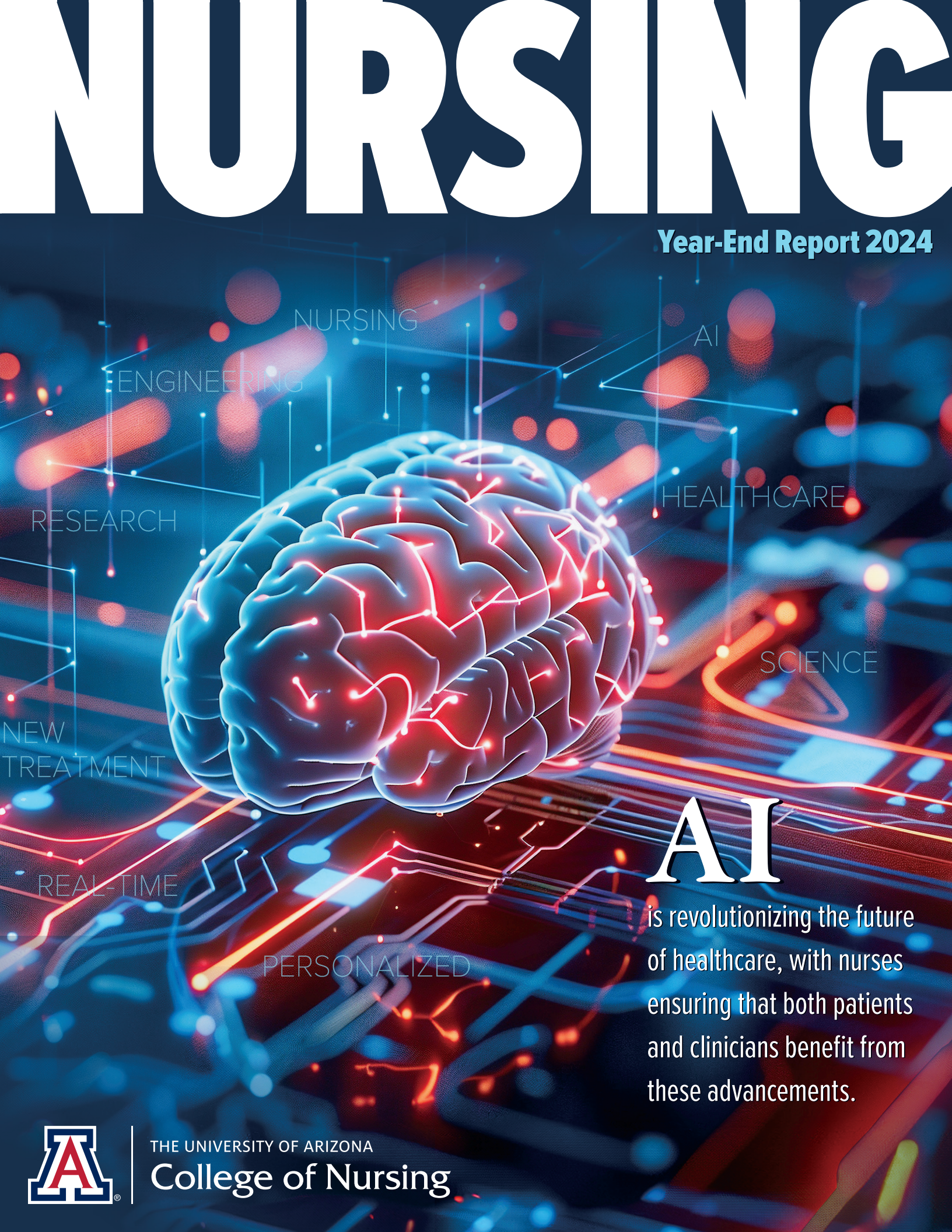
NURSING

Year-End Report 2024



AI is revolutionizing the future of healthcare, with nurses ensuring that both patients and clinicians benefit from these advancements.

THE UNIVERSITY OF ARIZONA
College of Nursing

MESSAGE from the Dean 2024

Dear Alumni and Friends,

As we reflect on another remarkable year at the University of Arizona College of Nursing, I feel immense pride and gratitude for the extraordinary accomplishments of our students, faculty, and staff. Our commitment to excellence in education, research, and service has enhanced our programs and strengthened our impact across Arizona and beyond, making a significant difference in the lives of our community members.

