


Spring 2010

ASU College of Nursing
& Health Innovation
ARIZONA STATE UNIVERSITY

Innovations in nursing & health

*Promoting Teen Health
Through Research*



dream • discover • deliver

In this issue...

3



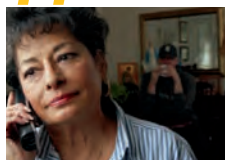
Joining Forces with the FDA: The College of Nursing & Health Innovation and an FDA center work together to launch a unique academic program.

6



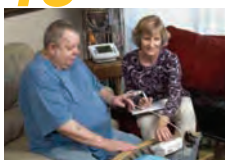
Tackling Teen Health Disparities: NIH-R01 study focuses on health disparities in teen obesity and mental health.

11



Who Cares for the Caregivers?: Five U.S. Administration on Aging grants to Arizona and Nevada fund research to assist the helpers of Alzheimer's and dementia patients.

18



Healthcare Returns Home: NINR-funded study on telehealth brings new dimension to home care.

- 1 Dean's Message – Why Research Counts
- 10 Healthy Lifestyles – From Classroom to Conference
- 15 Using Culture and Literacy to Battle Cancer Disparities
- 21 Better Health, One Step at a Time
- 23 World Takes Center Stage at ASU
- 24 Health System – By Design
- 26 ASU Nursing & Health Lives and Breathes Innovation
- 29 Dream • Discover • Deliver / A Tradition Grows
- 32 New Health Sciences Programs Offer Alternative Paths
- 36 Student of Excellence: Elaine Clayton
- 38 Scholarships and Annual Giving
- 41 NP Healthcare – What's in a Name?
- 42 Appointments, Achievements, News, Alumni Report

On the Cover:

U.S. adolescents today, especially Hispanics, face two of the most serious and rapidly increasing health problems – overweight/obesity and depression. An NIH-funded study seeks an intervention.

Innovations in Nursing & Health

Innovations in Nursing & Health is published twice a year by the College of Nursing & Health Innovation at Arizona State University for alumni, friends of the college, national nursing and health promotion leaders, students, faculty, and the media.

MISSION

Our mission is to produce a publication of high-quality editorial news content and creative design to communicate the educational, research, and evidence-based initiatives of the College of Nursing & Health Innovation to its key audiences.

WEBSITE

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COLLEGE OF NURSING & HEALTH INNOVATION

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Dean's Message

Why Research Counts



What would each of us do in the next 3 to 5 years to improve healthcare quality and safety if we knew we could not fail? That is a key question that I continually ask myself and our faculty and students here at ASU as well as colleagues across the nation.

With the recent passage of the healthcare reform bill, there will be many striking changes and challenges in our healthcare system into the future that will demand a higher level of innovation than ever before in both healthcare and academic institutions that prepare health professionals. Nurse practitioners, health promotion

professionals and nurse-managed health centers will play an even greater role in access to and the delivery of care, especially in lieu of fewer physicians choosing to enter the field of primary care. Therefore, we must accelerate the pace at which we produce more nurse practitioners and health promotion professionals if the quality and safety in our healthcare system is not to be further compromised.

Every year, poor quality healthcare costs the United States about \$720 billion dollars and wasteful healthcare spending costs the healthcare system \$1.2 trillion annually. Furthermore, the U.S. healthcare system

could reduce its healthcare spending by 30 percent if patients received evidence-based healthcare. At our college, we have launched several initiatives to address the challenges of healthcare quality and safety, some of which you will read about in this edition of *Innovations in Nursing & Health*.

We are very excited about our new collaborative partnership with the Food and Drug Administration to implement an innovative master's program in regulatory science and health safety that will enroll professionals from various disciplines, including nurses, physicians, pharmacists and dentists. Our college continues to

accelerate its innovations at all levels and, for the first time in our history, we received the ASU President's Award for Innovation this spring for our Center for Healthcare Innovation & Clinical Trials.

We continue to accelerate the pace at which we are conducting research that will have a direct impact on enhancing the care that we deliver and improving patients' outcomes. As a result of building an exceptionally strong research infrastructure over the past five years, tremendous efforts by our wonderful faculty and staff, and the recruitment of several additional talented researchers, we are now 11th in the nation in National Institutes of Health (NIH) funding among colleges of nursing. Our grant awards for 2005-2009 totaled \$22.9 million compared to \$11 million in the previous five years. In the current year, we have already brought in \$10 million of new grant funding, of which nearly \$7 million is new awards from the NIH. Our college's success has contributed to Arizona State University breaking into the Top 20 list for research expenditures for universities without medical colleges.

The establishment of core research and evidence-based practice centers focused on state, national and global priorities has been part of our college's key strategy. Our centers of excellence cover the lifespan with their studies and target the most pressing morbidities facing our nation and globe. These centers also provide mentorship to faculty as well as students and generate evidence to improve quality healthcare and patient outcomes in each

of their concentrations. A major area of research across our centers targets the number #1 killer of Americans, that is, their behaviors that lead to obesity and cardiovascular disease. Our researchers also are conducting rigorous intervention studies to reduce growing health disparities.

We must remember though that it is not enough to generate evidence alone. The evidence generated from research must be translated into clinical practice to improve patient outcomes. Unfortunately, there continues to be a tremendous time lag between the generation of research findings and their translation into clinical practice. In fact, a large number of findings from research never reach the clinical arena to improve patient outcomes. At our college, through our Center for the Advancement of Evidence-based Practice, we have accelerated our work with healthcare systems, health providers and academic institutions throughout the state, nation and globe to speed the translation of research findings into clinical practice to improve the quality and safety of healthcare. Furthermore, some of our researchers are achieving huge breakthroughs by having their interventions that have been rigorously tested through research adopted in clinical practice by hospitals, healthcare systems and insurers.

The successful research and evidence-based practice focus of ASU Nursing & Health also is an example of the economic benefit a research university can bring to its state. In this case, the benefit has short- and long-term positive consequences.

Each year, Arizona universities pump almost \$1 billion into the Arizona economy from their research, most of which is funded by the federal government and entities from outside the state. Most importantly, patients and their families benefit from research-based interventions that promote their health and assist them in leading a higher quality of life. Students also benefit tremendously by learning how their burning clinical questions can be answered through research and evidence-based practice projects that also can transform healthcare.

I am so very grateful for your ongoing support and enthusiasm for our important work and invite you to learn more about the incredible innovations happening at our college by taking the time to read through this edition of *Innovations in Nursing & Health*. Our deeply rooted philosophy of dreaming, discovering and delivering has been key to our successes and it will continue to pave the way for pioneering initiatives that will create a brighter future for all of us.

Fondly,



Bernadette Mazurek Melnyk, PhD, RN,
CPNP/PMHNP, FNAP, FAAN

Dean and Distinguished Foundation
Professor in Nursing

Unique FDA Partnership Launched

The College of Nursing & Health Innovation at Arizona State University is one of only two programs in the U.S. to form a partnership with the Food and Drug Administration (FDA), Center for Drug Evaluation and Research (CDER), Center Academic Collaboration Program (CACP), the first partnership with a College of Nursing. This association is designed to prepare professionals for careers in regulatory science and health safety. These disciplines are integral to the college whose curriculum is evidence-based to produce and improve quality health outcomes.

“The academic partnership between the FDA Center for Drug Evaluation and Research and College of Nursing & Health Innovation to launch the Master’s Degree in Regulatory Science and Health Safety (RSHS), reflects the college’s commitment to collaboration, an innovative spirit, and transdisciplinary education and research,” said Dean Bernadette Melnyk.

“Working collaboratively with academia, industry and other partners is key in advancing regulatory science,” said Capt. Greg Wood, Director of the CDER Academic Collaboration Program. “This will assist the agency in meeting its mission and goals. In the development of the Master of Science in Regulatory Science and Health Safety (RSHS) program curriculum, we were pleased that input from the FDA/CDER/CACP was strongly considered and incorporated by ASU and the college. This program will provide valuable knowledge and experience in preparing students to work in settings such as the FDA, regulated industry and beyond.”

“The federal agency’s public health directive and mission are to review for approval safe and effective drugs and to provide con-



sumers and healthcare practitioners with accurate drug information. This requires a continued demand for scientists and health professionals trained in regulatory science,” said Russ Abbott, Deputy Commissioner for Administration at the FDA. “Working closely with a graduate health educational program like the one at ASU is one important way in which the agency can continue to achieve its regulatory and scientific goals.”

NEED AND OPPORTUNITY

The U.S. and global bioscience research and medical products industries increasingly require individuals with graduate level degrees who can conduct business in accordance with regulatory requirements. Scrutiny of the development of new health products has increased with the explosion of new products every year. To protect the public health, line staff and managers are needed who can interpret the regulations, verify that they were followed, evaluate research data, and assure the safety and effectiveness of products throughout their lifecycle.

The clinical research industry is growing at a 5-9 percent annual rate, with the largest employment need for high level clinical research managers, auditors, inspectors and regulatory oversight personnel. This degree program provides the credentials to serve as an entry- or mid-level associate in a broad range of regulatory affairs positions.

Above: Leaders of the FDA Center for Academic Collaboration and the College of Nursing & Health Innovation have formed the first educational partnership between the FDA and a college of nursing in the United States.

PROGRAM OVERVIEW

The Master of Science in Regulatory Science and Health Safety (RSHS) is designed as a full-time in-classroom degree that will be completed over two years. The purpose of this new graduate MS degree is to prepare students for careers in the field of Regulatory Affairs with an emphasis on safety, risk management, partnership development and leadership. The program will build on course work in the field of clinical research, regulatory affairs and healthcare project management and will develop communication skills such as creating, delivering and defending presentations and learning regulatory writing techniques.

Core courses for the new RSHS program are primarily offered by ASU College of Nursing & Health Innovation, including courses from the Master of Healthcare Innovation and Master of Clinical Research Management programs. Other courses are housed in the Sandra Day O'Connor College of Law and the Ira A. Fulton Schools of Engineering. FDA/CDER staff also will serve as adjunct faculty and special guests for the program. Thanks to this association, students in the program will benefit from speakers who can deliver the most up-to-date information.

The RSHS degree uses a multidisciplinary approach to meet the unique needs of regulating bodies as well as the regulated

courses are classroom-based. Students will develop skills that incorporate an evidence-based approach to decision-making, analysis of clinical research, evaluation of health products (drugs, biologic products, medical devices and food) and develop leadership and project management skills.

PROGRAM HIGHLIGHTS

Features of the MS, Regulatory Science and Health Safety include:

- 39-credit hour program over four (4) semesters and a summer internship
- Courses in clinical research and regulatory affairs, regulatory writing, project management, and FDA regulation
- Integrates principles of leadership and innovation, product safety, and science-based decision-making
- Internship or field experience opportunity will expose students to real work experience in the field of regulatory science
- Geared to scientists, nurses, physicians, dentists, pharmacists, engineers, life sciences and healthcare professionals, statisticians, quality assurance professionals and others who want to work in the field of regulatory science or advance their career in this field.
- Applies an interdisciplinary approach to provide a curriculum that will develop leaders
- Capstone project (3 credit hours) that builds on the internship experience and integrates core course competencies.

VALUE FOR PROSPECTIVE STUDENTS

Healthcare professionals and students from diverse science fields may enter the program. It is expected that students will represent a variety of backgrounds as listed in the preceding summary. This is the only current degree program developed in collaboration with FDA/CDER in the Southwest.

industry. It encompasses course work in clinical research, ethics, quality systems, quantitative methods and statistics, leadership, and project management in the regulatory field. All RSHS core

Students enrolled in the program will develop an in-depth understanding of existing regulatory practices and the context in which regulations evolve. Students will develop leadership and



Faculty and administrators from the ASU College of Nursing & Health Innovation discuss the educational partnership with FDA representatives.



Regulatory Sciences professionals hold hearings and make inspections to assess the safety of medical products and equipment.

project management skills that incorporate an evidence-based approach to decision-making as they will build on course work in the field of Clinical Research and apply their knowledge to evaluate the development, testing and marketing of products in the regulatory arena.

Graduates will be prepared to lead complex regulatory reviews, manage projects and evaluate clinical research to determine that health products are safe and effective. They will qualify for positions in regulatory science such as scientific reviewers, project managers, and regulatory affairs specialists.

The FDA/CDER Academic Collaboration Program is fully funding up to 10 students, or half of the first cohort, which starts fall semester in August 2010. Students selected for this program will be full-time students at ASU as well as active duty officers in the Commissioned Corps of the U.S. Public Health Service (USPHS). Participants in the FDA Academic Collaboration Program will receive tuition, housing allowance, and a competitive salary with active duty benefits while in training. In return, the student must agree to work for FDA/CDER for two years for each year of paid tuition as a USPHS Commissioned Corps officer. The college also will recruit up to 10 non FDA-funded students who may seek

employment with a regulatory agency or with regulated industry upon completion of the degree.

Sandra Shire, DMD, MPA and Capt. (Retired) U.S. Public Health Service, has been named director of the program. Dr. Shire has extensive experience in the regulatory field, including 15 years with the FDA. Her career at FDA included work as a scientific reviewer and as a field investigator. She served in the Commissioned Corps of the USPHS for more than 25 years, working in both clinical and regulatory assignments.

“The MS in Regulatory Science and Health Safety is an ideal degree for students with a background in the sciences or health-care,” Shire said. “Our innovative curriculum is designed to meet the ever-changing needs of government agencies and the regulated industries in order to develop and promote products that are safe and effective, protecting the public health. The ASU College of Nursing & Health Innovation is well-positioned to provide leadership in this emerging field.”

For more information, contact Dr. Sandra Shire, Director, Regulatory Science and Health Safety Program, at 602-496-1694 or Sandra.Shire@asu.edu, or you may visit <http://nursingandhealth.asu.edu/regulatory>.

LOOKING AHEAD

Health product providers must design, evaluate, and continually improve the context within which their products are used to deliver care by healthcare providers. Based upon the growing complexity of healthcare compounded by an escalating demand for products, burgeoning growth in scientific knowledge, and the accelerating advance in technology, the importance of regulatory science to ensure patient safety is more critical than ever. That is why the health product suppliers, regulators and healthcare providers must be prepared to work closely to achieve their common goal of positive patient outcomes and better health. ■

Teen Health Disparities Investigated

NIH/NINR Funded Research Study Focuses on Teen Obesity and Mental Health

Overweight/obesity and mental health are two of the most serious and rapidly-increasing health disorders among U.S. adolescents, especially among Hispanics. Without effective intervention and prevention, these health problems can lead to serious lifelong diseases that entail even higher costs to the U.S. healthcare system.

In response to this growing threat to public health, the National Institutes of Health/National Institute of Nursing Research (NINR) has funded a study with a \$2.3 million grant by the College of Nursing & Health Innovation at Arizona State University to focus on prevention of and intervention for these disorders. Dean Bernadette Melnyk, PhD, RN, CPNP/PMHNP, FNAP, FAAN is principal investigator.

“There are few intervention studies that have focused on improving both healthy lifestyle behaviors and mental health in adolescents,” Dean Melnyk said. “Physical and mental health tend to be separated in the U.S. healthcare system. What is often not realized is that teens with a poor self-concept as well as elevated depressive and anxiety symptoms will probably not be able to engage in healthy behaviors until they first feel better about themselves. The uniqueness of our program is combining cognitive-behavioral skills building (CBSB), a strategy that has been successful in reducing depressive and anxiety symptoms, with nutrition education and physical activity.”

The four-year RO1 study, which was funded in September 2010, is a randomized controlled trial to test the short- and long-term efficacy of teaching teens cognitive-behavioral skills to improve healthy lifestyle behaviors and reduce depressive/anxiety symptoms. The research sample consists of 800 culturally diverse adolescents, ranging in age from 14-16, who are enrolled in Phoenix public high schools.

BUILDING SKILLS EMPOWERS TEENS FOR HEALTHIER LIFESTYLES

The program, named the COPE (Creating Opportunities for Personal Empowerment) /Healthy Lifestyles TEEN (Thinking,

Emotions, Exercise, and Nutrition) Program, consists of 15 sessions presented during their semester long regular health class. The educational and cognitive skills-building sessions (CBSB) focus on empowering teens to engage in healthy lifestyle behaviors such as good nutrition, physical activity, and positive strategies to cope with stress, among other topics.

