

In a changing world, Penn Nursing Alumni seeks to provide our graduates with information on alumni resources and upcoming events, general School updates, and new ways to stay connected with Penn Nursing.

Help us stay connected and provide you with timely, relevant information by updating your contact and professional information.



Scan the code or visit this link for a short survey where you can update your information.

www.alumni.upenn.edu/nursingupdate

SCOPE 4 — A Presidential Visit for

News

Penn Nursing

6 - Happenings at**Penn Nursing**

10 — Media Spotlight

PRACTICE & COMMUNITY 12 — Local Engagement and Partnerships

GLOBAL 14 — World Wide Work and Perspectives

Policy

16 — The Environmental Justice League

Discovery & Innovation

20 — At Your Service ∨



22 — Amplify Nursing: **Pavilion Edition**

24 — The Accidental CEO

PATH

We want to hear your thoughts about Penn Nursing magazine. Please send your letters to magazine@nursing.upenn.edu or tag us on socials @PennNursing.

"Regardless of your race, background, or income, you should have the same environmental protections. But that's not always the case." -Jianghong Liu PHD RN FAAN, p. 19

Leadership

50 — Catching Up with **HUP Alumni**



53 — A Capitol Internship ^

54 -Be True To Your School: An Alumni Guide To **Giving Back**

56 - A Love Story: The Patricia Ann Teetsell **Carson Nursing Endowed** Scholarship

Alumni **Notes** 58

64 — Kenrick Cato



Features

COVER STORY A Critical Role

26

The Life Cycle of Injury Science v



Contents



"We give our students the advantage of seeing the power of nurse-led research on patient outcomes." - Martha A. Q. Curley PHD RN FAAN, p. 32

Cover photo by Margo Reed







"Being a mom of four and a full-time critical care nurse practitioner, I am able to fulfill my personal and professional dream of advancing my career in the comfort of my home."

Patricia Bajaj, ACNP-BC, RN, MSN, CCRN Current DNP Student

Post-Master's DNP • DNP in Executive Leadership

Enhance your clinical and leadership experience in 18-24 months.

Online • Part-Time • Full-Time



Visit us at nursing.upenn.edu/get-your-dnp/

Also check out our DNP Nurse Anesthesia Program

Penn Nursing

UNIVERSITY OF PENNSYLVANIA SCHOOL OF NURSING MAGAZINE

Editorial Staff

Sasha Dages
CONTRIBUTORS
Ed Federico
Nicole Wolverton

ALUMNI NOTES EDITOR
Maddie Nicol

EDITORIAL CONSULTANT Christine Speer Lejeune

Page 33 Studio

Administration

MARGARET BOND SIMON

DEAN OF NURSING

Antonia M. Villarruel

PHD RN FAAN

VICE DEAN OF INSTITIONAL ADVANCEMENT Nadina R. Deigh

SR. DIRECTOR OF MARKETING AND
COMMUNICATIONS
William Parker

Editorial Board

Maya Clark-Cutaia PHD ACNP-BC RN
Christina Costanzo EDD
Marion Fox
Dennis Flores PHD ACRN
Terri Cox Glassen RN MN
Steven Hoffman
Marion Leary RN MSN MPH FAHA
Rev. Lorina Marshall-Blake MGA
William Parker
Marie Savard MD
Kerry Shields MSN RN PCCNP
Connie Ulrich PHD RN FAAN

University of Pennsylvania School of Nursing Magazine

Penn Nursing is a biannual publication of the University of Pennsylvania School of Nursing, Claire M. Fagin Hall, 418 Curie Boulevard, Philadelphia, PA

nursing.upenn.edu/magazine 215-898-9891 magazine@nursing.upenn.edu



Dean's Letter

Indelible Impact

Dear Friends and Colleagues,

HILADELPHIA IS A city well-known for the grit of our residents (so much so that our professional hockey team's mascot is named Gritty). It's fitting that Penn Nursing is located in a city defined by its mental toughness—because our School helps to develop some of the most resilient nurses in health care. We see this especially in critical care nursing, the feature focus in this issue of Penn Nursing magazine (see page 26).