This year, our Bachelor of Science in Nursing (BSN) program received recognition from *U.S. News and World Report,* ranking No. 19 nationally and No. 13 among public institutions. We are very proud to be ranked No. 1 in Arizona! Our Doctor of Nursing Practice (DNP) program is equally distinguished, standing at No. 19 nationally and No. 10 among public institutions while again leading the state.

We excel in research as well. Our college is ranked No. 19 nationally and No. 13 among public institutions in *National Institutes of Health* (NIH) funding, highlighting our unwavering commitment to addressing critical healthcare challenges.

Arizona faces severe healthcare staffing shortages, with the demand for specialized nurses projected to increase 23% by 2025. The state is also expected to see a significant change in the demand for registered nurses through 2030. We are committed to addressing this shortage through the expansion of our programs. We are proud to have expanded this year to 2,149 students enrolled in our programs, a significant step toward helping improve Arizona's nursing shortage.

Thanks to the generous AiMS4Nursing Scholarship, all 158 of our Master's Entry to the Profession of Nursing (MEPN) students received essential financial support. Our impact extends to rural and Indigenous communities through a $1.5 million grant for the Sexual Assault Nurse Examiner (SANE) program and a $1.6 million grant to support Indigenous students. These projects are pivotal to our mission of developing leaders; addressing healthcare challenges; and promoting health, equity, and inclusiveness.

Our college's impressive rise in national and state rankings demonstrates the quality and impact of our nursing programs, which is made possible by dedicated faculty and staff members committed to making a significant difference in healthcare and our students' lives. As you review this year's successes, we hope that you will consider a generous donation using the enclosed donor envelope. Your support, as a vital part of our community, plays a crucial role in shaping the future of healthcare in Arizona and across the nation. With your help, we can continue to reach new heights and make a lasting difference in the lives of our students. Your contribution is not just a donation; it's an investment in our future achievements. We are incredibly grateful for your support.

Warm regards,

Hyochol Ahn

Hyochol Brian Ahn, PhD, APRN, ANP-BC, FAAN
Dean of the College of Nursing

"Our goal is to develop leaders; address healthcare challenges; and promote health, equity, and inclusiveness."

COLLEGE OF NURSING YEAR-END REPORT

Programs Offered

Bachelor of Science in Nursing (BSN)

Bachelor of Science in Nursing - Integrated Health (BSN-IH)

Master of Science in Nursing, Entry to the Profession (MEPN)

Doctor of Nursing Practice (DNP)

- Adult-Gerontology Acute Care Nurse Practitioner (AGACNP)
- Executive Health Systems Leadership (EHSL)
- Family Nurse Practitioner (FNP)
- Nurse Anesthesiology (NA)
- Nurse-Midwifery (NM)
- Pediatric Nurse Practitioner (PNP)
- Psychiatric Mental Health Nurse Practitioner (PMHNP)
- Post-Master's DNP

Doctor of Philosophy (PhD) in Nursing

Graduate Certificates (APRN)

Accrediting Agencies

Commission on Collegiate Nursing Education: BSN, MS, DNP

Arizona State Board of Nursing: CON

Council on Accreditation of Nurse Anesthesia Educational Programs: DNP-NA

Accreditation Commission for Midwifery Education: DNP-NM

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.

CONtents

4 **PAIN MANAGEMENT**
Dean Ahn's non-invasive brain stimulation research holds significant promise in pain management across numerous conditions.

REVOLUTIONIZING NURSING
Shu-Fen Wung is combining her nursing experience with engineering and AI to create technology that improves care and lives. 6

8 **BREATHING EASIER**
Ashley Lowe is training school nurses on how to use albuterol inhalers to help students in respiratory distress at school.

BSN GRADUATE
Samantha Chai's diverse cultural heritage drives her passion for nursing, community, and helping those in need. 9

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By the NUMBERS

THE UNIVERSITY OF ARIZONA
College of Nursing

NIH FUNDING

#13 among public institutions, National Institutes of Health (NIH) Research funding among schools of nursing

– 2023, Blue Ridge Institute for Medical Research

DNP PROGRAM

In Arizona

#19 nationwide, #10 among public institutions for Best Nursing School, Doctor of Nursing Practice (DNP)