In the COPE program, the teens are taught how to restructure their thinking when negative events/interpersonal situations arise that tend to lead them into negative thought patterns, and how to turn that thinking into a more positive interpretation of the situation/interpersonal interaction so that they will emotionally feel better and act in more healthy ways.

Emphasis is placed on how patterns of thinking impact behavior and emotions. Goal setting to promote engagement in healthy lifestyle behaviors and problem-solving for typical teen challenges is part of the CBSB component of the program (e.g., peer pressure for fast food and unhealthy snacks, being ostracized by peers, unhealthy behaviors to cope with stress, conflicts with parents).

The program also includes educational content to increase teens' knowledge of how to lead a healthy lifestyle and homework activities to reinforce skills that are being learned in the classroom, which assists them with putting into daily practice what they are learning. Physical activity of 20 minutes also is part of the 15 sessions to assist the teens in raising their beliefs/confidence in their ability to engage in daily activity.

Ultimately, engaging in healthy lifestyle behaviors should lead to the prevention of overweight in normal weight teens and less weight gain in teens who are overweight at baseline.

Findings from prior COPE intervention pilot studies have had promising short-term positive physical and mental health outcomes among adolescents, such as increases in healthy lifestyle behaviors, decreases in weight, and decreases in depressive symptoms, commented Dean Melnyk.

FACTORS IN OTHER ADVERSE TEEN HEALTH OUTCOMES

The incidence of teens who are overweight has increased dramatically to 17.1 percent, triple the number of teens now overweight or obese compared to 1980. Key factors influencing the obesity epidemic include an increase in sedentary activities and food consumption. While 30 years ago teens were more likely to eat home-cooked meals and participate in physically active pastimes, today's teens consume more high-fat/low nutritive value fast-food and spend more time in sedentary activities, like playing video games and watching television. Being overweight predisposes adolescents to adverse health outcomes compared to their non-overweight counterparts, including Type 2 diabetes, hypertension, dyslipidemia, sleep apnea, increased asthma symptoms, and a shortened life span.

Overweight and obese adolescents, in comparison to normal weight adolescents, also have a higher prevalence of mental health problems, expressed through poor academic performance and lowered self-esteem, depressive disorders, and a greater number of reported suicide attempts.

Approximately 15 million children and adolescents in the U.S. have a mental health problem that is interfering with their functioning at home or at school, but less than 25 percent receive treatment for this disorder, according to researchers. Depression among adolescents is associated with disabling morbidity, significant mortality, and substantial healthcare costs, Dean Melnyk noted. Recent annual prevalence data from a national survey of high school students (9th to 12th graders) indicate that depressive symptoms severe enough to impair daily functioning are reported by 37 percent of girls and 20 percent of boys. Depressed adolescents also typically have altered psychosocial and academic functioning, even after these conditions resolve.

Teacher Russell Stovall (standing) and ASU COPE team member Alan Moreno (seated) talk with students about the value of nutrition and exercise in a health class at a Phoenix high school.



Seated l. to r., Dr. Krista Oswald, post-doctoral fellow; ASU Dean Bernadette Melnyk, principal investigator; Dr. Judith O'Haver, co-investigator. Back row l. to r., Meghan Mills, research assistant; Kimberly Weberg, project coordinator; Alan Moreno, research specialist; Dr. Diana Jacobson, co-investigator.

HEALTH DISPARITIES PREVALENT IN TEEN OBESITY

While the 17.1 percentage of overweight/obese adolescents nationwide is serious, it is important to note that there are significant health disparities related to childhood overweight/obesity in Hispanic youth. For example, the combined prevalence of overweight and obesity for Mexican-American adolescents is 34 percent. Beyond obesity, these youth are more insulin resistant than their Caucasian counterparts and they exhibit lower cardio-respiratory fitness levels, which may contribute to the high incidence of pre-diabetes and metabolic syndrome in this population.

Substantial disparities also exist in child and adolescent mental health among minority groups in Arizona and across the U.S., which make the location of the study ideal. Data on mental health disparities indicate that depression and suicide are more common among some minorities compared to whites and less common among other groups. The prevalence rates of obesity and mental health problems co-existing are even higher for Hispanic teens.



DISPARITIES ECHOED IN PREVALENCE OF TEEN MENTAL HEALTH DISORDERS

According to the Institute of Medicine (IOM), more than 2.5 million of the 42 million children and teens in the U.S. have suffered from clinical depression in the last year. Due to a critical shortage of child psychiatrists, only 20-25 percent of children with mental health and behavioral problems receive treatment. An IOM and National Research Council report in 2009 found these disorders cost the U.S. \$247 billion annually and has become as common as fractured limbs among children and teens.

Despite the rapidly increasing incidence and adverse health outcomes associated with both overweight and mental health problems, very few theory-based intervention studies have been conducted with adolescents to improve both their healthy lifestyle behaviors and mental health outcomes. Physical and mental health services continue to be largely separated instead of integrated in the nation's healthcare system, which often leads to inadequate identification and treatment of these significant adolescent health problems.

Dean Melnyk, the principal investigator, is an experienced pediatric nurse practitioner and child-family psychiatric nurse practitioner, whose specialty area is high-risk teens. She has practiced with and conducted research with high-risk adolescents in primary care practices, schools and mental health settings. Dr. Melnyk and her research team have completed five related

Part of the COPE/Healthy Lifestyles TEEN program includes scheduled physical activity, as shown by this group of students and their teacher taking a brisk walk together around their campus.



studies with teens in the past eight years.

Co-investigators for this study include Diana Jacobson, PhD, RN, PNP-BC, Judith O'Haver, PhD, RN, CPNP, Stephanie Kelly, PhD, RN, FNP-BC, Leigh Small, PhD, RN, PNP-BC, Gabe Shaibi, PhD, Michael Belyea, PhD, Krista Oswald, PhD, and Flavio Marsiglia, PhD.

PROGRESS OF STUDY TO DATE

Kimberly Weberg, BS, Family Resources and Human Development, is the project coordinator for the grant. Prior to joining ASU, Weberg served as program director for a non-profit organization in Arizona that focuses on providing Substance Abuse and Violence Prevention Programming to a diverse low income, high minority populations, including youth, parents and community members.

As coordinator for the COPE/Healthy Lifestyles TEEN Program

grant, Weberg is responsible for overseeing the implementation of all aspects of the project in accordance with the grant's core principles and under the oversight of the local IRB. "In its first three months, the COPE grant has already seen many successes," Weberg said. "We have a strong partnership with Phoenix Union High School District which has allowed us to work with four of their high schools during the first semester. With

our goal of enrolling 800 youth into the program over the life of the grant, it has been a huge accomplishment to already have 258 youth enrolled after only one semester, as well as having enrolled more than 180 parents -- an almost 70 percent participation rate from the parents."

In May, research assistants will gather data from the more than



On this page: Kim Weberg (above) and Alan Moreno (kneeling, right) of the ASU COPE team work with teens in their school setting, taking height and weight measurements as part of the program.

250 youth who are participating in the study as follow up post 15-week intervention, as well as gathering data on the parents post intervention.

Weberg said the next steps for the research team include continued follow up at 6 and 12 months post intervention with the current participants, and the recruitment of our next set of program participants for the second semester of implementation.

“We are in the process of recruiting our next four schools into the program from Phoenix Union High School District where we will be implementing the program in the fall semester of 2010,” Weberg said. Up to 16 high schools will be involved by the end of the four-year study.

IN CONCLUSION

Our nation has never faced the threat that the prevalence of teen obesity and mental health pose. These health problems have a significant financial and social burden on families and society in terms of distress, cost of treatment and disability.

Combine the incidence of teen obesity with youth mental health problems and you can see the exorbitant cost of these two diseases. According to the American Academy of Child and Adolescent Psychiatry, the annual cost to society for obesity is estimated at nearly \$100 billion. The National Adolescent Health Information Center reported in 2008 that 1 in 5 teens experience significant symptoms of emotional distress and nearly 1 in 10 (11.6 percent of the 12-17 age group) are emotionally impaired.

Research such as the school-based COPE/Healthy Lifestyles TEEN study is not just of importance today. It is about the long-term need to decrease and prevent controllable adolescent behaviors before they become lifelong and lead to serious illnesses and early death in adulthood. ■



C Building Healthy Lifestyles Conference

What could be more interesting than food? How about a conference on nutritious foods that help lessen the risk of chronic diseases, such as heart attacks and cancer? More than 220 health providers, educators and students certainly agreed with the latter opportunity in late February.

That is how many persons attended the 5th Annual Building Healthy Lifestyles Conference (BHLC) hosted by the Exercise and Wellness and Nutrition Programs within the College of Nursing & Health Innovation.

The theme for the conference was “Functional Foods” and featured speakers from Hershey Corporation, Yakult Yogurt, Innocent Indulgence, the University of Florida, Banner Good Samaritan Medical Center, and Exercise and Wellness and Nutrition faculty and other faculty from ASU colleges, such as the W.P. Carey School of Business.

Keynote addresses by three prominent speakers focused on the conference theme. Professor Susan Percival, PhD, Food Sciences and Human Nutrition, University of Florida, spoke about how nutritious food choices support the immune health and reduce

the risk of cancer and infectious diseases. Dr. Ralph Felder, MD, PhD, Director of Cardiac Nutrition, Banner Good Samaritan Medical Center, and author of “The Bonus Years Diet,” discussed foods that can add years to life. Amy Griel Preston, PhD, RD, Senior Nutrition Scientist, Hershey Corporation, guided attendees through a virtual journey of the world of cocoa to learn the process of how chocolate is created and its benefits for the human body.

“The conference is unique in that it is mainly for students to provide them research first hand by experts who may be of both professional and personal value,” said Glenn Gaesser, PhD, Director of the Exercise and Wellness Program and Healthy Lifestyles Research Center. “In other words, they can learn about things they have not learned about in class, basically ‘hot off the press’ findings that they would otherwise not get in the classroom. It allows them to get information that they can use in their personal lives.”

Caleb Stodghill, a senior in Exercise and Wellness, observed that he learned something from almost every speaker. “I feel that the BHLC is an important event for students in my field to attend because it gives you insight on new research,” Stodghill said. A competitive swimmer, Stodghill also found Rick Hall’s lecture on functional foods in endurance events beneficial to his own sport. “I found Professor Hall to be the most interesting speaker to me because I compete athletically,” Stodghill noted. “He definitely gave me a lot of useful tips on how to plan my own diet.”

The annual conference’s purpose is to link physical activity, exercise and wellness, and nutrition to translate research and practice into skills for building healthy lifestyles.

Professors Gaesser and Carol Johnston, PhD, RD, Director of the Nutrition Program, chaired the conference planning committee. Third-year doctoral students in the Interdisciplinary Physical Activity, Nutrition, and Wellness PhD Program organized and executed the conference while first and second-year doctoral students provided additional support.

The 6th annual Building Healthy Lifestyles Conference will focus on topics and research on “Weight Management” and is scheduled for early spring 2011, tentatively in downtown Phoenix. ■

Shannon Smith, MS, RD, and Jenelle Walker, MS, GFI, second-year doctoral students in the Exercise and Wellness Program, were major contributors to this report.



Conference speaker Dr. Keith Martin addresses the audience.



“The Forgotten” of Healthcare: Care for the Caregivers

Out of sight, out of mind...” Nothing could be more true than for those who care in homes for the aged spouses or family with serious physical or cognitive limitations, due to Alzheimer’s disease or related dementias (ADRD). It is one major reason why the U.S. Administration on Aging funds state units to provide care for the aging. Arizona State University, its College of Nursing & Health Innovation, and Professor David W. Coon are fortunate to be involved in grants spanning two states to help those who give the help and often are forgotten until it is too late.

Professor Coon, PhD, Acting Associate Dean for Research and Professor, College of Nursing & Health Innovation, is ASU’s principal investigator for five grants awarded by the U.S. Administration on Aging to improve support services to family caregivers of persons with serious physical or cognitive limitations, such as Alzheimer’s disease. The \$3 million in funding has been awarded through the state units on aging for Arizona and Nevada.

These grants require state units on aging to be the primary applicant and that they partner with other organizations. Research institutions such as colleges, community-based organizations, and area agencies for aging are typical partners with state units on aging in this category of grant.

Professor Coon’s projects have names such as CarePRO: Care

Partners Reaching Out; NevadaCARE; Lifespan Care Respite Program; and EPIC: Early-stage Partners in Care.

The impact on the national healthcare system will soar as Boomers age. In 2010, the U.S. Administration on Aging reported that the United States was home to 40 million people age 65 or older. By 2030, the agency projects the total to reach 72 million. Caregivers used to only be wives and daughters - more than two-thirds of caregivers are women - but the problems they suffer are becoming so widespread that experts consider it a public-health issue.

About 34 million caregivers provided unpaid help valued at \$375 billion to family and friends in 2007, up from \$350 billion in 2006, according to a Wall Street Journal story quoting AARP, the large advocacy group for older Americans. The typical U.S. caregiver is a 46-year-old woman who works outside the home and spends more than 20 hours a week providing unpaid care to her mother, the report says. Those tasks include personal care and everyday tasks as well as health-related interventions such as administering medications.

The estimated \$375 billion in care is based on approximately 34 million caregivers providing an average 21 hours a week of care to adults with limitations in daily activities at an average cost

of \$10.10 an hour. The estimates were derived from five nationally representative surveys.

ARIZONA ADDRESSES PROBLEM

More than \$2 million of the total has been awarded to the Arizona Department of Economic Security, Division of Aging and Adult Services (ADES-DAAS) to improve support services to family caregivers throughout the state over the next three years. The funding, in the form of four grants from the U.S. Department of Health and Human Services, will be focused on the individuals in need of care as well as loved ones and family members who provide their care. In addition to ADES-DAAS, CarePRO and EPIC project partners include the Desert Southwest Chapter of the Alzheimer's Association, the local area agencies on aging, and ASU. The Arizona Caregiver Coalition and the Foundation for Senior Living join ADES-DAAS, local area agencies on aging, and ASU on the Lifespan Care Respite Program.



Dr. Coon meets with members of the Alzheimer's Association of Southwest Arizona.

Project activities include:

- Translating into the community an evidence-based skill-building intervention for family caregivers of people with ADRD called CarePRO that was developed by Dr. Coon and colleagues;
- Developing and implementing an innovative approach named EPIC to deliver care to people diagnosed in the early stage of ADRD and their care partners;
- Raising public awareness to help family caregivers regardless of family members' diseases or disorders to find respite programs that help them cope with the challenges and burnout associated with caregiving; providing a caregiver statewide hotline and partnering with Adult Protective Services and others to provide respite assistance to caregivers who do not qualify

for existing programs.

According to the AARP, there are about 610,000 family and other informal caregivers in Arizona who are providing an estimated \$6.9 billion in unpaid home-care each year. Many of those are caring for the more than 97,000 Arizonans who are expected to be diagnosed with Alzheimer's disease by 2010 — a number projected to rise to 130,000 by 2025.

"It is very exciting to have the opportunity to work collaboratively with the grant partners to implement evidence-based programming for caregivers," said David Besst, Caregiver Support Specialist, Division of Aging & Adult Services. "We are currently getting ready to expand CarePRO outside of Pima County, adding Area

Agencies on Aging as new project partners in Maricopa County, Coconino and Yavapai Counties in the north, Mohave and Yuma Counties out west, and south in Santa Cruz County."

THE SPIRAL DOWN FOR CAREGIVERS

Caregiving exacts a heavy toll on many families. Studies have found that the stress from caregiving cascades into depressive symptoms, anxiety, anger, poor health, social isolation and even heightened rates of mortality. It is not unusual to learn of a family caregiver that dies before the person for whom they are caring — deaths often associated with the burdens of caregiving. The unremitting stress can lead to high blood pressure, diabetes, a compromised immune system, susceptibility to heart attacks and arthritis.

Alzheimer's disease and other dementias are among some of the most challenging conditions for which to provide care in the home. The patients often "shadow" their caregivers, repeat questions constantly, become possessive of their possessions, refuse to eat or bathe and, worst of all, wander off.