Critical care nurses assess, treat, and monitor gravely ill patients, typically in high stress environments like intensive care units or emergency departments. It requires critical thinking, skill, and a high degree of emotional intelligence, compassion, and leadership. I'm pleased to highlight some of our excellent faculty in this area, including Amanda Bettencourt, Martha A.Q. Curley, Terry Richmond, Sharon Y. Irving, and Deborah Becker-as well as emerita faculty such as Jane Barnsteiner, who was recognized as a Living Legend by the American Academy of Nursing, in part, for starting the field of pediatric critical care nursing both here and across the world. Now that's impact! Yet the article in this issue just scratches the surface of the legion of Penn Nursing alumni and faculty who in their leadership, research, and practice have helped to shape the field.

In addition to critical care, nurses are also trying to stop crises—injuries, for example—from happening in the first place, such as those carrying out research for Penn's Injury Science Center (story on page 42) and nurses working alongside the communities they serve to advocate for better policy around health-damaging climate change (page 16). While nurses certainly care for a wide range of populations, we are also charged with promoting health and preventing illnesses well. We are uniquely positioned to understand health



▲ Antonia M. Villarruel PHD RN FAAN The Margaret Bond Simon Dean of Nursing

challenges—and to innovate solutions, whether gun violence prevention or averting deaths resulting from extreme heat. And there is no doubt about our leadership in injury prevention!

Penn Nursing students and alumni are leaders, compelled by our mission of social justice, practice excellence, and evidence-based science to be the best and to promote best health, no matter their role. It has been part of what makes our School special since the very beginning, when the Hospital of the University of Pennsylvania established a training school for nurses that put the University at the forefront of nursing clinical leadership. I'm excited to point you toward two very special stories in this issue (pp. 50 & 54)—one celebrating our fantastic HUP alumni and another highlighting options for our alumni to stay engaged with the School and with each other.

As we embark on a new chapter at the University of Pennsylvania under the leadership of President Liz Magill, Penn Nursing will continue to play an important role as we work to create "tomorrow, together." We all have a role to play, and I am grateful for your support of our mission every day. ...

A Presidential Visit for Penn Nursing

HE COLD November bluster could not dampen enthusiasm from students, staff, and faculty as the School of Nursing welcomed University of Pennsylvania President M. Elizabeth Magill to Claire M. Fagin Hall. Upon arrival, President Magill—Penn's ninth president, inaugurated in October 2022—was greeted by a huge turnout of staff, faculty, and students with cheers, balloons, and waving 'number one' foam fingers.

No visit to Fagin Hall is complete without understanding Penn Nursing's place in the storied history of nursing worldwide and, of course, at the University of Pennsylvania. Margaret Bond Simon Dean of Nursing Antonia M. Villarruel accompanied President Magill on a walk-through of the mural, "The History of Nursing As Seen Through the Lens of Art", with the artist who created it, alumna Kathy Shaver HUP'76. The mural, installed in 2011, was commissioned by the Hospital of the University of Pennsylvania (HUP) Alumni Board to commemorate 125 years of nursing education at Penn.

It was that education that was the true focus of President Magill's visit, with a student showcase to highlight Penn Nursing's many degree programs, from undergraduate through PhD and DNP doctoral studies; virtual reality learning and an interactive birthing simulation in the Helene Fuld Pavilion for Innovative Learning and Simulation; and a whirlwind walkthrough of student and faculty leadership, research and innovation, and practice.

Dean Villarruel said, "It was a privilege to welcome President Magill and introduce her to all things Penn Nursing. We welcome her to our community and are ready to support her leadership, while we continue our work at the forefront of cutting-edge education and policy-changing research." .*





News

Inclusive Sexuality Talks with Teens

Given legislative barriers to inclusive sex education in schools, parent-child sexual health communication has emerged as a route to meet the sexual health education needs of GBQ youth. A new study from Penn Nursing, published in the Journal of Adolescent Health, forwards a foundational conceptualization of what age-appropriate, inclusive, and comprehensive sexual education looks like for families with GBQ adolescent males. "Having early developmental discussions is critically important," explains lead-investigator Dalmacio Dennis Flores PHD ACRN FAAN, Assistant Professor of Nursing. "Our findings point to the crucial need for parents to proactively engage in inclusive and methodical sexuality talks throughout adolescence and especially in middle school, and even as early as elementary school." Co-authors of the article include Penn Nursing Assistant Professors Melanie Kornides



SCD RN FNP-BC and Steven Meanley PHD MPH. This study was funded by the National Institutes of Health and the Surgeon General C. Everett Koop HIV/ AIDS Research Award.