– 2024, U.S. News & World Report

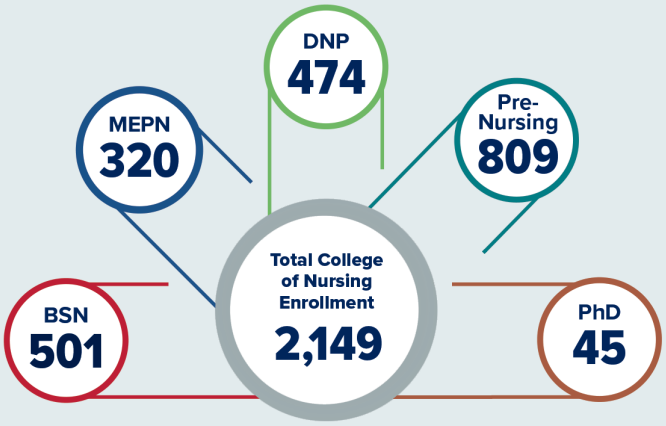
BSN PROGRAM

In Arizona

#19 nationwide, #13 among public institutions for Best Bachelor of Science in Nursing (BSN) Programs

– 2025, U.S. News & World Report

NUMBER OF STUDENTS BY PROGRAM



STUDENT ADMISSIONS

124 Admissions to the BSN Program Per Year

216 Admissions to the BSN-IH Program Per Year

294 Admissions to the MEPN Program Per Year

CERTIFICATIONS, FIRST-TIME PASS RATE

DEGREES AWARDED

(8/2023 – 8/2024)

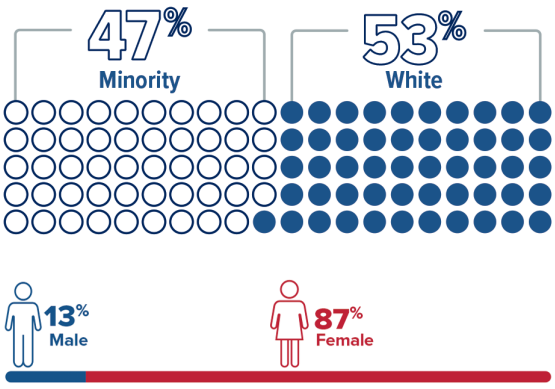
Bachelor **254**

Master **203**

DNP **113**

PhD **9**

STUDENT RACE / ETHNICITY & GENDER



FACULTY & STAFF

277 Faculty

71 Staff

10 CON researchers bring significant NIH funded grants

The College of Nursing (CON) is currently ranked **13th among public universities and 19th overall for National Institutes of Health** (NIH) funding among nursing schools, as reported by the *Blue Ridge Institute for Medical Research.* New rankings will be released in March 2025. NIH funding is essential for driving innovation in biomedical research nationwide, ultimately contributing to better health outcomes, economic growth, increased productivity, and reduced healthcare costs. NIH grants also cover indirect expenses such as facilities, administration, utilities, safety personnel, data storage, and shared equipment.

The college obtained approximately $5.02 million in funding during fiscal year 2023, marking a notable increase from the $3.73 million it received in fiscal year 2022. The $1.28 million increase in federal grants represents a remarkable 34% in growth.

"I am deeply grateful to our faculty and staff, who have made this significant achievement possible. Their passion for advancing research has truly elevated our college," said **Dean Brian Ahn**, PhD. "I am especially grateful for Terry Badger's outstanding leadership. Her service as interim associate dean for research was pivotal. Beyond our NIH successes, our faculty's ability to secure additional research and educational grants reflects their commitment to innovation and excellence."

As of October 2024, the college's federally-awarded professors include **Brian Ahn**, PhD, APRN, ANP-BC, FAAN; **Terry Badger**, PhD, RN, PMHCNS-BC, FAAN; **Aleeca Bell**, PhD, RN, CNM; **Elise Erickson**, PhD, CNM, FACNM; **Rina Fox**, PhD, MPH; **Sheila Gephart**, PhD, RN, FAAN; **Judith Gordon**, PhD; **Kathleen Insel**, PhD, RN; **Ashley Lowe**, PhD, MSPH; and **Thaddeus Pace**, PhD.