With the award of these grants, caregivers will be assisted in developing the skills necessary to better cope with the stresses of caregiving as well as gaining access to respite services which can provide much needed relief for loved ones and family members who provide care.

NEVADA FORGES COMMUNITY-BASED PROGRAM

The U.S. Administration on Aging Services also awarded two grants to the Nevada Aging and Disability Services Division (ADSD) totaling \$1 million for Alzheimer's programming and respite. Both awards will help family caregivers cope with the daily sacrifices and challenges they make to keep their loved ones at home.

The \$1 million awarded for these Alzheimer's disease grants enables ADSD and its project partners to forge Dr. Coon's evidence-based program, CarePRO, into an overall community based program, NevadaCARE. This program will serve diverse populations of family caregivers of persons suffering from the affects of ADRD. Just as in Arizona, it will provide them with vital coping strategies caregivers need.

ADSD partners in the NevadaCARE project include the Cleveland Clinic Lou Ruvo Center for Brain Health; the local Alzheimer's Association Chapters in Northern and Southern Nevada; and Arizona State University (ASU).

The AARP estimates that there are about 280,000 family and

other informal caregivers in Nevada who provide an estimated \$3.3 billion in unpaid home care each year. Nevada is one of five other states projected to experience at least a doubling of their populations age 65 and older with Alzheimer's disease between 2000 and 2025, according to the 2010 Alzheimer's Disease Facts and Figures from the Alzheimer's Association.

Many of those are caring for the more than 29,000 Nevadans who are expected to be diagnosed with Alzheimer's disease by 2010 - a number projected to rise to 42,000 by 2025. Like similar Arizonans, these people will seek to stay in their own homes and communities as long as possible.

"Nevada is delighted to have received this funding and for the opportunity to work with our partners on such cutting-edge activities," said ADSD Administrator Carol Sala. "These grants will greatly enhance our goal of enabling caregivers to keep their loved ones living at home independently, as long as possible. Stress reduction for caregivers is a fundamental need, and planning for respite care across the full spectrum of chronic and debilitating disease will maximize available resources."

HELPING THE HELPERS

David Coon has a favorite maxim drawn from former First Lady Rosalynn Carter, that assures caregivers, personal and professional, that they are in good company: "All people have been, currently are, will be, or will need caregivers."

According to the ASU professor, more caregivers than ever are needed since people live longer and with more chronic conditions. "Caregivers are the backbone of healthcare in the home for our transient society," Dr. Coon said. "They often must balance work and caregiving in a very stressful environment."

Dr. Coon has studied caregivers from an interdisciplinary perspective for 15 years. His methodology has been to develop, implement and evaluate interventions, and then to translate evidence-based interventions into the community by "training the trainers" in local social service agencies such as the Alzheimer Association regional staff to offer these interventions to caregivers.

For example, Dr. Coon is training Alzheimer's Association staff to deliver CarePRO to family caregivers of people with ADRD across both Arizona and Nevada. CarePRO participants are provided workshops and telephone coach calls to learn coping skills for



Dr. David Coon

maintaining their own physical and emotional well-being while caring for a patient with a devastating disease. They also participate in telephone interviews with Coon's graduate student research assistants before the workshops and then at 3, 6 and 12 months after the initial interview, to assess how well the techniques worked.

The interviews measure the caregivers' state of well-being in terms of mood, health, burden, thought patterns and their levels of frustration and anger, two common symptoms of caregiving stress.

The local area agencies on aging in Arizona and the Alzheimer's Association in Nevada help set up respite services so that CarePRO participants can have someone to stay with their care recipients while they attend CarePRO workshops.

Coon's workshops for the grant have started in the Southern Region of the Desert Southwest Chapter of the Alzheimer's Association and will spread to other Alzheimer's Association regions throughout Arizona and Nevada, giving communities a way to help the helpers.

There are nearly 130,000 people today with Alzheimer's disease in Arizona and Nevada. According to Deborah Schaus, MSW, Executive Director of the Alzheimer's Association Desert Southwest Chapter, the southwest has one of the highest expected rates of increase in prevalence in the nation.

Ms. Schaus indicated that the needs of caregivers of persons with Alzheimer's and related dementia are significant. "The new federal grants and Dr. Coon's work with our staff and volunteers are making a tremendous difference in building out the chapter's capacity to help the growing number of families impacted by this devastating disease," Ms. Schaus said.

David Coon's work has shown that if caregivers can learn to manage their own stress and moods, bring sources of pleasure into their lives, communicate and ask for help effectively, they are less likely to fall into depression, frustration, and anxiety. One of the harder skills he teaches is to stop the chain of negative thinking, a circular pattern of thought that leads to depression, frustration and guilt.

If the caregiver takes the time to keep her/himself, healthy in mind and spirit, that person will be a better caregiver. In a very real sense, finding ways to balance taking care of themselves while caregiving is often the best gift caregivers can give their loved ones, Coon said.



Graduate research associates Terrance Walker and Vitae Felix analyze data from studies on care for caregivers.

A RESEARCH CAREER DEDICATED TO CARE PARTNERS

A professor of psychology, Coon joined the faculty of the Division of Social and Behavioral Sciences in New College at Arizona State University in 2004 and transferred to ASU's College of Nursing & Health Innovation in January 2009. Prior to coming to Arizona, he served as associate director of the Older Adult & Family Center of the VA Palo Alto Health Care System and Stanford University School of Medicine and Senior Research Scientist at UCSF/Mt. Zion Institute on Aging in San Francisco.

A Fellow of the Gerontological Society of America, Professor Coon received the Gwen Yeo Award for Excellence in Research, Education and Community Service in Ethnogeriatrics presented by Stanford University School of Medicine Geriatric Education Center for his work with patients and caregivers from diverse communities.

A BEGINNING THAT HASN'T ENDED

The genesis of David Coon's career interest in research to help caregivers for the aged with chronic physical and cognitive conditions was in his own family. A caring grandmother who was trained as a missionary and parents who demonstrated a strong ethic of care for their family, their neighbors, and their community influenced David greatly. At Stanford, he then engaged in programs to improve the quality of life for patients and care partners with his colleagues, Dr. Dolores Gallagher-Thompson and Dr. Larry Thompson. Now Coon's area of research expertise and the fruits of his labors are of benefit to ASU, the states of Arizona and Nevada and their departments of aging, local social service agencies, and most importantly, those who give the care to those who need it to stay in their homes as long as possible. ■

Using Culture and Literacy to battle cancer

Usha Menon, PhD, RN, is the first Pamela Kidd Distinguished Research Professor at the College of Nursing & Health Innovation and visiting Scientist at the Department of Research-Health Disparities at Mayo Clinic in Arizona. Despite her current rank and affiliation with Mayo Clinic, she did not launch her professional career as a nurse or cancer researcher. One could say she arrived where she is in a roundabout way.

After growing up in India, Menon traveled to Greenwood, South Carolina to study English Literature. She worked her way through school (including teaching English at the local prison) and completed her undergraduate degree. She began her professional career enthusiastically but soon decided to return to school to pursue what she hoped to be a more lucrative profession as a nurse practitioner. It did not take long for Menon to realize that a significant number of women were dying of breast cancer then, which today has become a 95 percent curable disease. A heightened awareness regarding this problem is what inspired Dr. Menon to

redirect her focus to cancer research and associated health disparities.

REFINING A RESEARCH FOCUS

Over the years, Menon has centered her research on the development and testing of tailored interventions to improve cancer screening behavior. She has placed an emphasis on the reduction of health disparities and an increase in early detection among underserved and minority populations. It is this foundation of knowledge that has led her to refine her research focus to cancer survivorship, screening and care among minority populations in Arizona.

Disparities in healthcare continue to impact cancer survival. Low-income men

and women who have inadequate or no health insurance coverage are more likely to be diagnosed with cancer at later stages, when survival times are shorter. According to the U.S. Census Bureau, Hispanic Americans now constitute the largest minority in the United States at 15 percent of the total population and 30 percent of Arizona's population. Statistically, their populations have high rates of poverty as well as low education and job classification levels.

The American Cancer Society reports that breast cancer is the most commonly diagnosed cancer among Latinas and cervical cancer incidence rates are about 70 percent higher than for non-Hispanic white women. Consequentially, breast cancer is the leading cause of cancer deaths and cervical cancer death rates in the U.S. are about 50 percent higher among Latinas. Low screening rates for breast and cervical cancer are significant contributors to these disturbing statistics as almost 80 percent of deaths from cervical cancer can be prevented by regular Pap screening coupled with patient follow-up for treatment.





Patient/provider communications are key to understanding the barriers and cultural factors related to cancer screening.

CULTURE GOES BEYOND LANGUAGE

One research initiative put forth by Dr. Menon and Mayo Clinic, is to develop interventions by first understanding the barriers, facilitators and cultural factors related to breast and cervical cancer screening among Latinas. According to Menon, “This research will inform the development and testing of a culturally-responsive, ecological model of care for breast and cervical health in community-centered primary care settings.” Culture is not restricted to language. It also includes family and social norms, beliefs, religion/spirituality, perceived discrimination and trust in the healthcare system. These cultural influences are critical in understanding how to motivate the Latina population to not only show up for their appointments but also to follow up after the fact.

As part of the research study, a number of focus groups are being conducted collaboratively with the Mountain Park Clinics in Arizona. The objective of the focus groups is to develop a relationship with different Latina communities to better understand their cancer screening barriers and facilitators. Groups include both older and younger individuals with an exploratory focus group methodology. Menon brings a significant amount of practice and knowledge to this study as she has extensive experience developing and testing tailored and targeted interventions to increase cancer screening for disadvantaged populations. There is ample opportunity to further her research here in Arizona as healthcare disparities continue to challenge minority and underserved populations, underscoring the need for studies to not only understand the reasons for cancer disparities but also to develop, test and refine culturally appropriate interventions to reduce these disparities.

STRENGTH OF PARTNERSHIP: 1 + 1 = ∞

Menon also is partnering with Mayo Clinic to address cancer survivorship. According to the Centers for Disease Control and Prevention, there are an estimated 11 million cancer survivors living in the United States due to advances in the early detection

and treatment of cancer. Although these numbers sound promising, only about 68 percent of people diagnosed with cancer are expected to live more than five years following diagnosis. Cancer survivors are at a greater risk for recurrence and for developing second cancers due to the effects of treatment, unhealthy lifestyle behaviors, underlying genetics or risk factors that contributed to the first cancer. It is evident that the cancer experience extends far beyond the completion of treatment as survivors may not only face physical problems, but they may also encounter emotional, social, spiritual and financial challenges as a result of their cancer diagnosis and treatment. Issues with the coordination of care, patient-provider communications and health literacy are only some things to be considered when attempting to identify the underlying causes of this growing public health concern.



Menon works with her team to prepare for a focus group meeting to help understand cancer-screening barriers and facilitators.

Cancer survivorship encompasses the entire cancer experience, from the initial diagnosis through the remainder of a cancer patient's life. It is focused on the distinct phase of cancer care following active cancer-directed treatment and extends over a range of issues faced by survivors, including the physical, mental and social aspects of the cancer experience. Menon and Mayo Clinic have been working on the development of a Cancer Survivorship Care Initiative designed to create a sustainable culturally responsive model of care that can be implemented both at Mayo as well as in community settings. This model of care will be developed and tested for feasibility and acceptability among cancer survivors, their caregivers and providers. It is designed to be proactive in anticipating and meeting

the comprehensive lifestyle needs of patients and families as they go through the cancer survivorship experience. The model will be designed as a menu of possible options that patients and families can select from to fit their unique individual experiences. A focal point of this program is educating and engaging oncologists, primary care physicians and non-physician providers in the cancer survivorship care plan model, as well as developing avenues for implementing such a model in diverse communities.

The Arizona Native American tribal communities have provided Mayo with a culturally diverse community rooted in spirituality, tradition and heritage where environmental issues and perceptions can make providing effective healthcare a challenge. A strong sense of tribal identity has kept culture and social cohesiveness intact, despite the many changes of the last century. A cultural understanding is essential in developing a trusting relationship that allows for a uniquely tailored approach to survivorship care. Menon and Mayo are exploring the need for and the desire to collaborate on the care of cancer survivors in these communities.

MAKING THE IMPOSSIBLE POSSIBLE

Barriers such as environment and daily life can present numerous challenges when working with underserved communities. It is important to consider these barriers when assessing care as difficulties in reaching providers is critical and at times can be physically impossible. Another significant concern is the lack of sanitary and care centered environments for patients. As stated by Sharon Levey, RN, BSN, OCN, Co-Director of Cancer Outreach at Mayo Clinic, "It may be a routine task to gather wood or feed hay to the livestock but, for a cancer patient, daily tasks such as these can be very problematic." By addressing these daily tasks, providers can do a better job of communicating risks to patients and developing a tailored treatment plan. It is much easier for the patient to understand what they can do to stay healthy if risks are made clear by addressing daily life.

Health literacy is another critical component of survivorship care to tackle. "Socio-economically disadvantaged and/or medically



Menon's focus includes improved patient education.

underserved patients often have difficulty understanding medical language and interpreting directions given by providers," said Professor Menon. It is critical that providers adapt their language so that it is more understandable. By doing this, they not only improve their patient communications but patients tend to be more committed to their care. Levey believes that "it

is important for providers to be excellent listeners and to not make assumptions. They need to clarify needs and often have patients share their interpretation of what has been communicated." It is not uncommon for patients to repeat or nod in agreement without really understanding what is being said. A technique that Levey has found effective is to ask the patient to tell her what they will communicate to their family members. By doing this, it becomes clear what is or isn't understood and what the patient is actually willing to share with their family.

COLLABORATION BRINGS MUCH TO TABLE

Teri Britt Pipe, PhD, RN, Director of Nursing Research and Innovation at Mayo Clinic and adjunct faculty at the ASU College of Nursing & Health Innovation, said, "The partnership between Professor Menon and Mayo allows for a unique collaboration between research, practice and education." Since this collaboration brings varying perspectives and experience to the table, a sense of broader understanding across disciplines has developed and an atmosphere has been established that facilitates new ideas and creativity while fostering necessary dialogue.

By developing a cancer survivorship care plan and addressing health disparities in cancer screening and treatment, Menon and Mayo are leveraging culture and literacy so care providers can develop a platform to deliver effective health interventions. These research objectives will enable providers to better serve patients and their families in culturally diverse, disadvantaged and/or minority communities.

Menon's initial intentions may not have been to pursue a career in nursing, but her numerous and ongoing contributions to the field are clear indicators that there is a demand for the energy and passion that she brings to cancer research. ■

Studying TELEHEALTH to Improve Patient Outcomes



Dr. Kimberly Shea

Questioning, learning, and searching for ways to achieve best possible patient outcomes—is there a better way for a nurse researcher/educator to spend time? ASU College of Nursing & Health Innovation Assistant Professor Kimberly Shea does not think so. Shea, a nurse

who holds a PhD from the University of Arizona, has received a federally funded K23 grant from the National Institutes of Health/National Institute of Nursing Research. The grant provides her the opportunity to study how telehealth can be effectively used in the home to monitor patients with congestive heart failure (CHF), motivate self-care, and ultimately improve patient outcomes.

Shea's particular interest is looking at the patient and computer interaction with respect to nursing care. Her research questions examine patients' reactions to their remotely monitored vital signs and what type of feedback is needed to motivate them to use this information to perform self-care. She wonders how a patient interacts with the technology in their home. How does a nurse interact with that information to

make the best decisions for the patient to assure the best possible outcome? The purpose of her research is patient-oriented; to challenge standard thinking on telehealth delivery to find the best method of providing feedback to the patient. By coming to a better understanding of how patients react to different types of feedback, Shea hopes to motivate patients to perform self-care that will decrease the reoccurrences of disabling symptoms from chronic illnesses, like congestive heart failure (CHF).

EDUCATION + RESEARCH

The purpose of a K23 grant is to allow new PhD researchers to further develop their research interests and develop their research careers. The grant provides the opportunity for a researcher to identify components within his or her background/education that need further development and design a process over a three-year time span that focuses on progressing in those components.