THRIVE Improves Health Equity

People with multiple chronic conditions

require complex care management and often experience significant challenges when transitioning from hospital to home. This is especially true for people insured by Medicaid who are disproportionately Black, Indigenous, People of Color (BIPOC) and experience higher chronic disease burdens and adverse outcomes following hospitalization. For them, comprehensive transitional care support is a paramount, yet often absent aspect of care delivery that may result in health inequities. An innovative clinical pathway, THRIVE provides intensive case management, care coordination, continuity of care, and communication across acute and community settings. Participants in the program receive a visit from a home-care nurse within 48 hours of discharge, as well as clinical support from their discharging physicians and social workers. Other clinical care services are provided as warranted, including occupational therapy, physical therapy, and community health worker services.

Early results from the THRIVE clinical pathway show that participants had fewer 30-day ED visits and fewer 30-day readmissions than those not enrolled in the program. This suggests the value of interdisciplinary and community-based

♦ Dalmacio Dennis Flores PHD ACRN FAAN



▲ J. Margo Brooks Carthon PHD RN FAAN

collaborations and health care innovations that target health care delivery and system processes. The results of the first year of the intervention can be found in the article "Transitional Care Innovation for Medicaid-Insured Individuals: Early Findings," published in the journal BMJ Open Quality. "Through both home-care services and continued clinical oversight by hospital-based physicians, we are able to intensify the clinical services provided in the aftermath of an acute hospitalization while also attending to social needs that are often unaddressed after hospitalization," says J. Margo Brooks Carthon PHD RN FAAN, the Tyson Family Endowed Term Chair for Gerontological Research, Associate Professor of Nursing, and lead developer of the intervention.

Psychedelic-Assisted Therapy Education

Thanks to a \$1 million grant from the Joe & Sandy Samberg Foundation and the

Steven & Alexandra Cohen Foundation, Penn Nursing and the Columbia University School of Social Work (CSSW) are developing a collaborative initiative to educate social workers and nurses about psychedelic-assisted therapy in anticipation of FDA approval of this type of treatment. This effort will help improve access to affordable, safe treatment facilitated by a large workforce of highly qualified practitioners. The grants will fund the development of an educational training curriculum which will be piloted at Penn Nursing and CSSW with plans to expand to Columbia School of Nursing and Penn's School of Social Policy & Practice (SP2). In addition to offering the curriculum to enrolled stu- Dr. Besser will be a great inspiration, dents, there are plans for curriculum targeting post-graduate nurses and social workers. Upon successful implementation, the intent is to have the curricula available at no cost for wider adoption in other institutions.

"This dynamic new partnership with Columbia University builds on Penn Nursing's well-received Psychedelic Revival learning series held last year that brought the growing field of psychedelic medicine in mental health to a broad audience of nurses and nurse-scientists," said Dean Villarruel. "With Penn Nursing's sharp focus on health equity and innovation, we are excited to work with Columbia University as well as with our colleagues here at SP2, to prepare our graduates for key roles in psychedelic therapy provision—and ensure that barriers to this care are addressed."

2023 Penn Nursing **Commencement Speaker**

Dr. Richard Besser, President and CEO of the Robert Wood Johnson Foundation (RWJF), the nation's largest health philanthropy, will serve as the 2023 Penn Nursing commencement speaker. The event will take place at 3 PM EST on Monday, May 15, 2023, at the Kimmel Center for the Performing Arts and will be live streamed.

"The Robert Wood Johnson Foundation has been a leader in their support of nurses to address health for all. Dr. Besser, in particular, has been an incredible advocate for health equity," said Dean Villarruel. "As our students look ahead to their careers in nursing,



▲ George Demiris PHD FACMI

challenging them to engage and lead in meaningful efforts in health care systems and communities to ensure everyone has a fair and just opportunity to attain their highest level of health."