The CON's NIH rankings emphasize the exceptional productivity of the faculty and their vital role in shaping the future of healthcare. Through pioneering interdisciplinary research and scholarship, the college strives to elevate healthcare delivery, prevent disease, and improve health outcomes to achieve health equity in Arizona and globally. We relentlessly pursue innovation and excellence. Learn more about our current research at **https://nursing.arizona.edu/research/current.**

NIH GRANT FUNDED PROJECTS

PI	GRANT #	PROJECT TITLE
Hyochol Brian Ahn	R01NR019051	Combination Therapy of Home-based Trans-cranial Direct Current Stimulation and Mindfulness-based Meditation for Self-management of Clinical Pain and Symptoms in Older Adults With Knee Osteoarthritis
Terry Badger	R01CA263714	Adaptive Symptom Self-Management to Reduce Psychological Distress and Improve Symptom Management for Survivors on Immune Checkpoint Inhibitors
Aleeca Bell	R01NR018828	A Randomized Controlled Trial to Improve Mother-Infant Synchrony Among Women with Childhood Adversity
Elise Erickson	R01HD111125	Oxytocin Sensitivity and Postpartum Hemorrhage: Testing Genetic and Epigenetic Biomarkers for Improving Maternal Morbidity
	R00NR019596	The Clock is Ticking: Epigenetic Age Acceleration as a Biomarker of Uterine Function in Pregnancy
Rina Fox	K08CA247973	Improving Sleep in Gynecologic Cancer Survivors
Sheila Gephart	R01HS030226	Reducing Necrotizing Enterocolitis Disparities with a Neonatal Project Echo
Judith Gordon	R01AT011500	Testing the Efficacy of A Scalable, Telephone-Delivered, Guided Imagery Tobacco Cessation Intervention
Kathleen Insel	R01NR020261	Digital Technology to Support Adherence to Hypertension Medications for Older Adults with Mild Cognitive Impairment
Ashley Lowe	R01HL174599	Breathing Easier in Schools: Enhancing Adoption, Fidelity, and Effectiveness of the SAFE School Program through Innovation Implementation Strategies
Thaddeus Pace	R01CA264047	Leveraging Social Connection by Including Informal Caregivers in an Internet Video Conference-Based Compassion Meditation Intervention to Reduce Psychological Distress in Breast Cancer Survivors
	R21OH012386	Reducing Psychological Distress in Fire Fighters with an Asynchronous App-based Meditation Intervention

Source: NIH RePORTER, FY 2023-24

Beyond Pain Relief – the future of pain and cognitive therapy

Brian Ahn, PhD, APRN, ANP-BC, FAAN, is not only the dean of the U of A's College of Nursing but also a visionary leader in pain management research for older adults. With expertise in nursing, medicine, and electrical engineering, Ahn is at the forefront of research to redefine pain management and improve patient outcomes for aging

populations. His innovative work integrates cutting-edge technology and non-pharmacological interventions, paving the way for advancements in chronic pain treatment.

Since 2011, Ahn's research has been funded to integrate nursing expertise with engineering and digital health advancements for personalized medicine. Brain stimulation techniques can become more precise by incorporating artificial intelligence and adapting to an individual's unique neural patterns and symptoms for optimized care.

Central to Ahn's efforts is the college's *Brain Digital Technology Laboratory* (BDTL), a multidisciplinary innovation hub. Alongside **Juyoung Park**, PhD, the Associate Director of BDTL; **Chiyoung Lee**, PhD, RN, a BDTL faculty member; and three research coordinators, his team is exploring the use of transcranial direct current stimulation (tDCS) and mindfulness-based meditation to alleviate chronic pain in older adults with knee osteoarthritis.

They aim to provide a non-pharmacological approach to pain management that enhances this population's quality of life and mobility. The study is supported by a $2.41 million NIH R01 grant from the *National Institute of Nursing Research.* Ahn states, "Our goal is to provide patients with effective, home-based solutions directly. By combining brain stimulation with digital health technologies, we strive to make treatment more personalized, accessible, and sustainable."

For patients with chronic pain, traditional treatments often rely heavily on medications, particularly opioids, which come with risks of addiction and various side effects. Ahn's research signifies a paradigm shift in this approach. His team has shown that using transcranial Direct Current Stimulation (tDCS) to target specific brain regions can modulate pain pathways, reduce inflammation, and encourage positive neuroplastic changes. These modifications can lessen pain perception and may affect overall brain function and well-being.

The implications of this research extend well beyond knee osteoarthritis. Ahn explains, "The unique mechanisms our device targets make it versatile and could be used to treat other chronic conditions, such as lower back pain, fibromyalgia, and neuropathic pain in the future." Collaboration in Pharmacology and brain stimulation could enhance drug-based treatments, providing patients with benefits while minimizing side effects. This makes it an essential component of integrated care. In acute pain situations, such as post-surgical recovery, this technology could reduce the need for opioids, shorten recovery times, and lessen the risks associated with long-term dependency, paving the way for more effective alternatives to conventional treatments.