A key element in this development process is working closely with a strong senior research mentor. Dr. Shea is working with two mentors, both biomedical engineers. One mentor, Professor Robert Greenes, BA, MD, PhD is chairman of the Biomedical Informatics Department at ASU. One of Greenes' area of particular research interest that comes into play with Shea's research is human-computer interaction, particularly with respect to the use of clinical information systems by providers and patients, the improved capture of clinical data and the incorporation of individualized, context-specific decision support. Shea's other mentor is Patricia Brennan, PhD, Professor, Departments of Biostatistics and Medical Informatics, Nursing and Industrial Engineering at the University of Wisconsin (UW) in Madison. Brennan's research investigates the use of computer technologies in the homecare of persons with complex health problems.

Dr. Shea meets regularly with Dr. Greenes, discusses the research and learns from the many research endeavors at ASU's Biomedical Informatics Department. She will spend the summer with Dr. Brennan at UW observing and learning cognitive work analyses processes.

BENEFITS AND POTENTIAL

Dr. Shea's research project has large potential implications. When patients with CHF are discharged from the hospital, they are often provided with monitoring equipment for their home. This equipment is used to track the patient's daily progress, via an uplink through a standard telephone line to a telehealth monitor-

ing station. Data that is sent from the patient's home typically includes blood pressure, weight, oxygen saturation and blood sugar level readings. A telehealth nurse in a remote office analyzes the data sent from the patient's home, and if the data indicates a potential problem, the nurse then notifies the patient by telephone.

Benefits of a home health telehealth program are the ability to provide adequate monitoring of a patient's condition while minimizing the expense of traveling home health nurses, as well as reducing the need for expensive hospitalizations by early identification of potentially threatening changes in the patient's condition. By analyzing how patients react to the feedback provided in response to the telehealth data, Shea hopes to identify a process that will improve patient self-care and quality of life and ultimately reduce readmissions to the hospital.

Approximately one million Americans experience a heart attack each year; 76 percent of people who experience an initial heart attack will progress into one of the stages of heart failure within five years. Industrialization, improved treatment, and earlier onset increase the prevalence of people living with CHF. Telemonitoring is becoming increasingly important as a means to assist CHF patients to manage their own care and use professional resources more efficiently and effectively. It is projected that remote telemonitoring will be used in seven million homes by 2012. Yet, despite its increasingly widespread use, little is known about how to use telemonitoring to improve patient's adherence to recommended behaviors. Presently, there is minimal research on how CHF patients relate to telemonitoring and the impact of different feedback interventions. Dr. Shea's research focuses on filling that gap.

Clearly, Kimberly Shea is committed to getting some practical, evidence-based data to improve patient care. When asked what she hopes to learn from the study, Shea responds, "There are many pieces of the human to computer interaction process that we don't yet understand, especially in healthcare. The primary goal of this research is to provide insight into the interaction components that will influence patients' motivation to deal with their daily health struggles." Dr. Shea continues, "Basic interaction that occurs when technology comes between the patient and the nurses questions



Shea (left) and her research assistant Cathy Lalley, RN, MHI work together to identify a process to analyze patient reactions to feedback.

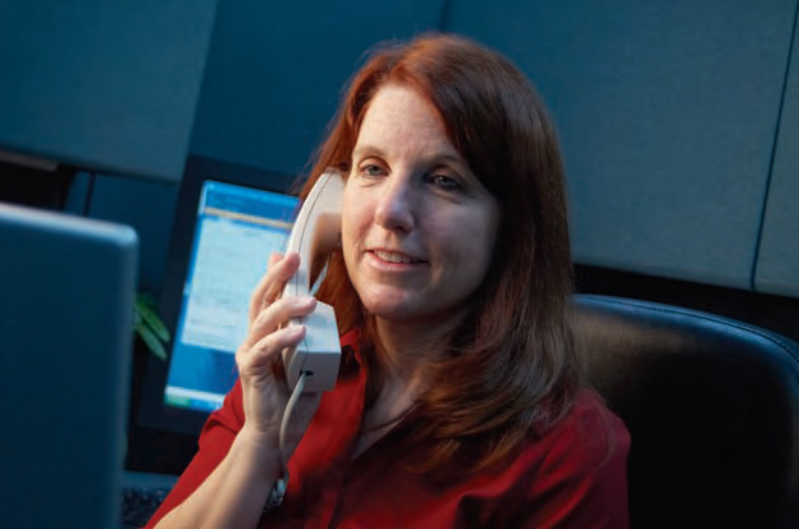
the need to be studied to be certain that we are using telehealth technology as effectively as we can."

ANSWERING IMPORTANT QUESTIONS

In looking at questions such as "Does the telehealth monitoring help patients with self-care? Can patients act on the information that they are receiving from the technology? Does it motivate them? Does it encourage them to be engaged in promoting their own health?," Shea examines research areas within the science of biomedical informatics. She will be developing a program of study using human-computer interaction and cognitive science to translate technological input into action that positively affects patient outcomes. She believes that the nurse and patient are a team when using technology in home healthcare; each with specific roles that contribute to outcomes. Each plays a part of the process but in order to achieve the best outcomes from the team effort, we must first understand the details of each interaction with the technology.

Training activities and scientific research timelines will coincide during the grant's three year period. This research is being done in partnership with Banner Home Health, working with discharge planners, home health nurses, and a telehealth nurse. In Phase I of the research study, Shea will recruit a small sample group of CHF patients who will be studied using a cognitive task analysis process.

The study is designed to measure patient's response to feedback given to them based on the information the patients transmit



Banner telehealth nurse Susan Salo, RN communicates with patients by telephone when their telehealth data indicates the need.

through Banner's telehealth monitoring system. Previous research indicates that patients who receive monitored information about their health react one of four ways: 1) accept 2) worry 3) actuate (are motivated to do something) or 4) evaluate the results. Shea will do a pretest of the subjects, including a questionnaire with this small sample of patients, to evaluate and validate the four reactions.

RESARCH PROCESS

For the first 30 days of the study, the patients receive usual care, meaning that they upload their health data daily, and only receive contact from the telehealth monitoring nurse if data indicates something outside their expected range. During the usual care, patients' reactions will be evaluated such as; Do they worry? Accept? Evaluate? or Are they actuated? At the end of the 30 days, patient's outcomes are measured to determine behaviors such as medication adherence, vital sign maintenance and daily self care activities.

For the next 30 days, patients will continue to upload their data, but rather than receiving feedback in the form of a phone call from the telehealth nurse if something is wrong, the patients will receive positive feedback from the telestations regarding the vital signs that have been monitored. The telestations will be programmed to transmit positive responses and encouraging feedback when data indicates that the patient's vital signs are maintained within the prescribed range. Again, the patient's reactions will be evaluated. At the end of receiving the usual care plus the positive feedback, the patient behavioral outcomes will be measured.

REAL-TIME APPLICATIONS TO PRODUCE BEST OUTCOMES

Results will be analyzed to determine the relationship between reactions, feedback and patient outcomes, addressing questions such as: Do patients that receive positive feedback have better medication adherence? Are they more actuated to take better care of themselves when they receive immediate feedback?

"This study is a foundational step in understanding how home telemonitoring feedback can supplement nurses' practice to produce best outcomes," Dr. Shea observed. "Post-acute hospitalization is a critical time of transformation for patients living with chronic illnesses and should include interventions targeted to motivate the individual."

It is Shea's goal to lay the groundwork for continued study in testing applications of technology designed for best practice methods and persuasive interventions for chronic illness. She hopes to demonstrate the means to successfully motivate patient adherence to medication and treatment protocols, in keeping with her passion for finding the best possible patient outcomes. ■



Kimberly Shea works with a telehealth patient in his home, training him in the use of the monitoring equipment.



Building Better Health One Step at a Time

It is such a simple concept: better health is achieved by increased physical activity. Yet in reality, the simple steps that can be taken to achieve the goal of better health remain untaken by far too many. Physical inactivity is a major risk factor for chronic disease, and it is believed that as many as two million deaths per year worldwide can be attributed to sedentary lifestyles.

The ASUKI Step project, a joint effort of the Karolinska Institutet (KI), Stockholm, Sweden, and the ASU College of Nursing & Health Innovation in Phoenix, brought together over 2,000 participants from both institutions in a nine-month collaborative research effort to increase physical activity levels among employees, to improve their health and well-being. The Karolinska Institutet is one of the leading neuroscience facilities in Europe.

10,000 STEPS AND COUNTING...

Participants in the two locations that are more than 5400 miles apart were challenged to walk 10,000 steps per day for 185 days over the course of the study. The project measured how helpful walking in a university setting can be with regard to self-perceived health and stress levels, anthropometric measures, and fitness. The effort was designed to reduce the number of inactive days by 20 percent in employees at both institutions. Inactive days were

defined as a level of less than 3000 steps per day. Step counting was accomplished by use of pedometers issued to each participant in the study.

Participants recorded their steps in a website maintained by Select Wellness, a Swedish company. At ASU, New Lifestyles Pedometers, Inc. provided pedometers for participants. Four locations at ASU and two locations at KI were used to perform fitness testing in a sample of subjects. Project coordinators, graduate students and undergraduate students helped to collect data to assess the physical fitness for one person on each team.

Faculty, staff and graduate student employees were eligible to enroll as a team in groups of three or four, and winning teams from each institution were awarded a trip to Arizona or Sweden. Interest in the ASUKI Step was high: 1377 participants at KI and 713 at ASU at the outset. Most participants were female (approximately 75 percent) and nearly 1 billion steps were taken by study participants over the course of the study.

The ASU individual award winner, Connie Pangrazi, from ASU's
Above: ASU's winning team of Linda Larkey (l), Julie Gonzalez and Brian Sillanpaa walk briskly on ASU's Downtown Phoenix campus.



ASU Principal Investigator Barbara Ainsworth (seated) and co-investigator Pam Swan.

Polytechnic campus, averaged 26,069 steps per day and the ASU winning team of Linda Larkey, Brian Sillanpaa, and Julie Gonzalez, averaged 21,000 steps/day for every team member each day of the competition (approx. 7.5 miles/day). On average, KI recorded more steps per day than ASU (13,051 vs. 10,975) and earned the top places for teams with the most days over 10,000.

CHALLENGES AND REWARDS

The project created some challenges, notably the difficulties inherent in walking, an essentially outdoor activity, in two disparate climates, for a defined length of time. The cold and rain of Stockholm presented challenges for Swedish participants, while the heat in Arizona provided a different kind of challenge. Despite the difficulties, however, ASUKI Step was a large success with participants. Some reported significant weight loss, improved work perfor-

mance, and enjoyment during the contest, as well as good will and increased social support for the healthy activity.

Swedish winners visited Arizona in February and their trip included sightseeing in Phoenix and Sedona, a visit to the Grand Canyon, and a congratulatory dinner with their ASU counterparts. Arizona winners will travel to Stockholm in June where plans include a city tour, a boat ride touring the Archipelago around Stockholm, and a countryside tour during the Swedish holiday called Midsummer, which celebrates the first day of summer.

Principal Investigators from ASU are Barbara Ainsworth, MPH, PhD, FACSM and Pamela Swan, PhD, FACSM of the ASU College of Nursing & Health Innovation. Karolinska Institutet Principal Investigators are Agneta Yngve, PhD, and Patrik Emanuelsson. Analysis of the findings of the study is in process.

ASU's PI Barbara Ainsworth noted, "While the weather for outside activities in Stockholm and Phoenix will never be optimal at the same time, we learned that it is feasible to conduct incentive-based worksite health promotion projects internationally with few difficulties. While the Karolinska Institutet won the overall contest by having more participants walk 10,000 steps per day, many ASU participants reported having fun, improving their health, and losing weight." What better result can there be from taking simple steps to build better health? ■



The Karolinska Institutet's winning team on their February visit to Arizona.

With chronic non-communicable diseases currently accounting for 60 percent of all deaths worldwide, 80 percent of which occur in low- and middle-income countries, the demand for a healthcare workforce and cutting-edge research in foreign countries is growing. The College of Nursing & Health Innovation's newly established Center for World Health Promotion and Disease Prevention is taking the lead in addressing this 21st century global challenge.

Under the leadership of Director Carol Baldwin, PhD, RN, AHN-BC, FAAN, the center builds on two and a half years of achievements by the Office of World Health Promotion and Disease Prevention. Baldwin also serves as the college's first Southwest Borderlands Scholar. The ASU Southwest Borderlands (SWB) initiative addresses the regional needs and shifting demographics throughout Arizona and its borders and includes health, education, business and other issues with respect to academics, research and policy.

CREDO (Collaboration, Research, Education, Dissemination and Outcomes) is the acronym utilized to focus major activities, projects and programs integral to the center's mission. The center is actively engaged with the UnitedHealth Group Global Health Initiative in London and has developed collaborations with their Centers of Excellence in Latin America, the U.S. Mexico Border and China. According to Baldwin, the U.S. Mexico Border Health Office regional division of the World Health Organization/ Pan American Health Organization (WHO/PAHO) has agreed to be an immersion site for International Health for Health Professionals graduate certificate students. Faculty collaborations also have been established to reduce the rates of childhood obesity in the region.

Diverse faculty, staff and collaborators provide a broad foundation to achieve center objectives. "The partnerships facilitated

by the center will expand ASU's capacity to improve health and reduce disease at the individual, interpersonal, organizational, community and policy levels worldwide," the ASU associate professor noted.

Center objectives include:

- Conducting trans-disciplinary research with local and global partners to reduce and prevent the morbidity and mortality associated with chronic diseases
- Obtaining research funding to develop culturally, regionally and globally responsive health promotion and disease prevention interventions
- Testing and integrating innovative, cost-effective, evidence-based health promotion/risk reducing products and processes to improve quality of care and quality of life in developed and developing countries in the presence and absence of natural and human-made disasters (i.e., earthquakes and war).

"To achieve these objectives, the center will draw from faculty expertise across the college and partner programs," added Baldwin. Representatives from other colleges and programs within Arizona State University also have indicated their willingness to participate in various center research initiatives. Focal areas will include interventions for obesity and obesity-associated illnesses (diabetes and cardiovascular disease), sleep disorders, asthma, mood disorders (particularly depression and anxiety), and cancer screening/prevention across the lifespan.

Dean Bernadette Melnyk and Maria Teresa Cerqueira, PhD, U.S. Mexico Border Health Office WHO/PAHO Regional Director, have already outlined the terms of agreement for the college to be designated as a Collaborating Center for Health Promotion and Behavior change. "The center expands our capacity as healthcare scholars, leaders, collaborators, and providers through worldwide collaboration," the Dean noted. ■

The World Takes Center Stage at ASU Nursing & Health Innovation

A Health System *By Design*

Contributed by Denis Cortese, MD and Robert Smoldt, MBA, BS

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avigating the healthcare labyrinth while you're sick is like trying to traverse Boston's streets when you're late for a meeting—an exercise rife with frustration and roadblocks.

With its lack of street signs, numerous one-way streets and constant construction, driving in Beantown can be extremely stressful for the uninitiated. And it's no wonder. Rather than being designed to accomplish the smooth flow of traffic, many of the city's streets are simply paved 18th-century cattle trails.

Healthcare suffers from the same problem. It is built on an old infrastructure and paradigm.

We have myriad professionals and organizations providing healthcare, but no vision of what we should collectively accomplish. In discussing this problem with colleagues across the country, one physician remarked, "Healthcare is a loose collection of independent services with a specific vested interests. These groups come at the customer only with their little piece of the pie."

We must abandon this cobbled approach and begin to design an effective healthcare system for the citizens of the U.S. Our vision is that all U.S. citizens will have access to high-value healthcare through a dynamic learning system in which teams of professionals use information technology and systems engineering to learn from each other and quickly disseminate and assimilate new evidence that can benefit individual patients.