Besser has been a leader in the national call for equitable COVID-19 response and recovery efforts and is co-chair of the Presidents' Council on Disability Inclusion in Philanthropy. Before joining the Foundation, Besser served for eight years as Chief Health and Medical Editor for ABC News, and as a leader at the Centers for Disease Control and Prevention, where he worked for 13 years. He served as Acting Director of the CDC during the initial response to the H1N1 influenza pandemic. Besser recently retired from pediatric practice after more than 30 years of volunteering in community clinics and currently sits on the Howard University Board of Trustees. He is a member of the National Academy of Medicine. He received his undergraduate degree in economics from Williams College, his medical degree from the University of Pennsylvania, and completed a residency and chief residency in pediatrics at Johns Hopkins University Hospital in Baltimore.

J&J Partners on Nurse **Innovation Fellowship**

The Johnson & Johnson Nurse Innovation Fellowship Program (IJNIF) powered by Penn Nursing and the Wharton School is a ground-breaking, one-year, team-based nursing fellowship (June 2023-May 2024) for Chief Nursing Officers (CNO), nurse

executives, and senior nurse leaders. The goal of the fellowship is to advance health care by powering up nurse-led innovation and leadership within health systems. The JINIF is designed for innovative nurse executives who have a passion for finding solutions that provide better care for patients and support a workplace environment where nurses can thrive. This fellowship is unique in that two nurse leaders-one Chief Nursing Officer or nurse executive and one other senior nurse leader from the same health system organization - participate and work together to address a real-world challenge they are facing in their health system. The program will immerse fellows in the innovation process by focusing on human-centered design and design thinking methodologies and will teach fellows how to apply them to their challenge areas.

Collaboratory Funds \$2.1M in Grants for First Year

The Penn Artificial Intelligence and Technology Collaboratory for Healthy Aging (PennAITech)—made up of Penn's School of Nursing, the Perelman School of Medicine, and other departments across the University-focuses on identifying developing, evaluating, commercializing, and disseminating innovative technology and artificial intelligence methods/software to support aging. It's made possible through a grant from the National Institute on Aging, a part of the National Institutes of Health. In its first year, and through a competitive national grant review process, twelve applicants from academia, industry, and clinical practice across the U.S. have been selected for funding. "These awardees represent the broad range of innovative solutions that have the potential to significantly improve the lives of older adults and their families, and our team of experts at Penn are looking forward to working with them and supporting them in this journey" said George Demiris PHD FACMI, a Penn Integrates Knowledge Professor with joint faculty appointments in Penn Nursing and Penn's Perelman School of Medicine. He is one of the principal investigators of PennAITech.



∧ Connie M. Ulrich PHD RN FAAN

Cancer Trial Withdrawl

While people with cancer have options to participate in cancer clinical trials (CCTs), it can be challenging when they encounter difficulties enrolling and remaining in the trial. Trial withdrawal, although every participant's right, can thwart study goals and hamper advancing novel treatments.

A new investigation from Penn Nursing has examined the association between patients' perceived benefits and burdens of research participation and CCT retention. It found that patients perceived important benefits from CCT participation, which was associated with trial retention, even among those who also perceived substantial burdens. "The findings of how perceptions of benefits and burdens were associated with CCT withdrawal outcomes provide novel and foundational evidence of the importance of understanding these perceptions for trial retention," explains lead investigator Connie M. Ulrich PHD RN FAAN, Lillian S. Brunner Chair in Medical and Surgical Nursing, Professor of Nursing and Professor of Medical Ethics and Health Policy.

The results of the study have been published on JAMA Network. Coauthors include Mary D. Naylor PHD RN FAAN, Marian S. Ware Professor in Gerontology and Director of the NewCourtland Center for Transitions and Health as well as Therese S. Richmond PHD RN FAAN, Andrea B. Laporte Professor of Nursing and Associate Dean for Research & Innovation.