Additionally, the ability to modulate neural activity could also offer non-drug treatment options for conditions like depression, anxiety, and PTSD, either complementing existing therapies or providing standalone interventions for comprehensive psychological care.

In terms of cognitive health, brain stimulation shows promise for addressing age-related mental decline and conditions like Alzheimer's disease. Ahn envisions a future where non-invasive methods can enhance memory, attention, and learning capabilities. His research establishes a framework for tackling cognitive challenges and motor impairments more holistically and integratively. Pain and motor function often intersect, particularly during stroke recovery or in cases of neurodegenerative diseases. Brain stimulation could aid in restoring motor control, speeding up rehabilitation, and improving overall outcomes.

Ahn's vision for the future is always centered on patient empowerment. "The ultimate goal of our research is to help people live healthier, more fulfilling lives," he states. Through one breakthrough at a time, Ahn's work at the college is set to significantly impact healthcare by transforming complex scientific discoveries into practical solutions that benefit patients.

Nurse practitioner named best job in America!

U.S. News & World Report's 100 Best Jobs of 2024 ranked the job of nurse practitioner (NP) as No. 1. This recognition highlights the growing importance and respect for a profession that is increasingly becoming the backbone of healthcare delivery in the United States.

Nurse practitioners, distinguished by their additional education and training, possess unique skills that allow them to perform various tasks once reserved for physicians. Their expertise in taking patient histories, performing physical exams, ordering and analyzing lab results, prescribing medications, and designing and managing treatment plans sets them apart in healthcare. NPs are also heavily involved in patient education, ensuring that individuals understand how to care for themselves in the longterm.

Their expanding role in primary care is a crucial factor driving the demand for nurse practitioners. According to Axios Phoenix, almost 30% of Arizona residents don't have a primary care provider. Nationwide, nearly 83 million Americans live in areas with insufficient access to primary care physicians, so NPs are stepping in to fill critical gaps in care. Their ability to work independently in many states, including Arizona, means they can diagnose and treat patients without direct supervision from a doctor, making them essential in underserved areas. This high demand underscores the value and importance of their role in the healthcare system.

The United States has approximately 385,000 licensed nurse practitioners. The profession is highly respected and well-compensated, with an annual mean salary of $132,560 in Arizona, according to a May report by the U.S. Bureau of Labor Statistics. The job outlook is even more promising, with an expected employment growth rate of 44.5% through 2032. This translates to around 118,600 new NP jobs, underscoring the increasing reliance on nurse practitioners to meet healthcare needs, especially as the U.S. faces a looming physician shortage.

Nearly half of all practicing physicians in the U.S. are over 55 and approaching retirement, which will only worsen the current shortage of medical professionals. By 2036, the country will face a deficit of up to 86,000 doctors. The need for healthcare professionals is particularly urgent in states like Arizona, which will require over 2,000 additional primary care physicians by 2030 to meet rising demand. Additionally, the National Center for Health Workforce Analysis predicts that by 2025, Arizona will have 28,100 fewer registered nurses than needed, representing the most significant disparity of any state.

For those interested in pursuing this rewarding career, the University of Arizona College of Nursing offers a Doctor of Nursing Practice (DNP) in the Family Nurse Practitioner specialty. This program prepares nurses to provide healthcare to individuals across their lifespan, from newborns to older adults. Full-time students can complete the program in just 2.5 years, graduating as Advanced Practice Registered Nurses, and are eligible for Family Nurse Practitioner certification.

"As the No. 1 ranked DNP program in Arizona, the U of A College of Nursing is proud to be part of training the next group of nurse practitioners who will help alleviate Arizona's current healthcare crisis," said **Brian Ahn**, PhD, dean of the College of Nursing.

Nurse practitioners are becoming indispensable in the evolving healthcare landscape. Their ability to provide high-quality care, particularly in areas where physicians are scarce, makes them a vital part of the solution to the nation's healthcare crisis. The rewarding nature of their work and the increasing demand for their services make it no surprise that the profession has been named the best job. Learn more about this program at **https://nursing.arizona.edu/dnp**.

Revolutionizing nursing

with the cutting-edge power of AI

At the University of Arizona (U of A) College of Nursing, **Shu-Fen Wung**, PhD, RN, ACNP-BC, FAAN, is leading an initiative to integrate engineering and nursing. Her focus is on utilizing technology, especially artificial intelligence (AI), to enhance healthcare delivery and support nurse well-being. Her work centers on precision patient monitoring, enabling nurses to deliver holistic care.