The core elements include:

- Individualized healthcare focus on the individual patient: The needs of the patient must come first. The science of individualized medicine, which helps providers tailor therapies to a person's genetic composition, will reinforce the need to build a healthcare system that is patient-centered.
- Teams of professionals: Dr. Will Mayo, one of the founders of the Mayo Clinic, said patient care is best delivered by teams. This is even truer today. Patients are best served when teams function in an integrated way with the patient at the center. The teams can function best when they include a variety of pertinent backgrounds — physicians, nurse practitioners, nurses, patient educators and other allied health personnel.
- Information technology to coordinate evidence-based care: Individual medical records, medication lists and the most up-to-date clinical trial information must be available at the touch of a computer key, allowing all types of providers over vast geographic spans to collaborate and coordinate evidence-based care for patients. In addition, decision support tools should be embedded in the electronic systems to encourage the most effective and efficient use.
- Systems engineering/science of healthcare delivery: The healthcare industry must commit to using systems' engineering principles to analyze outcomes and processes of care—a key step to improving healthcare quality; identifying innovative ways to care for patients; and reducing waste and inefficiencies.

- High-value healthcare: Healthcare professionals must work diligently to provide patients with high-value healthcare—a quality outcome and a satisfied patient at the lowest possible cost.

To realize this vision, stakeholders within the system—providers, patients, insurers, employers and the government—must commit to two fundamentals.

First, as the central figure within healthcare systems, the patient must have more decision-making power and responsibility. This includes choosing a healthcare provider and insurance plan from multiple options; working with providers to select treatments for illnesses; adopting healthy lifestyles; following treatment plans; accepting more financial responsibility for his or her medical care.

Second, competition based on value—a quality outcome and a satisfied patient at the lowest possible cost—is the best way to drive improvement in healthcare. Provider payments should be based on value, rather than on completing processes or performing discrete services alone. That value must be made apparent through transparency of quality and price of care.

In such a system, the role of government would change fundamentally — from an insurance company to an enabler of innovation



Robert Smoldt, MBA, BS

and a coordinator/financier of private health insurance, based on need. The government should coordinate a market-based insurance model (similar to the Federal Employees Health Benefit Program) to ensure fair, universal access to private insurance.



Denis Cortese, MD

Laying the foundation for a new healthcare system requires attention to many intersecting, complicated issues: insurance design, care coordination and payment reform, among others. All of these elements must converge if we are to reach our final destination—a healthcare system in which disparate organizations and professionals work together, learn from each other and coordinate care for people who are sick. ■

Denis Cortese, MD is the Director of ASU's Health Care Delivery and Policy Program and a Foundation Professor in the Department of Biomedical Informatics, Ira A. Fulton Schools of Engineering. He also is the Emeritus President & CEO of Mayo Clinic and Professor of Medicine.

Robert Smoldt is the Associate Director of ASU's Health Care Delivery and Policy Program and the Emeritus Chief Administrative Officer of Mayo Clinic.

Making Innovation a Reality:

The ASU President's Award for Innovation for 2010

'Innovation' is a word commonly used today. Some critics would quickly say it is 'overused.' However, the College of Nursing & Health Innovation takes the word so seriously that it is part of its name. But a word is just a word until it stands for accomplished facts. The word in the college's name became even more meaningful when its Center for Healthcare Innovation & Clinical Trials (CHICT) recently received the ASU President's Award for Innovation for 2010.

The President's Award for Innovation recognizes Arizona State University faculty and staff who have worked as departmental, interdepartmental or transdisciplinary teams that have made significant contributions to ASU and higher education through innovation. This award recognizes the creation, development and implementation of innovative projects, programs, initiatives, services and techniques.

ASU President Michael Crow presented the award to Linda Mottle, director of the center, in April at a ceremony in Tempe. In accepting, Mottle recognized Kim Arcoleo, Sharon Goldsworthy, Fran Rees, Kimberly Shea, Denise Link, Susan McGarity, Terry Olbrysh, Priyank Jasani of the College of Nursing & Health Innovation, Carl Yamishiro of the BioDesign Institute, and community clinical research partners for their contributions.

Bernadette Melnyk, Dean of the College of Nursing & Health Innovation, is especially

proud of the recognition of the center's work, which was launched in 2006. "The Center should be held as a model exemplar of innovation and entrepreneurship for ASU, as well as other universities throughout the nation and globe," she said. "In this time of cutbacks at universities, the Center for Healthcare Innovation & Clinical Trials created a win-win-win solution which enabled stakeholders to collaboratively accomplish its goals."

A NECESSITY, NOT A NEED

Awards are impressive but positive impact beyond your own walls is the bottom line of innovation. Phoenix is the largest standard metropolitan statistical area in the U.S. with the least clinical research activity. That was the case until CHICT seized the opportunity to lead a transformation of Arizona's clinical research enterprise by identifying and integrating the community's goals and needs with the aspirations of the "New American University." The center became the catalyst for the coordination and formation of new partnerships among community-based clinical research entities, university researchers, and global industry sponsors.

The opportunity to enhance and



Linda Mottle, ASU President Michael Crow, and Kim Arcoleo

re-engineer the community-based clinical research enterprise in Arizona arose in 2007 when ASU received the "University as Entrepreneur" Kauffman Foundation grant. The grant supports ASU's vision of the New American University to use knowledge and encourage innovation and entrepreneurship. A portion of this funding supports the Center for Healthcare Innovation & Clinical Trials within the ASU College of Nursing & Health Innovation.

IT STARTED WITH COMMUNITY

In a grassroots effort, CHICT met with community clinical research leaders to identify their needs and goals, break down silos, and leverage community and university strengths. Representatives from hospitals, healthcare research facilities, contract research organizations, the bio-

medical industry, and ASU came together to identify key initiatives that would benefit all stakeholders. Many commented that this was the first time they had ever met and talked with their competitors and colleagues in the industry. They quickly embraced the challenge to become a unified force to enhance and re-engineer Arizona's clinical research enterprise. The center mission became a shared mission—to foster excellence in collaboration, outreach, research and educational (CORE) activities to support and promote clinical research that advances healthcare through innovative products, processes and educational programs.

Over the course of the year, advisory board members developed a five-year strategic plan that continues today to be the operating guide and the key measure for center initiatives. The Center Advisory Board used a reciprocal process model to build consensus among the stakeholders, to drive the structure and the process, and set goals that served the diverse group, the community, state and ASU.

“The center has innovatively leveraged the membership of its advisory board to simultaneously make advances in multiple areas of healthcare, education, and clinical research,” said Glen Vaughn, DBA, Chair of the CHICT Advisory Board Executive Committee, and retired Director, Technology Development, Medtronic Microelectronics Center, Medtronic, Inc.

Participation by Advisory Board members “builds community involvement and collaboration by demonstrating ASU's community commitment, and increases competencies to achieve progress in healthcare.”

Toby Anchie, RN, MAEd, CHRC, Executive Director, Research & Development, St. Joseph's Hospital and Medical Center and Barrow Neurological Institute and also a member of the CHICT Advisory Board Executive Committee, agreed with Vaughn. “CHICT has given birth to a unique, non-competitive, supportive and collaborative ecosystem unlike any other with a mission of healthcare innovation and service to our community,” Anchie said. “The center provided an innovative and unique opportunity to diverse individuals and companies to network and work closely together to develop and discover new ways to provide healthcare services, information and support to the communities of Arizona.”



Clinical Research Coordinator Sharon Goldsworthy works with a participant in a clinical trial of neurological medical equipment.

Since the center's inception four years ago, significant results have been achieved in the four CORE challenge areas. Center Director Mottle said the results speak for themselves and include:

Collaboration

- Designed, developed, and launched Arizona's first clinical research searchable directory, with over 1,100 listings compiled from nine databases,
- Established a diverse clinical research advisory board of 30 members representing 18 organizations,
- Established internal partnerships within ASU to develop operational infrastructure to support clinical trials and establish the center as ASU's support hub for biomedical clinical research.

Outreach

- Launched the first national health innovation online competition -- Rise to the Challenge: Health Innovation 2010 for students. This is the first university-sponsored, health oriented, inter-disciplinary team challenge. The Challenge, which is in process, focuses on utilizing Health 2.0 to improve patient outcomes with the winning team to be selected by a panel of independent judges.
- Standardized approximately 100 available operational templates and tools for use by clinical research practitioners that will be posted on a website this summer. Tools included templates for budgets, contracts, site feasibility assessment, and standard operating procedures.

— Formed strong relationships for the center with existing Downtown Phoenix (biomedical) Campus strategic partners: University of Arizona College of Medicine, Pharmacy, and Engineering; ASU Bio-

Health Innovation community-based health centers, with substantial revenues. The trials were sponsored by Arizona-based medical device companies, including CardioLert, Kinetic Muscles, and Guided

Therapy. These were the first ever FDA regulated, industry and NIH sponsored clinical trials conducted at ASU.

— Received a \$360,000 NIH sub-contract under Yale University to conduct the first-ever drug clinical trial on the ASU campus.

drug inventory system at a major academic and research medical center; in collaboration with a Sun Health neurology researcher, developing and submitting an NIH research grant for adjunctive spinal network analysis for Parkinson's patients; and developing the first Arizona clinical research publicly available and searchable directory with ongoing support from the University of Arizona College of Medicine and Bioinformatics Departments.

LOOKING TO THE FUTURE

In Linda Mottle's view, the future looks bright for the center. It is currently in the final stages of forming a strategic alliance with a large global clinical research organization. This alliance will result in an ASU and community oriented network to enhance clinical trials and research, that is expected to bring approximately 100 new studies to Arizona research providers over the next three years. The model for this alliance supports multiple ASU units (e.g., Biodesign Institute, Ira A. Fulton Schools of Engineering, School of Life Sciences, College of Nursing & Health Innovation, SkySong).

If you want an honest assessment on innovation and what the Center of Healthcare Innovation & Clinical Trials has done, ask an innovator. Joshua Tong, CEO, co-founder of Innovate Life @ SkySong, quickly gave this assessment, "The Center for Healthcare Innovation & Clinical Trials is a critical link in the ASU chain of innovation and entrepreneurship. By leveraging internal expertise as well as community resources, the center ensures that ASU discoveries and developments have a clear pathway from the lab bench to the marketplace."

Enough said...For now! ■



Linda Mottle (right) consults with team members Fran Rees (left) and Sharon Goldsworthy on the CHICT projects.

Informatics, College of Public Programs; and TGen, as well as with Northern Arizona University College of Health Sciences. Mottle said this trans-disciplinary networking is driving new strategic initiatives, including a tri-university graduate certificate in Clinical and Translational Science and research grant submissions in complementary and alternative medicine (CAM) educational programs.

— Consulted student-formed businesses (e.g.; STAX System, InnovateLife) being launched through ASU SkySong in regulatory and commercialization pathways for medical product development and clinical testing.

Research

— Successfully conducted three medical device trials at College of Nursing &

professional education programs that drew students from multiple disciplines. These programs integrate principles of innovation, entrepreneurship, and organizational design to re-engineer the clinical research industry.

— Online graduate certificate in Clinical Research Management (CRM), launched in spring 2008.

— Online MS CRM degree launched in fall 2009, with an initial cohort of 26 students from 16 disciplines.

— Arizona tri-university online graduate certificate program in Clinical and Translational Science targeted for community-based, multidisciplinary investigators and clinical research professionals. The certificate program starts fall 2010.

— CRM students completed capstone projects such as: improving the research

Don't Miss a Chance to Dream, Discover, and Deliver in 2010!

Mark your calendars now for November 9, 2010, — the date of the college's annual Dream • Discover • Deliver Awards Luncheon.

Now in its third year, the 2010 program is an annual affair featuring three stellar honorees dedicated to improving health-care or the health of the American public, each of whom pursue big dreams, lead innovative changes, and achieve their goals. The first awards program was held at the gala dinner in 2007 celebrating the 50th anniversary of the college.

The 2010 event will be held at the Sheraton Phoenix Downtown Hotel, a block away from the Nursing & Health Innovation complex on the ASU Downtown Phoenix Campus. Attendees will receive complimentary valet parking at the Sheraton, a healthy nutritional lunch, and lively, inspiring

Details at a Glance

Dream-Discover-Deliver Awards Luncheon

November 9, 2010

Sheraton Phoenix Downtown
Hotel

11:30 – 1:00 pm

\$60/person

Complimentary valet parking

remarks by our three honorees (See pages 30-31 of this issue for the names of the 2010 award winners.).

The goal for the 2010 Dream • Discover • Deliver Awards Luncheon is to raise funds to support the college and its initia-

tives. Examples of items supported by this fund include student leadership travel to professional conferences, pilot studies, and financial support for other student, alumni and faculty activities and initiatives.

Whether you are a graduate of our college, healthcare leader, or interested community member, we encourage your attendance at the luncheon November 9th. Last year, approximately 250 guests joined us for the luncheon that featured Dr. Richard Carmona, MD, MPH FACS (17th Surgeon General of the United States), Michelle King Robson (philanthropist and founder of EmpowHer — a website dedicated to women's health and well-being) and Marla Weston, PhD, RN and CEO, American Nurses Association. She is a 1988 graduate of the college.

Sponsorship opportunities begin at \$2,500 and individual tickets are \$60/person. If you cannot attend but would like to support a student's attendance at the luncheon, we welcome your generous gift. See page 39 of this issue for more information on the advantages of giving.

For more information regarding sponsorship opportunities or tickets, please contact Pamela Lowe, Assistant Development Officer at 602.496.1498 or pamela.lowe@asu.edu.

From left to right: Dean Bernadette Melnyk with 2009 winners Richard Carmona, Michelle King Robson and Marla Weston.



A Tradition Grows

Dream • Discover • Deliver Awards

Recognize Excellence and Encourage Leadership

Three years go by quickly. However, in that short time the **Dream-Discover-Deliver Awards** program of the College of Nursing & Health Innovation has developed into a tradition that recognizes healthcare leaders accomplishments and inspires future leaders.

According to Dean Bernadette Melnyk, the name of the awards program was not chosen by accident. "It is the tagline of our college and guides our culture in how we act and what we expect from each other," Dean Melnyk explained. "I believe dream, discover, deliver describes the qualities the college always has had in its 53 years," Dean Melnyk said. Proceeds from the 2010 **Dream • Discover • Deliver Awards Luncheon** will be used to support the College's Investment Fund.

The 2010 celebration will be held November 9, 2010 at the new Downtown Sheraton Hotel in Phoenix from 11:30 a.m. to 1 p.m.

The event this year recognizes three health professionals, which brings the total of award winners to nine since the launch of the program. The scope of the awards encompasses professionals in all health disciplines who have set high standards and made major accomplishments that have positively impacted their professions. Honorees usually have established connections to Arizona and the college. In selecting honorees, we recognize ASU alumni but also leaders from across the nation," Development Director Laurel Van Dromme said.

The **Dream • Discover • Deliver Award** recipients for 2010 are:

Dream Award – Captain William G. Wood, RN, MSN, FNP

Captain Greg Wood, RN, MSN, FNP, has fulfilled many diverse career dreams in his more than 30 years of extensive public health experience in administration and direct healthcare delivery. His broad professional accomplishments and education have focused on research, administration, education, epidemiology, special minority populations, budget, grants management, program planning/evaluation, public health, hospital/ambulatory care nursing, advance practice nursing, and regulatory science. His accomplishments in regulatory science include device and drug evaluation, drug marketing advertising, and quality improvement/customer service. He currently serves as the Director of the FDA Center for Drug Evaluation and Research Academic Collaboration Program that was founded by the agency in 2009 to advance scientific opportunities and careers in the field of Regulatory Science by collaborating with academia to co-design innovative regulatory science curricula that meet the ever-changing needs of the FDA, sister agencies, regulated industry and beyond. This will lead to development and promotion of products that are safe and effective to protect the public health of the nation. Other esteemed positions that Capt. Wood has held in his career include: Director for Scientific and Program Operations, Office of AIDS Research, Office of the Director, National Institutes of Health; Director, Centers of Excellence for HIV Disease, Oncology and Diabetes, Indian Health Service; and Associate Director, Phoenix Indian Medical Center, Indian Health Service. Captain





Wood received his Bachelor of Science in Nursing degree from the University of Arizona in Tucson, and attained a Master of Science in Community Health Nursing and Family Nurse Practitioner certification from Arizona State University.

Discover Award - William Haskell, PhD

William L. Haskell, PhD is Professor of Medicine (active emeritus) in the Stanford Prevention Research Center and the Division of Cardiovascular Medicine at Stanford University. His doctoral training was in human applied physiology with postdoctoral training in chronic disease epidemiology. He has been a member of the Stanford Medical School faculty for the past 38 years with primary interests in applied and clinical research in preventive cardiology, cardiac rehabilitation, physical activity assessment and successful aging. Dr. Haskell's journey of discovery has included serving as an investigator on numerous single and multi-center clinical trials, which have investigated chronic disease prevention or management. Of particular interest to him has been the role of habitual physical activity and related health behaviors in metabolic and hemodynamic factors contributing to the development of atherothrombotic vascular disease. He has served on numerous national and international panels responsible for developing guidelines for physical activity and public health, preventive cardiology and cardiac rehabilitation.

Recently, he was chair of the Physical Activity Guidelines Advisory Committee for the U.S. Department of Health and Human Services. This Committee documented the scientific basis for the 2008 Physical Activity Guidelines for Americans. Since 2008, Dr. Haskell has been a scientific advisor to the World Health Organization for the development of WHO Global Recommendations on Physical Activity and Health.



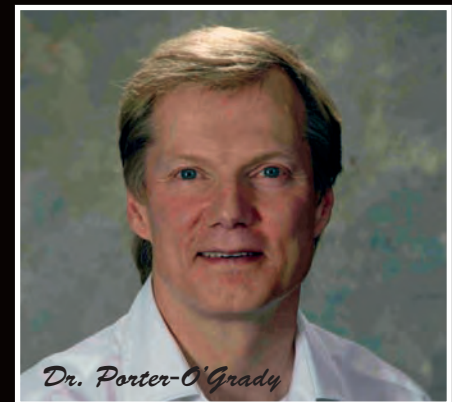
Deliver Award - Timothy Porter-O'Grady, DM, EdD, ScD (h), FAAN

Tim Porter-O'Grady has been involved in healthcare for 40 years and has held roles from staff nurse to senior executive in a variety of settings. Porter-O'Grady is currently senior partner of an international healthcare consulting firm in Atlanta specializing in health futures, organizational innovation, conflict and change, as well as complex health service delivery models. He is noted for his work on shared governance models, clinical leadership, conflict, innovation, complex systems, and health futures. As associate professor and leadership scholar for the interdisciplinary Master of Healthcare Innovation and PhD in Nursing & Healthcare Innovation programs for the ASU College of Nursing & Health Innovation, Porter-O'Grady also is visiting Professor in the hybrid DNP Program at University of

Maryland and is an adjunct professor at Lakehead University, School of Public Health, Ontario, Canada.

Dr. Porter-O'Grady holds graduate degrees in clinical leadership, two earned doctorates—one in learning behavior and a second in organizational and systems leadership. In addition, he received a Doctor of Science degree, honoris causa, from the Medical University of Ohio. He completed post-doctoral work in aging and is dual board certified as a nurse executive and nurse practitioner in gerontology. Porter-O'Grady also is certified by the Georgia Supreme Court's Office of Dispute Resolution as a registered mediator and arbitrator.

Dr. Porter-O'Grady has published extensively in healthcare with over 175 professional journal articles and 21 books, and is a seven-time winner of the American Journal of Nursing Healthcare Book of the Year Award. He has consult-



ed internationally with over 500 institutions and has lectured in more than 1,000 settings internationally. He has held a number of offices in professional associations and national and community boards such as the vice chair of the governing board of Catholic Health East, governor with Sigma Theta Tau International (STTI), president of AID Atlanta, and the STTI Foundation, among others. ■



New Degree Programs

*BS and Bachelor of Applied Sciences in Health Sciences
Offer Choices for Change*

C

ollege is a place filled with constant and unexpected change for everyone. Students in particular bear the most stress as they pursue educational tracks that can lead to successful and satisfying careers. But what happens

when a student changes his or her mind about their career path or an unexpected development necessitates a change? In these challenging and unpredictable times, the student's best hope is to be enrolled at a college that provides multiple career paths from which to choose. The College of Nursing & Health Innovation is one such place as evidenced by its introduction of two student-focused education programs in fall 2010 — the BS in Health Sciences and the Bachelor's of Applied Sciences in Health Sciences.

The launch of the new degree programs is part of the integration of health promotion disciplines into one college that began at Arizona State University in May 2009.

Executive Dean Craig Thatcher, DVM, PhD, Diplomate ACVN and Assistant Dean for Academic Affairs Linda Vaughan, PhD, RD, FADA developed both new degree programs.

"These new degree programs represent our focus on providing students a number of choices in terms of health career alternatives," Dr. Thatcher said. "Our goal is to provide students with a seamless transition to various health-related career and employment options."

The BS in Health Sciences [HSC] degree is designed to provide the academic knowledge and skills to allow students to move directly into a range of employment opportunities within the health field and/or continue their education in discipline-specific graduate or professional programs. Students will complete core courses that emphasize ethics, communication skills, critical thinking, and cultural awareness.

The BS in Health Sciences offers three innovative concentrations:

Pre-Professional Concentration, for students whose goal is to enter medical, dental, osteopathic, physical therapy, veterinary medicine, pharmacy, and similar professional schools;

Healthy Lifestyle Coaching, for students seeking immediate employment in the community health education/health promotion field and/or admission to graduate studies; and

Health Policy, for students interested in the community policy aspects of disease prevention and health promotion and/or who seek admission to graduate programs.

HEALTH SCIENCES GROWING

According to the U.S. Department of Labor, the health sciences field represents the largest single industry in the U.S., accounting for 14.3 million jobs across 200 different fields. In addition, 7 of the 20 fastest growing occupations are health related, generating 3.25 million new jobs between 2008 and 2018, a 22 percent increase or double the growth of all other industries combined.

“The program is designed to provide cross-disciplinary and interprofessional education and training.”

The three concentrations offered within the BS program reflect the diversity of this high demand, well-paid field. As designed, each concentration provides both employment and post-baccalaureate educational options upon completion of the BS in Health Sciences. In addition, the program is designed to provide cross-disciplinary and inter-professional education and training, an essential in today's economy.

PROGRAM CURRICULUM

The BS in Health Sciences is a 120 credit-hour program, including first year composition, general studies, core/required courses, program specific electives, and any additional requirements. Core courses required in the Health Sciences program include Applied Medical/Health Care Ethics, Evaluation of Health Sciences Research, Complementary Healthcare, Practicum in Health Sciences, Medical or Technical Writing/Communications, and Statistics, which are all three credit courses.

The Practicum in Health Sciences is a capstone experience to be taken during the student's senior year. It consists of a supervised placement with an individual, agency, organization, company, or other entity relevant to the student's own academic and professional goals.

The curriculum will be broadened over time with courses on such topics as Cultural Aspects of Health and Legal Issues for Health Care Professionals.

PRE-PROFESSIONAL CONCENTRATION

The Pre-Professional Concentration is designed for students planning to attend medical, dental, veterinary medicine, physical therapy, pharmacy, osteopathic, and similar professional schools. In addition to a comprehensive core of basic science courses, the concentration is unique because it provides a solid base in ethics, communication, the evaluation of research (the cornerstone of evidence-based practice), and healthy lifestyles (the foundation of health promotion and chronic disease risk reduction avenues of healthcare).

These students will be well prepared to apply for graduate programs in many of the basic and applied sciences. Students who do not move immediately into an advanced degree program will be fully prepared for a range of career opportunities including laboratory scientist, health officer, clinical research coordinator, and sales/marketing representative for pharmaceutical and/or medical device companies.

HEALTHY LIFESTYLES COACHING CONCENTRATION

Lifestyle intervention is an evidence-based, cost-effective, low-risk approach to the prevention, risk reduction, management, and treatment of chronic diseases such as type-2 diabetes, heart disease, hypertension, obesity, certain types of cancer, stress, back pain and insomnia, among others. This approach includes diet/nutrition, physical activity, stress management, smoking cessation, and similar low-technology, non-pharmaceutical modalities.

The Healthy Lifestyles Coaching concentration is for students who have a broad interest in health education and is a possible career track alternative for third-year College of Nursing & Health Innovation students who elected not to attend or were not admitted to the Upper Division Nursing program due to the highly competitive admissions setting. Non-nursing students also are expected to be attracted to this concentration because it leads to clearly defined career options such as health/patient educator, elder service/congregate program coordinator, WIC/Community Nutrition Aide, school health specialist, community health coordinator, HMO/insurance company client health coach, and Healthy Start coordinator. Enrollment in the Healthy Lifestyles Coaching Concentration is expected to be strong given current trends emphasizing preventive health. If even 10 percent of the 300 nursing students who are not admitted to the Professional Division in nursing move into the HSC program, initial enrollment estimates will be extremely competitive.

Students who do not immediately enter the workforce will be well qualified for entry into graduate programs in Gerontology, Family Sciences, Health Education, Public Health, and related areas.

HEALTH POLICY CONCENTRATION FOR NON-MEDICAL STUDENTS

The continuum of healthcare now spans a diverse array of health providers ranging from private practices and outpatient care centers to residential care facilities and acute care hospitals. The Bureau of Labor Statistics estimates the need for healthcare service administrators in these segments of the healthcare workforce to increase 19 percent between 2008 and 2018. The

experience within their field of interest. Students also can use their electives to complete a minor in Nonprofit Administration, which requires a total of 15 credits.

Students who do not immediately enter the workforce will be well qualified for entry into graduate programs in Healthcare Innovation, Healthcare Administration or Health Sector Management, Business Administration, Law, or similar areas of study.



development and implementation of innovative, cost effective, and universally accessible programs by administrators are essential to U.S. healthcare reform from a sick-care to a more integrated well-care based system.

The Health Policy concentration is designed for those students interested in the non-medical side of the healthcare industry, preparing them for entry level positions in healthcare policy development and implementation. Students in this concentration are required to complete a supervised practicum, providing hands-on

THE NET RESULT

The College of Nursing & Health Innovation strongly focuses on preparing students to advance better health outcomes, coaching others on leading healthier lives to prevent and/or lessen chronic diseases, and policy administration that helps make the U.S. healthcare system more integrated and efficient. To achieve these goals, the college provides multiple career opportunities to students through innovative programs such as the BS in Health Sciences.

College Integration Leads to 2-year Bachelor of Applied Sciences in Health Sciences



Four-year degree programs are not the only programs at the College of Nursing & Health Innovation. As part of its integration of health promotion programs, the college is establishing a Health Sciences concentration for two-year degreed students to complete a Bachelor's in Applied Sciences (BAS) degree to advance in their chosen health professions. Sixty credit hours from applicants' AAS degrees count toward the BAS 120 credit hour requirement. The BAS program joins RN-to-BSN as the second two-year program offered by the college, according to Executive Dean Craig Thatcher.

The BAS in Health Sciences [HSC] provides the academic knowledge and skills to allow students with an AAS degree from an approved health-related program to advance their employment opportunities within the health field and/or continue into a graduate program of study. All students will complete a specified complement of general studies courses that reflect the graduation requirements of Arizona State University. The BAS in Health Sciences will offer a core of related courses to broaden and strengthen the academic expertise of students.

The economic reasons for offering the BAS program are based on the same U.S. Department of Labor projections for the BS in Health Sciences — strong market demand creating employment growth over the next decade. There are many health professionals who begin their career paths with an AAS degree in specific technical areas such as Medical Radiology, Nuclear Medicine Technology, Histology Technology, etc., and who wish to advance their career opportunities through additional education.

The program provides cross-disciplinary training, an essential factor for today's workplace. With their completion of the BAS

degree, graduates can return to their original area of expertise in allied health [e.g., radiology, nuclear imaging, etc.] and qualify for a managerial position, or as an educator/instructor within their field of expertise, and/or a higher position grade within their current place of employment. Students who do not immediately enter or reenter the workforce will be qualified for entry into graduate programs in Gerontology, Family Sciences, Health Education, and related areas.

ADMISSION REQUIREMENTS

Students with a regionally accredited AAS from an approved (articulated) Health/Health Technology program are eligible to enroll in the BAS program. All courses in the AAS must have a grade of C or higher. The articulated AAS degree must contain the following lower division general studies and foundations coursework:

- First Year Composition (6 hrs)
- Humanities (selected from AGECE list) (3 hrs)
- Social & Behavioral Sciences (selected from AGECE list) (3 hrs)
- Natural Sciences (Selected from AGECE list) (4 hrs)
- Mathematics (0-3 hrs). If not completed in the AAS, this requirement will be included as part of the 60 units completed at ASU in order to meet the university's general studies requirements.

COMPLETION REQUIREMENT

The three components to the concentration requirements include ASU General Studies courses, BAS Area Core courses, and the Health Sciences Concentration with credit hour requirements as follows:

- ASU General Studies Sequence - 22-25 credits
- BAS Area Core - 9 credits
- Health Sciences Concentration - 26-29 credits

BAS DEGREE SUMMARY

The concentration is designed so that 60 credits are completed at ASU. However, students seeking to complete this degree are required to earn a minimum of 30 semester hours in resident-credit courses at ASU. ■

Spotlight

Student of Excellence

Elaine Clayton

Elaine Clayton, an RN-to-BSN student at the ASU College of Nursing & Health Innovation, had a vision for partnerships between trade unions and The Crossroads, Inc. to facilitate recovery for union workers who have substance addictions. Crossroads is a system of transitional living facilities for people in recovery from substance addictions. Elaine completed her Leadership Evidence-Based Project on the subject and presented it in mid-February, as keynote speaker to Crossroads board of directors at its annual retreat.

It was no accident that Elaine Clayton's presentation to the board was titled "Trade Unions and The Crossroads –Working Together for Recovery." Her diverse 30-year career had been a journey that brought her to this point and made her passionate about the subject.

Clayton's journey began in San Francisco in the late 1970's. Married to the Labor Liaison for Region 9 of the Occupational Health and Safety Administration, she became aware of the many serious workplace injuries and deaths caused by employees with substance addictions. During the same time, she embarked on a work career that was as diverse as it was formative.

TELLING HER OWN STORY

Perhaps it is best to let Elaine Clayton tell the story of this part of her journey. "I decided to make a career change in my early 30's and traded in my office job for a job as a union laborer removing asbestos and other hazardous materials," Elaine

recounted. "I was required to take a number of health and safety classes and was immediately intrigued by the profession and challenges that came with it. Throughout the years I continued to take vocational and other classes eventually becoming a foreman on construction projects, which in time led to my becoming a health and safety professional. I worked in the profession for 12 years and ultimately became a vocational instructor at a community college in the Phoenix area, teaching industrial health and safety. However, my knowledge of health was limited to occupational injuries, illnesses and routine screenings. I realized I could not answer employees' health questions outside of the occupational scope, which I viewed as a shortcoming on my part and a disservice to the employees. I wanted to literally unite health with safety and renew the original health and safety model for which unions were historically known. I came to the conclusion that becoming an RN was the path to do what I needed to accomplish."

Clayton earned an Associate Nursing Degree from Gateway Community College, passed her state licensing examination, and has been in practice as a registry nurse working in many hospitals since 2001. In 2009, she enrolled in the RN-to-BSN program at the ASU College of Nursing & Health Innovation to advance her knowledge and skills.

RETURN TO THE BEGINNING

Flash back to that presentation to The Crossroads board in early February 2010. At the retreat, Elaine Clayton presented the leadership project she developed in her baccalaureate program. Everyone who attended saw the potential for a rich collaboration between The Crossroads and the local unions to facilitate recovery for union members with substance addictions. She also mailed the presentation to every union she contacted during her clinical leadership rotation. Not even Elaine anticipated how quickly things would move after that.

One week later, the RN-to-BSN student called her ASU nursing mentor and professor Gail Hock, MS, RN to inform her of the first potential partner for the program she proposed in her presentation – JBS Packerland, Local 99 United Food and Commercial Workers Union (UFCW). "Elaine had been in communication with JBS Packerland and e-mailed them the presentation we saw at the retreat," Hock related. "They flew her to Colorado a few days later and on her return home she was offered a position at Local 99 at the JBS Packerland plant in Tolleson, Arizona.

“Our union is very excited about the possibilities of this program – educating our 1,200 members at JBS to more effectively use their health benefits, gaining better health results for the individual workers, and lowering costs which keeps the benefits affordable and available,” said Paul Rubin, Secretary-Treasurer, Executive Assistant to the President, Local 99.