Wung's leadership in nurse-engineering initiatives has cultivated strong collaboration to modernize healthcare. "We have been working with the U of A College of Engineering for five years," Wung said. This collaboration has led Wung's team to advance its innovation by exploring the use of cameras and AI to predict when people might lose their balance. "The AI evaluates various factors, including an individual's center of gravity and the positions of multiple joints, while instantly processing movement data," Wung said. "This system can provide real-time personalized advice, such as alerting users to potential obstacles or reminding them to use their walking aids. Doing so helps prevent falls before they happen, which is vital for individuals with mobility challenges." The development of digital health technologies and analytics enables nurses to provide improved patient care, whether the patient is experiencing acute illness or managing chronic conditions.

Wung's research focuses on precision monitoring in both medical and consumer devices. One of her most exciting ongoing projects is a fall-detection system designed to prevent and mitigate falls, the second-leading cause of death from unintentional injuries among older adults. "We recently completed a project that integrates radar sensors into a lighting system along with AI technology, enabling the detection of falls in older adults," Wung said. "This system functions effectively in both daylight and nighttime, recognizing the rapid, uncontrolled movements characteristic of a fall." The device is being tested and is on track to become a commercial product.

Wung's team, in collaboration with local assisted-living facilities, is developing a wearable technology beacon system intended to provide location data for both residents and caregivers. The system will improve tracking and enable the monitoring of daily patterns, such as when a resident visits the restroom more frequently than usual. As the healthcare industry shifts towards a value-based payment model, technology can be utilized to detect early changes in health conditions, helping prevent more expensive care down the line.

Additionally, Wung is developing a wearable electrocardiogram sensor strip for continuous remote monitoring. "We're testing a single-lead ECG strip that provides real-time data directly to a patient's smartphone, enhanced by AI for instant analysis," Wung said. "This technology makes it easier for patients and clinicians to track important health metrics from home." Although still in the early stages of development, the ECG strip represents a significant advancement in managing chronic conditions and preventing adverse outcomes through timely interventions. Clinical applications may include daily stress detection, remote heart-failure monitoring, and the monitoring of patients at risk of life-threatening arrhythmias, such as long QT syndrome.

Wung's emphasis on leveraging AI has led her team to develop two "smart" care technologies. The first is an innovative bandage designed to monitor wound healing. This advanced bandage tracks essential metrics such as moisture levels, pH, wound size, and oxygenation, alerting users when signs of infection emerge. "This technology could be used in hospitals, by home health nurses, or even adapted for commercial use," Wung explained. While the bandage is still in the testing phase, it has a significant number of potential applications. The project aligns with Wung's vision of utilizing AI to enhance remote patient care. It enables clinicians to monitor wounds more effectively, receive alerts if healing isn't progressing as expected and could reduce the workload for healthcare workers, all while improving patient outcomes.

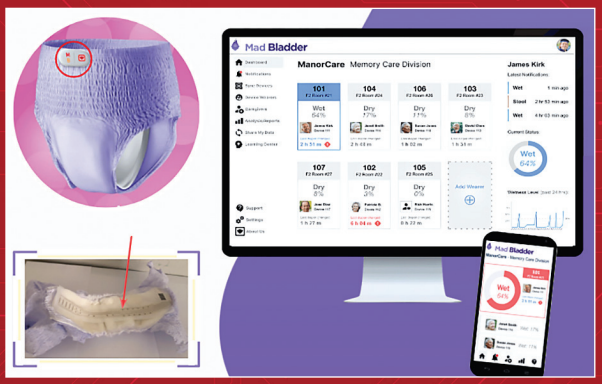
A second project centers on monitoring incontinence with a "smart" fabric system. This AI-powered device will alert caregivers when patients require assistance, helping to save time and resources while maintaining patient dignity and comfort. We are currently testing how this technology can enhance outcomes by reducing skin complications and improving care workflows," Wung stated. "By using AI to analyze data for measuring health biomarkers, the possibilities are limitless."

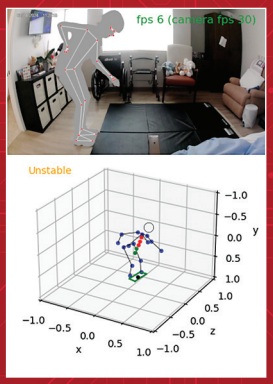
Wung is also exploring the use of AI in health literacy and self-management. She and her team are developing an educational portal that simplifies complex health information for patients. "In a pilot program, we utilize a large language model AI to generate personalized health information for non-medical users to tackle health literacy and misinformation," she said. "This project could potentially integrate with patient monitoring systems, providing users with access to real-time, customized medical information based on their unique health conditions and circumstances."