THE NEXT CAREER STEP

While completing her remaining general requirements and planning to graduate this summer, Elaine Clayton is now Community Case Manager at JBS Packerland. She reports to Dr. Ernie Vesta, MD, medical director, JBS, who developed the current healthcare model that the plant in Tolleson and the UFCW are following. Her primary responsibility is to ensure JBS Packerland employees and their families get the most out of their healthcare dollar. She assists employees and often their family members from diverse cultures in maneuvering through the red tape of the healthcare system. Clayton works with employees to secure excellent healthcare providers and accompanies them to doctor’s appointments when requested. She also goes to an employee’s residence to provide healthcare education to the employee and/or family members to make certain they understand their diagnosis and treatment plan. She monitors employees with chronic conditions and provides the support and encouragement necessary to help them remain compliant with their plan of care.

According to Clinical Assistant Professor Gail Hock, Elaine Clayton seized the opportunities that the ASU RN-to-BSN program provides. “The activities in the practice component are flexible enough to allow students to pursue their personal professional interests and build their professional networks,” Hock said. “Our faculty and administration strongly believe ASU RN-BSN graduates are engaged, innovative professionals who utilize evidence-based practice to facilitate positive change. Our graduates demonstrate holistic population-based perspectives and are critical thinkers, client advocates and effective communicators. Elaine Clayton is an exemplar of the edge which our RN-to-BSN program strives to provide students.”

Lee Pioske, MS, LISAC, CACIII, Executive Director, Crossroads, first met Clayton a couple of years ago. “It was easy to see that she absolutely had a great affinity for those people we were trying to help,” Pioske observed. “She had developed relationships with various local unions and began to foster a relationship between

Crossroads and those unions. We believe this budding relationship has the potential to turn into something beneficial for both Crossroads and these unions. With someone like Elaine involved, only good things can happen.”

OLD CAN BE NEW AGAIN

What Elaine Clayton values most about this position is the opportunity to demonstrate that this healthcare model works. In the 1930’s and 1940’s Kaiser Industries did more than treat their employees’ occupational injuries and illnesses. They provided holistic healthcare services to union construction, shipyard and steel mill workers and their families. The employees felt valued and became more committed and the employers had healthier employees and families, which reduced healthcare costs.

“What was old is new again – Kaiser experienced great success using this model and I am convinced that the UFCW and JBS can replicate it and improve upon it,” Clayton remarked. “I believe the UFCW and JBS can and will set a new standard in Arizona that others will want to follow.”

Elaine Clayton not only brought her RN license with her to the RN-to-BSN program at ASU. She brought the experience of a 30-year journey, her passion to help people, and the spirit of collaboration to make things happen. ■



RN-to-BSN nursing student Elaine Clayton (sitting) takes time to rest with co-workers CNA Ruth Jimenez (center) and LPN Marvena Knowshisgua (right) and collaborative partner Executive Director Lee Pioske of Crossroads at the JBS Packerland plant in Tolleson, Arizona.

Scholarships

The Bridge to Excellence

ASU

With the recession that started in 2007, many students and their families need help to bridge the financial gap of paying for their higher education. The College of Nursing & Health Innovation has responded to this need by providing financial support to 41 and 35 percent of its students in 2009 and 2008 respectively. However, the need continues to grow.

Financial aid not only helps students afford college, it also helps put them on the path to success. Studies have shown that students from lower socio-economic levels who received some form of

financial aid in their first year were nearly 50 percent more likely to complete the year than students who did not receive such aid, according to a *Chronicle of Higher Education* article.

Attracting students of excellence to join the ASU nursing and health family is a top priority regardless of the economic times. Today's students are tomorrow's healthcare and health promotion professionals and future caregivers. You have an opportunity to ensure and celebrate their success by giving back to a scholarship fund at the college.

A Story of Inspiration and Effort

Persistence... dedication... and organization describe Andrea Johnson's role as a mother, educator and future nurse. Before enrolling in ASU's Nursing program, Andrea was teaching 6th grade. It wasn't until one of her daughters became ill and needed care at Phoenix Children's Hospital that Andrea realized her calling to become a nurse, and ultimately, an educator and mentor to future nurses.

ASU's baccalaureate nursing program is one of the most rigorous programs offered, which makes Johnson's story so meaningful. She retained her teaching job while carrying 21 credit hours to prepare for applying to the Upper Division Nursing Program. Her role as a mother always is at the forefront of her daily life and yet, Johnson's determination and persistence for her education remain strong.

Because of her determination and work, Johnson was awarded not one, but two scholarships during the 2009-2010 school year. She was awarded the Sara Lynn Semmens Scholarship in fall 2009. The following spring semester, Andrea was awarded the Leona Whetstine Nursing Scholarship. These scholarships were donated by people who recognize the importance of giving

Andrea Johnson



back to non-traditional students. In fact, Mrs. Whetstine's experience mirrors Johnson's current experience of someone who decided to go back to school after she had started a family and career.

LEONA WHETSTINE NURSING SCHOLARSHIP

The Leona Whetstine Nursing Scholarship was initiated by one of Mrs. Whetstine's children, Walter Whetstine, in honor of his mother. The Leona Whetstine Nursing Scholarship is an endowed scholarship to ensure that Mrs. Whetstine's legacy and memory live in perpetuity. Leona Whetstine is an ASU nursing alumna, who went to school in her 40's to earn a degree to support her family. Married with three children; she graduated in 1965. Mrs. Whetstine then went on to work in public health, including tuberculosis work in northern Arizona, and then as assistant supervisor for public health in Yuma. She later taught in an LPN program and a nursing program in El Centro, Calif., to which she commuted. She earned a master's degree in vocational education from the University of San Diego.

YOUR IMPACT

Every student deserves the opportunity to succeed in school and we invite you today to join others who have helped students like Andrea thrive. ASU's College of Nursing & Health Innovation has three scholarship funds and you can direct your donation straight to the program of your choice: Exercise & Wellness, Nursing or Nutrition.

Gifts of any size may be made to the funds. Your generosity, along with others, will add up to make a significant difference right now for excellent students enrolled in ASU. These gifts could go towards need- or merit-based awards. Because these are general scholarship funds, it gives our scholarship committees the flexibility to use your generous gift in a way that's most needed at any given time.

SMALL CONTRIBUTION, BIG CHANGE

Donations of all amounts are welcome. Please see the following list of how your contribution is put to use:

- Gifts of \$50 from 16 people will buy one semester's books for a deserving student.
- Gifts of \$100 from 30 people will pay for one student's tuition for one semester.

Appreciation for Giving

Innovation Circle: \$5,000 or more

- Invitations to special events
- And all benefits listed below

Dean's Club: \$1,000 - \$4,999

- Invitation to lunch with the Dean and fellow Dean's Club members
- Recognition as a Dean's Club member on donor wall in College of Nursing & Health Innovation Building Two
- Recognition as a Dean's Club member on the college's website
- And all benefits listed below

\$500 - \$999

- Recognition on the college's website
- And all benefits listed below

\$250 - \$499

- Invitation to networking event with fellow alumni and faculty
- And all benefits listed below

\$100 - \$249

- Recognition on donor wall in College of Nursing & Health Innovation Building 2
- Invitation to attend a "Coffee with the Dean"

Gifts of \$100 or more will be listed on our annual donor recognition wall and alumni will receive invitations to exclusive events and opportunities to meet the Dean and faculty of the college.

You may use the reply card enclosed in this magazine or you may make a gift online at <https://secure.asufoundation.org/giving/online-gift.asp>.

Mail your gift to:

ASU College of Nursing & Health Innovation
500 North 3rd Street
Phoenix, AZ 85004

Imagine...if 300 College of Nursing & Health Innovation alumni donated \$25 each, a student of the caliber of Andrea Johnson would have his or her tuition covered for an entire year!

Choose an amount you are comfortable giving, and see the impact those dollars make!



Annual Giving Fund Launched

October 2009 marked the inauguration of the College of Nursing & Health Innovation's Annual Giving Society. Donors who gave or pledged \$100 or more between January 1 and December 31, 2009 and whose gifts were designated to the Dean's Investment Fund were honored as Founding Members and were recognized on the brand new annual donor recognition wall in the lobby of the new Nursing & Health Innovation Building Two at the ASU Downtown Phoenix Campus.

On March 3, 2010, more than 50 supporters of the college celebrated the unveiling of the donor wall and enjoyed the first-ever Coffee with the Dean event! The mood was festive as alumni rekindled friendships with fellow classmates and professors. Dean Melnyk thanked everyone wholeheartedly for their generosity and commitment to the College before cutting a ribbon to mark the official unveiling of the donor wall.

Annual Giving Society fundraising results for 2009 follow:

- 47 donors joined the Annual Giving Society as Founding Members

- Founding Members gave more than \$10,000 in support of the Dean's Investment Fund.
- The average gift was \$75 — a 25 percent increase compared to gifts to the Dean's Investment Fund during this same time frame in 2008.

For more information on the Annual Giving Society or to make a gift, contact Pamela Lowe, Assistant Development Officer at 602.496.1498 or pamela.lowe@asu.edu.

Above: Dean Bernadette Melnyk cuts the ribbon on the new Donor Wall while Assistant Development Officer Pamela Lowe looks on.

your legacy is the ultimate gift

A bequest to support the College of Nursing & Health Innovation can fulfill your philanthropic goals without depleting your current assets. Through a bequest you may also **direct your gift to a specific purpose, retain control of your assets during your lifetime** and **reduce estate taxes.**

For more information about making a bequest through the ASU Foundation to benefit the College of Nursing & Health Innovation, please contact Tim Gartland, Office of Estate and Gift Planning • 800-979-5225 (toll free)

• 480-965-5338 • asufoundation.org/GiftPlanning

ASU Foundation
ARIZONA STATE UNIVERSITY

Health Centers Change Name to

NP Healthcare

The health centers administered by the ASU College of Nursing & Health Innovation have grown over the 33 years since the establishment of the first center in Scottsdale in 1977. Other health centers were added in Phoenix and Tempe in 1991 and North Tempe and Downtown Phoenix in 2006.

As each center was established, it adopted its own unique name to identify with its community and the residents it served. Now, the five centers have adopted a common name or brand, NP Healthcare, to better identify the nurse practitioners who provide the care in the centers and to communicate the system orientation for the five locations. The location will be the second part of the unified name. The names of the centers now are: NP Healthcare – Downtown Phoenix, NP Healthcare – Grace, NP Healthcare – Scottsdale, NP Healthcare – North Tempe, and NP Healthcare – Escalante.

Denise Link, PhD, WHNP, CNE, FNAP and Associate Dean for Community Practice & Partnerships, directs the health centers.

“The value in our name has increased as our business model as evolved to that of an enterprise,”

Link explained. “In addition to providing outstanding healthcare services, the health centers must become self-sustaining. A unified brand or name helps us to attract new clients and tells our existing customers that they can go to any of our centers to obtain the primary care services they need from highly educated and clinically qualified nurse practitioners and other healthcare professionals.”

The centers continue their traditional mission of providing nursing and students from other academic programs with clinical practice educational experience and opportunities to conduct research on what works to enhance patient outcomes, while fulfilling the college and university’s social responsibility to the community. The centers provide healthcare services to more than 8,000 patients annually.

In addition to the new name, two of the centers have experienced their own changes. NP Healthcare – Scottsdale has moved to a more central location in the city. While convenient to existing patients, the health center is attracting new clients. The

Scottsdale center, opened in 1977, holds the distinction as the first nurse-managed health center at a university in the nation.

NP Healthcare – Downtown Phoenix recently expanded services by adding New Choices, a child-adolescent weight management program. The new program’s purpose is to help children and families to obtain longer-term services on a referral basis by their own pediatric and family practice healthcare providers. Leigh Small, PhD, PNP and director of the new program, said the 6-week program is intended to respond to the increasing demand for healthcare services and to offer parents care for their children who are increasingly overweight or obese. More than one third of children in Arizona fall into those categories and run the risk for lifelong diseases if not treated before they reach adult age. The new program adds to the services for children and adolescents offered by the downtown center, including the Southwest Health Center for the Prevention and Treatment of Child and Adolescent Depression & Anxiety Disorders.

“There is nothing more dynamic today than healthcare, especially with the passage of the new federal legislation,”

Associate Dean Link said.

“Many new patients will now have access to a regular source of healthcare. We must be prepared to provide the quality, effective healthcare that consumers need and deserve.” ■



new appointments

PATRICIA HARRIS JOINS RN-TO-BSN FACULTY

Patricia Harris, RN, MS has joined the College of Nursing & Health Innovation as Clinical Assistant Professor in the RN-to-BSN program. Harris is an RN-to-BSN and MS in Nursing graduate of ASU. She most recently served as District Director of Health Care Education for more than 10 years for the Maricopa Community Colleges District Support Center.

As director, she was responsible for managing a system of approximately 45 allied health and nursing certificate and degree programs across 10 community colleges and two skill centers. During her time with Maricopa, a few of her major accomplishments included the development of a Joint Appointment program for agency employed clinical faculty, increasing healthcare program enrollment from 2,000 to over 6,000 students, the development of numerous clinical and educational partnerships, and development of the Clinical Coordination Collaborative.

Prior to her work with Maricopa, Harris served as executive officer for a Joint Commission and Medicare certified, long-term acute care hospital serving adult and pediatric patients recovering from catastrophic illness, surgery or trauma. She also developed, designed and began construction of a second hospital in the metropolitan Phoenix area.

Harris continues to serve as a professional and volunteer board/council mem-

ber for various medical and educational organizations. She served as a member of the Governor's Task Force on the Nursing Shortage, Citizens Work Group on the Long-Term Care Workforce, and currently serves as chairperson of the St. Josephs Hospital and Medical Center Community Board.

The RN-to-BSN program entry option offers Associate Degree and Diploma Nurses the opportunity to complete upper-division nursing course degree requirements leading to a Bachelor of Science in Nursing and allows students the opportunity to move to advanced practice arenas. Harris said that she values the importance of providing RN's with a relevant path to BSN and graduate degrees and is excited to share her own insight and experience as the program grows. She also appreciates the interdisciplinary curriculum that the college provides. "I was attracted to the RN-to-BSN program since I was a student myself and I look forward to drawing from my own student experience," said Harris. "I also think the unique interdisciplinary focus of the college is a great approach to education for today's healthcare professionals."

SHIRE NAMED DIRECTOR OF NEW PROGRAM

Sandra L. Shire, DMD, MPA has been named director, of the new MS in Regulatory Science and Health Safety (RSHS) program at the College of Nursing & Health Innovation (See page 3 in this issue for an article on the program.). She brings a diversity of knowledge as a clinical



Patricia Harris



Sandra Shire

dentist with 13 years experience in clinical practice in public health settings and having served in the Public Health Service (PHS) for over 25 years, achieving the rank of Navy Captain.

Dr. Shire has clinical practice experience working at an inner-city clinic in Harlem, as well as serving as Chief Dental Officer at a federal prison. She shifted to the regulatory arena when she joined the Food and Drug Administration (FDA) at its Center for Devices and Radiological Health as a scientific reviewer. Seven years later, she transferred to the FDA office in Phoenix as a lead investigator for the Bioresearch Monitoring program reviewing clinical trials. Dr. Shire was selected to participate in the International Inspection Cadre, conducting numerous inspections in other nations. Her inspections resulted in a number of regulatory actions, including criminal and civil penalties, as well as warning letters. Consequentially, her work is often cited for case use in FDA training.

Dr. Shire's contributions as a Commissioned Officer in the Public Health Service include selection as the Chair of the Dental Professional Advisory Committee, volunteer service to remote Indian Health Service sites, service on various professional boards, and a US Naval deployment mission to provide health services in Central and South America.

Most recently, Dr. Shire worked for PaxMed International where she provided clinical research and regulatory advice to private clients. Dr. Shire has served as key-

note speaker at many regional and national conferences and seminars. She also has received numerous Public Health Service awards, including the Surgeon General's Exemplary Service Award.

The RSHS degree is designed to prepare students for careers in the field with an emphasis on safety, risk management, partnership development and leadership. "I would like to get this exciting new program up and running and have it recognized as a quality educational experience with practical value for those seeking a career in the field of Regulatory Affairs," Dr. Shire added.