Additionally, Wung is investigating how AI can enhance the quality of life for older adults living alone. In collaboration with the University of Missouri, her team is helping to develop a digital companion that uses AI to engage older adults in purposeful interactions. The tool can also help detect cognitive decline. "Our goal is to ensure the AI engages older adults meaningfully through creative storytelling," Wung said. "This could be a powerful tool for improving cognitive function and providing personalized mental health interventions."

Wung emphasizes the significance of integrating nursing insights into technology development. "Technology can facilitate or challenge the care we provide. A well-designed, implemented, and integrated technology that improves care requires nurses' involvement at every development step," she stated. Wung's efforts demonstrate that AI can augment nurses' capabilities, allowing them to focus more on the human aspects of care.

"The Fifth Industrial Revolution highlights how human ingenuity can leverage advanced technology for well-being. Nurses must actively participate in leading this effort as we have expertise in holistic care," Wung said. With her vision and understanding of nursing and technology, Wung is shaping the future of healthcare, ensuring that AI benefits both patients and clinicians. "The key is to focus on clinically relevant technology that results in high-quality care." Thanks to Wung's work, nurses have much to look forward to.





Left: "Smart" fabric strip monitors and alerts care givers when it is wet. Middle: Camera and AI fall prevention system. Right: Fall detection radar lighting system.

BREATHING EASIER:

$3.4M NIH grant aims to revolutionize asthma management in schools nationwide

Nurse Rachel Howard (left) of the Catalina Foothills School District discusses the Stock Inhaler for Schools program with Ashley Lowe (right), the program's creator. (Inset photo) Nurse Howard checks the heart rate of a student having trouble breathing.

Asthma contributes significantly to chronic absenteeism and learning loss among schoolchildren in the United States, with respiratory distress being the leading cause of 9-1-1 calls from schools. This chronic, life-altering condition affects approximately 4.6 million children across the country. In 2021 alone, more than 145 children under the age of 18 died due to asthma attacks. The prevalence of asthma among school-age children is about 6.5%, yet only 12% to 15% of students nationwide have access to crucial interventions, highlighting the critical need for improved access.

For students with asthma facing respiratory distress, administering albuterol sulfate, a short-acting beta-agonist that relaxes the muscles in the airways and makes breathing easier, is essential for managing symptoms. While laws permit students to carry albuterol inhalers in all 50 states, access to these life-saving medications during school hours remains limited. This lack of access can lead to severe consequences, including increased absenteeism, higher healthcare utilization, and even death.

Ashley Lowe, PhD, MSPH, an assistant professor and research scientist at the University of Arizona, College of Nursing, developed the Stock Inhaler for Schools (SIFS) program. This initiative enables Arizona schools to keep inhalers on hand for students in respiratory distress. Despite its effectiveness, the program faces challenges in sustainability, especially in rural areas. Lowe secured a five-year R01 grant of $3,419,167 to address these issues for her project "Breathing Easier in Schools: Enhancing Adoption and Effectiveness of the Stock Inhaler for Schools program."

The SIFS program was launched in 2017 and has expanded to over 800 schools through collaborations with the Arizona Asthma Coalition and local health departments. This new funding will focus on developing strategies to improve the program's adoption and sustainability in schools through June 30, 2028. The project will assess three strategies with different levels of resources and intensity: a toolkit providing essential resources for program implementation; a toolkit plus nurse coach; and a third, enhanced option combining the toolkit, nurse coach, and practice facilitation. The first two strategies have been widely utilized in Arizona schools. The third strategy, which includes practice facilitation, is anticipated to improve program adoption and sustain its implementation. Lowe's research will evaluate the effectiveness and cost-effectiveness of each strategy individually and in combination.

"This research aims to identify practical and cost-effective methods to expand the SIFS program across Arizona and

24 other states with legislation permitting stock inhalers in K-12 schools," Lowe said. "The program ensures that students have access to emergency medication for respiratory distress at school, supporting their health and engagement in learning."

Brian Ahn, PhD, dean of the College of Nursing, said, "Lowe's SIFS program exemplifies the transformative impact that our faculty researchers can have on community health and safety. This grant will enable her to expand an initiative that addresses a critical, unmet need for students with asthma. We are proud to support such impactful research that serves not only Arizona but has the potential to influence national standards and policies."

Sheila Gephart, PhD, RN, professor and interim chair of the Advanced Nursing Practice and Science Division at the College of Nursing, added, "Thanks to Lowe's efforts, in 2020, Arizona became the first state to implement and publish data, establishing the program as a national exemplar. Her work is essential for reducing health disparities and creating a future where every child with asthma has safe and reliable access to care, not just in Arizona but across the nation."

What started as a small project in 2017 has evolved into a significant opportunity to empower policymakers, healthcare providers, and educators across the U.S. with actionable recommendations to improve student health, safety, and access to essential asthma rescue medications. The goal is to enhance these stakeholders' ability to promote student health and safety, ultimately improving access to life-saving treatments and safeguarding the well-being of youths in our schools.

BSN Student: A Tale of Culture, Community, and Compassion

Samantha Chai grew up in the warm embrace of Tucson, with the University of Arizona (U of A) practically in her backyard. As a lifelong Wildcat, her roots run deep in the city, and her diverse cultural heritage stems from her Mexican mother and Chinese American father. "Culture has always been so important to me. It's my roots, my heart, and who I am," she said.

Family has always been at the center of Chai's world, particularly her grandparents. Strong family ties and caring for elders are paramount in her heritage traditions. Chai often stepped in as a part-time caregiver for her grandparents, navigating the challenges of ensuring their care while bridging cultural and language divides. "None of my grandparents were native English speakers," she said.

Chai's passion for community and healthcare led her to the College of Nursing. Here, she became involved in the Arizona Nursing Inclusive Excellence program, which aims to foster a diverse and supportive environment for nursing students from different ethnic backgrounds. While balancing her studies, Samantha also took on roles that combined education and outreach, including her position at the Flandrau Science Center and Planetarium. In this role, she facilitated educational programs for children and helped create unique experiences for students who might not otherwise have access to such resources.

One of Chai's most rewarding experiences was assisting **Tarnia Newton,** DNP, FNP-C, assistant clinical professor in an outreach program that promotes nursing in underserved communities. "We would go to elementary and middle schools, and engage with students through activities designed to inspire them and plant early seeds of interest in nursing," she said.

When reflecting on her clinical experiences, Chai speaks fondly of rotations that allowed her to connect with patients on a deeper level. During a labor and delivery rotation, she assisted a young, Spanish-speaking mother through a complicated delivery. "I felt like I could provide a sense of comfort and relief, connecting with her and her family during such a vulnerable moment," she says. These occasions, when her cultural understanding and language skills bridge the gap between patient and caregiver, reaffirm her calling to serve and support.

Now on the brink of graduation, Chai looks forward to her future with excitement. Whether in pediatrics, intensive care, or labor and delivery, she's eager to continue growing and learning. She dreams of one day mentoring new nurses. "I want to be that supportive guide, just like those who have helped me," she says with determination. Her path is defined by her roots, community, and the countless individuals she hopes to help.

THE UNIVERSITY OF ARIZONA
College of Nursing

1305 N. Martin Avenue
P.O. Box 210203
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Arizona Needs More Nurses.

The college is committed to narrowing the gap by admitting more students who rely on your support to realize their dreams.

Your support is vital as we increase student admissions to meet the local and national demand for well-trained nurses. Your gift invests in students with financial need dedicated to making a difference and improving healthcare in Tucson and throughout Arizona.

Making a gift is an investment in education. Donations go directly to nursing students, ensuring maximum impact, and every donation is 100% tax-deductible. Scholarships not only provide financial aid but also recognize hard work, perseverance, and commitment to a meaningful nursing career dedicated to helping people.

Your generous donation reduces financial stress and helps drive the dreams of future nurses who will support, heal, and inspire those in their care. Make a difference in a student's life today by using the envelope enclosed in this publication or by visiting https://give.uafoundation.org/nursing to contribute online.

*Your support empowers students like **Mark Thomas Jiron-Khaler** (left), "This scholarship will significantly ease the financial burden of my education, allowing me to focus more intently on my studies and clinical experiences. With this support, I can dedicate more time to my coursework."*

*Donations to the college truly transform lives, like **Nasim Mohammed**, "Receiving this scholarship means a tremendous amount to me. I am financially struggling to care for my toddlers and attend school, so receiving this scholarship helps alleviate the financial burden of pursuing higher education."*

Thank you

to each one of you who makes giving to the College of Nursing a priority! Your gift is appreciated and we are very grateful for your support.