Dr. Shire graduated from Brown University and received her dental degree from the University of Pennsylvania as a United States PHS National Health Service Corps Scholar. She received a Master's in Public Administration from Troy State University.

LIVINGSTON NAMED TO ASUN LEADERSHIP POSITION

Stephen Livingston has been named Program Manager and Advisor of the American Indian Students United for Nursing (ASUN) Program at the ASU College of Nursing & Health Innovation. He has been with the ASUN program for nearly 10 years as Student Success Coordinator. Livingston is an enrolled member of Red Lake Band of the Chippewa Tribe in Minnesota.

The ASUN Project was established in the fall 1990 by a grant from the Indian Health Service. The purpose of the program is to increase the number of Native American nursing students at ASU and the number of nurses providing care to Native Americans. Livingston's appointment in this leadership role will assure the continuity of the program and help the college build on the strong foundation built by prior ASUN leaders, according to David Hrabe, PhD, RN, Associate Dean for Academic Affairs.

The ASU College of Nursing & Health Innovation is one of only five nursing programs in the U.S. funded by the Indian Health Service to provide scholarships and support to American Indian/Native Alaskan nursing students. ■



Stephen Livingston

professional achievements

Mercy Gilbert Medical Center has engaged the college to lead a 12-week non-credit Innovation Leadership Program designed by the Master of Healthcare Innovation faculty and offered through the Academy of Continuing Education. Fifteen directors at Mercy Gilbert Medical Center are going through the program which is being led by **Kathy Malloch**, PhD, MBA, RN, FAAN and **Jack Gilbert**, EdD FACHE... **Shannon Dirksen**, PhD, RN was inducted as a Fellow in the



Shannon Dirksen

Western Academy of Nursing and was recognized at the Western Institute of Nursing research conference in April... **Bronwynne Evans**, PhD, RN was competitively selected to receive the Senior Geriatric Researcher Award at the annual Western Institute of Nursing research conference in April. This is an honor that recognizes all of her outstanding research and contributions in the field of geriatrics.

Ali Hajaig, Assistant Director, Clinical Practice & Community Partnerships, was awarded the National Nursing Centers Consortium 2009



Ali Hajaig

Health Care Innovation Award... **Kay Jarrell**, MS in Nursing, was awarded the Woodside Sustained Community Service Award. She will receive funding for her work with the homeless in downtown Phoenix... **Kathleen LuPone**, MS, CNRN, FNP-C, CNE passed the Certified Nurse Educator exam... **Kathryn Records**, PhD, RN was competitively selected to receive the Anna Shannon Mentor Award at the 2010 annual Western Institute of Nursing conference in April... **Craig Thatcher**, DVM, PhD, Diplomate ACVN released the 5th edition of Small Animal Clinical Nutrition for which he is a co-editor. This book is widely used in vet schools across the nation and globe... **Linda Vaughan**, PhD, RD, FADA published the second edition of her book for which she is a co-editor, The Science of Nutrition by Benjamin Cummings Publishing... **Glenn Gaesser**, PhD, co-investigator, **Chong Lee**, EdD, and doctoral student **Sid Angadi** were awarded a Mayo Clinic/ASU competitive grant for their study on the effects of a novel, high-intensity aerobic interval training program on endothelial function, vascular compliance, and peak cardio-respiratory

capacity in patients with heart failure with preserved ejection fraction... **Donna Winham**, DrPH, CHES was awarded a grant from the U.S. Dry Bean Council entitled Perceptions of Beans among Low-



Donna Winham

income Hispanic Women... **Marianne McCarthy**, PhD, RN, GNP, ANP received the Gerontologist of the Year Award from the Arizona Geriatrics Society during their 21st Annual Fall Symposium, Geriatrics:



Marianne McCarthy

Preparing for the Future... **Kimberly Shea**, PhD, RN was selected as co-investigator of the grant Health Performance, Benefit-Cost & Cost Effectiveness of Green Retrofit Housing for Low-Income Seniors in Phoenix from the Stardust Center. ■

news that matters...

MHI GRADUATES PAY FORWARD

Graduates of the Master of Healthcare Innovation (MHI) class of 2009 created a scholarship to honor program co-founders Kathy Malloch, PhD, MBA, RN, FAAN and Tim Porter-O'Grady, DM, EdD, ScD(h), FAAN. Malloch was MHI's first director and Porter-O'Grady has been associate professor and leadership scholar for the interdisciplinary program since its inception in 2006.

The presentation of the scholarship took place at the Murphy School in Phoenix for which the class had conducted a project. Malloch presented the scholarship to Nora Lopez, as a medical office assistant at the Murphy School Education and Health Center who is planning a medical career.

The MHI graduates also donated a peace pole in the center in honor of



A delegation from Inje University Busan Paik Hospital in South Korea met with ASU Dean Bernadette Melnyk (center) and Director Linda Mottle (to right of the Dean), Center of Healthcare Innovation & Clinical Trials for the college in Phoenix. The group signed a memorandum of understanding for a partnership exchange program starting in the fall.

Sandra Davidson, former director of the interdisciplinary graduate program.

PARTNERSHIP FORMED WITH INGE UNIVERSITY IN SOUTH KOREA

The College of Nursing & Health Innovation and Inje University College of Medicine and Busan Paik Hospital of South Korea have signed a memorandum of agreement for a partnership exchange program which launches fall 2010.

The agreement includes faculty and research staff exchanges, joint editing of publications, exchanges of graduate students, and investigation of additional collaborative programs of mutual benefit.

Full-time graduate students in good standing should contact the Center for Global Education Service – Study Abroad Office (SAO) at <http://studyabroad.asu.edu> for more information. SAO will help



Scholarship winner Nora Lopez (center) accepts award from Kathy Malloch, as Dr. Paul Mohr, superintendent of the Murphy School, looks on.



ASU Associate Professor Carol Baldwin discusses research findings with Stuart F. Quan, MD, University of Arizona Professor Emeritus of Medicine and a globally recognized sleep researcher.

students with passports, filling out paperwork, and arrangements to apply.

The partnership developed from clinical research workshops at Inje and Busan Universities in 2008 and 2009 presented by Linda Mottle, director of the college's Center for Healthcare Innovation & Clinical Trials. The Center fosters excellence in collaboration, outreach, research, and educational activities to support and promote clinical research that advances healthcare through innovative products, processes, and educational programs.

SLEEP STUDY HIGHLIGHTED IN LEADING JOURNAL

The *Journal of Clinical Sleep Medicine*, the official publication of the American Academy of Sleep Medicine, featured an article contributed by ASU College of

Nursing & Health Innovation Associate Professor Carol Baldwin who was the lead author. The publication issued a news release announcing the article before publication of the issue.

The study in the April 15 issue of the *Journal of Clinical Sleep Medicine* shows that having a sleep disturbance is associated with clinically meaningful reductions in health-related quality of life, and the magnitude of this effect varies by race and sleep disorder. Results indicate that physical health-related quality of life of African-Americans who snored frequently, had insomnia symptoms or reported excessive daytime sleepiness was significantly worse than Caucasians. African-Americans with insomnia also had significantly more physical limitations than Hispanics. When mental health-related quality of life was evaluated, however, it was Hispanics with frequent snoring, insomnia symptoms or excessive daytime sleepiness who had significantly poorer mental health than Caucasians. African-Americans with insomnia also reported poorer mental health compared to Caucasians.

"The study highlights the increased disparities among African- and Latino-Americans compared to Caucasians even in the sleep and health-related quality of life domain," said lead author

Carol M. Baldwin, PhD, RN, FAAN, Southwest Borderlands Scholar is director of the Center for World Health Promotion and Disease Prevention in the College of Nursing & Health Innovation.

The study involved a secondary analysis of data from the Sleep Heart Health Study, a multicenter study that recruited 6,441 participants from seven regions of the U.S.

"These findings support the need for sleep clinicians to use culturally-responsive sleep education, assessment and intervention approaches, as well as depression, anxiety and other relevant mood and socioeconomic-status measures," Dr. Baldwin said.

AINSWORTH NAMED ACSM PRESIDENT-ELECT

Barbara Ainsworth, PhD, MPH, FACSM and professor of Exercise and Wellness in the College of Nursing & Health Innovation has been named President Elect of the American College of Sports Medicine, a global professional association of 35,000 researchers and practitioners. Ainsworth, who also serves on the research faculty for the Healthy Lifestyles Research Center,



Exercise and Wellness doctoral student Stephen Herrmann looks on screen at project data with Program Director and Professor Barbara Ainsworth.

will assume the President Elect position in June this year and become ACSM President for the 2011-2012 year.

ACSM membership includes professionals with many interests related to physical activity basic and applied research, sports medicine and exercise rehabilitation, physical activity and health, and exercise rehabilitation. ACSM supports two signature programs, "Exercise is Medicine" and the "American Fitness Index" and is involved in evidence-based advocacy to inform policy for sports medicine, preventive medicine, and exercise practice. When president, Ainsworth's role will be to support the organization initiatives and signature programs and to assure that science is at the base of all decisions and actions.

"I look forward to serving ACSM in a leadership capacity," Professor Ainsworth said. "As president, I will focus on increasing physical activity among underserved populations through ACSM's signature "Exercise is Medicine" program and on increasing the reach of ACSM internationally. I am proud to note that I will be the sixth female president in ACSM's 60 year history."

Ainsworth has been an ACSM member since 1982 and was elected a Fellow in 1991. She credits family members in physical education for inspiring her to study physical education. She also credits her post-doctoral mentor, Dr. Arthur S. Leon, of the University of Minnesota for guiding her professional growth in research. ■

alumni report

RYAN NAMED AS FELLOW OF AMERICAN ACADEMY OF NURSE PRACTITIONERS

The American Academy of Nurse Practitioners (AANP) honored ASU alumna Sandra Festa Ryan, RN, MSN, CPNP and chief nurse practitioner officer at Take Care Health Systems, as a 2009 Fellow of the AANP (FAANP). Ryan graduated in 1993 with a MS in Nursing from the College of Nursing & Health Innovation.

The FAANP program recognizes nurse practitioner (NP) leaders who have made outstanding contributions to healthcare through NP clinical practice, research, education or policy, providing a forum to extend and enhance such efforts.

One of six founding officers at Take Care Health Systems, Ryan was the first chief nurse practitioner officer in the convenient care industry. She currently leads nearly 1,300 board certified nurse practitioners and physician assistants who practice at Take Care Clinics – walk-in clinics located at 345 Walgreens drugstores in 19 states that provide access to high-quality, convenient and affordable healthcare services. Ryan has played an integral role in the development and implementation of integrated technology, quality assurance programs and evidenced-based



Sandra Festa Ryan

guidelines to create a consistent and unprecedented patient-focused experience for those who seek treatment at Take Care Clinics.

Ryan serves as chair of the Clinical Advisory Board of the Convenient Care Association (CCA), the industry's trade organization, where she was instrumental

in developing the CCA's Ten Quality and Safety Standards and implementing a third-party certification process for these standards. She also sits on the association's board. To address the educational needs of nurse practitioners in the convenient care industry, Ryan helped to orchestrate the first ever Retail Clinician Education Congress, fostering camaraderie and support within the NP community for the emerging model of healthcare.

Ryan has more than 25 years of nursing experience in various clinical, management and leadership settings. She is a nationally certified pediatric nurse practitioner with 16 years of leadership experience in the U.S. Air Force as a nurse corps officer, working as a clinician, charge nurse and director of ambulatory services in inpatient and outpatient settings. In 2007 Ryan received the Nancy Sharp Cutting Edge Award by the American College of Nurse Practitioners, presented to an individual who has demonstrated extraordinary belief in NPs and contributed to the efforts to improve the image and visibility of the profession.

FACULTY EMERITI OFFER FREE TOOL

Professor Emeriti Barbara K. Miller, RN, PhD; Donna Adams, RN, DNSc; and Lasca Beck RN, MEd, have developed a research tool to measure behaviors indicating a nurse's level of professionalism. The instrument is called the Behavioral Inventory for Professionalism in Nursing. It was developed from a model, The Wheel of Professionalism in Nursing, created in 1984 by Dr. Miller. Alumni and other read-

ers may obtain free copies by contacting Donna.Adams@asu.edu. The model delineates attributes of professionalism in nursing. It is in the shape of a wagon wheel where the hub depicts the essential components of a professional nurse, education in a university setting and a scientific background in nursing.

Each spoke of the wheel represents related attributes. The Behavioral Inventory was developed over four years and has been found to be reliable and stable. Researchers using the tool have included 1,600 staff nurses in eight states in all types of work settings as well as 279 nurse managers and executives in 10 states. The tools also were used in a study of 502 nurse practitioners conducted at an Academy of Nurse Practitioner Conference.

One advantage of the research tool has been its portability. In addition to use in the U.S., the tool is being used by nurses performing research in 15 other countries, including Thailand, Turkey, India and Australia. The attributes within the Wheel and the Inventory behaviors also have been discussed in relation to evidence-based practice in various articles and books.

In addition to use as a research tool, nursing management can use the Inventory tool as a staff development guide and a way for individual nurses to evaluate their nursing professionalism. It is being used in colleges, acute care agencies, and in other nursing workplaces to stimulate discussions to increase staff professionalism. ■

In Memoriam

Marilynn June Maunz Prins, 68, MS in Nursing, ASU College of Nursing & Health Innovation, 1986; BSN

Robert Denaro, 42, BSN, ASU, 1993, MSN and DNP in Nurse Anesthesia; adjunct professor in the School of Nursing at Columbia University; adjunct professor in the Columbia School of Nursing; Nurse Anesthetist in Obstetrics

Marlene Louise Abbott, 74, BSN, ASU, 1984; co-founder of Tri-Nursing, Inc., Phoenix

Leigh Ann (Marten) Tonkinson, 35, BSN, ASU, 1998; Nurse Supervisor, Phoenix Children's Hospital



event calendar

Academy for Continuing Education

MAGI Clinical Research Conference - East

May 23-26, 2010, Boston, MA

11th Annual Evidence-Based Practice Conference

June 9-11, 2010, Phoenix, AZ

EBP Mentorship Program

June 14-18, 2010, Phoenix, AZ

EBP Mentorship Program

September 13-17, 2010, Phoenix, AZ

Ethical Wisdom: The Heart of Leadership, Influence and Power

October 15, 2010 and April 15, 2011, Phoenix Metro Area

Teaching Excellence in Simulation Education

January 4-6, 2011, Phoenix, AZ

Building Healthy Lifestyles Conference

February 2011, Phoenix Metro Area

Center for Improving Outcomes in Children, Teens & Families: 3rd Annual Scholarship Forum

February 4, 2011, Phoenix, AZ

Theory-Based Intervention Workshop

February 28 – March 2, 2011, Phoenix, AZ

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

March 2-4, 2011, Phoenix, AZ

INDEPENDENT STUDIES

(Visit aceonlinece.com/ceofferings)

- Performing Fat and Muscle Biopsies – Didactic Instruction (Online)
- KySSSM Child and Adolescent Mental Health Fellowship Online Continuing Education Program (Online)
- Be Prepared: Global Disaster Response and Telemedicine (DVD)

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dream

William (Greg) Wood,
RN, MSN (ASU 1991),
FNP, Captain, US
Public Health Service,
USFDA - Center for
Drug Evaluation and
Research.



discover

William L. Haskell, PhD
Professor of Medicine
(active emeritus),
Stanford Prevention
Research Center
and the Div. of
Cardiovascular
Medicine at Stanford
University



deliver

Timothy Porter-
O'Grady, DM, EdD,
ScD(h), FAAN Senior
Partner, Timothy Porter-
O'Grady Associates

Save the date!

Dream • Discover • Deliver Awards Luncheon

Tuesday, November 9, 2010 • 11:30 a.m. – 1:30 p.m.

2010 honorees

dream: Captain William G. Wood, RN, MSN, FNP

discover: William L. Haskell, PhD

deliver: Timothy Porter-O'Grady, DM, EdD, ScD(h), FAAN

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Tickets \$60/person

Contact Pamela Lowe, Assistant Development Officer, at **602.496.1498**
or pamela.lowe@asu.edu if you have questions or want to purchase tickets.
For more information, go to <http://nursingandhealth.asu.edu/luncheon>

Sponsorship opportunities available.