Science Advisory Concerning Infants with Heart Disease

Developmental disorders, disabilities, and delays are common outcomes for infants with complex congenital heart disease. Targeting early factors influencing these conditions after birth and during neonatal hospitalization for cardiac surgery remains a critical need. The Journal of the American Heart Association has published a science advisory that highlights critical gaps in research aimed at evaluating developmental care interventions to improve neurodevelopmental outcomes in complex congenital heart disease. "Developing early interventions to promote brain maturation, mitigate risk factors, and change the trajectory of neurodevelopment are now urgent research priorities," explains the advisory's lead author, Amy Jo Lisanti PHD RN CCNS, Research Assistant Professor at Penn Nursing and a member of the research faculty at Children's Hospital of Philadelphia's Research Institute. Research scientists, clinicians, policymakers, government agencies, advocacy groups, and health care organization leadership are called upon to support funding and hospital-based infrastructure for developmental care in the complex congenital heart disease population. "Prioritization of research on and implementation of developmental care interventions in this population should be a major focus in the next decade," says Lisanti.

Achieving Equitable Primary Care

Data shows that unless the pattern of furnishing primary health care, particularly to underserved groups in both urban and rural areas, is drastically improved, these groups will suffer in inequitable and unnecessary ways. It is clear that the primary care workforce must be expanded and diversified. Dean Villarruel PHD RN FAAN and Julie Sochalski PHD RN FAAN, Associate Professor of Nursing and Associate Dean for Academic Programs, provide insight into the Leonard A. Lauder Community Care Nurse Practitioner Program, designed to promote community-engaged primary care nurse practitioner education—offering one solution to this national dilemma. "Built upon a strong University and School mission and values that align with health equity, the Leonard A. Lauder program augments nurse practitioner education at Penn with focused integration of the social determinants of health at the point of care and development of intersectoral leadership," explains Dean Villarruel. The commentary is published in the journal NAM Perspectives and is available online at nursing.upenn.edu/ namcommentary.



Eidos LGBTQ+ Health Initiative Partners with Gaingels

The Eidos LGBTQ+ Health Initiative at Penn Nursing has partnered with Gaingels, an LGBTQIA+/Allies private investment syndicate, to provide their portfolio of companies access to Penn's academic research to make an impact into the health and well-being of LGBTQ+ communities. "This academic-industry partnership will help shorten the pipeline from discovery to social impact. Often, great ideas are proposed by researchers and entrepreneurs, and yet there are limited opportunities for collaboration and synergy. Through the Eidos-Gaingels partnership, we seek to support founders and entrepreneurs with in-depth LGBTQ+ health knowledge and research expertise and accelerate the delivery of evidence-based strategies and innovative solutions for LGBTQ+ people," said José Bauermeister PHD MPH, the Albert M. Greenfield Professor of Human Relations and Founding Faculty Director of the Eidos Initiative. This first round of projects is expected to launch in spring 2023.

Awards and Appointments

The American Academy of Nursing (AAN) named JANE H. BARNSTEINER PHD RN FAAN,

Professor Emerita of Pediatric Nursing, a Living Legend for her significant contributions to nursing and health care over the course of her career. This is the Academy's highest honor.

ANN MARIE HOYT-BRENNAN

MSN RN, Simulation Education Specialist and Director of the Helene Fuld Pavilion for Innovative Learning and Simulation, received the 2022 Maes-MacInnes Award for Innovative Contributions from NYU Rory Meyers College of Nursing. This award is given to a Meyers' alumnus in recognition of their outstanding work in clinical innovation on behalf of professional nursing.

The Rita and Alex Hillman Foundation (RAHF) announced \$1.5 million in grants to support bold new programs addressing the health of marginalized populations. Two recipients are from Penn Nursing's Department of Family and Community Health: J. MARGO **BROOKS CARTHON PHD.** the Tyson Family Endowed Term Chair for Gerontological Research and Associate

Professor of Nursing; and SARA JACOBY PHD, the Calvin Bland Fellow and Assistant Professor of Nursing.

THE CENTER FOR GLOBAL **WOMEN'S HEALTH (CGWH)**

has been awarded a \$30,000 grant through It's On Us PA, a statewide campaign that aims to end sexual assault by bringing together college and university presidents, superintendents, administrators, teachers, students, families, and community members to reframe the conversation around sexual violence and pledge to be part of the solution.

CHARLENE W. COMPHER PHD RD LDN FASPEN. Professor of Nutrition Science in Penn Nursing's Department of Biobehavioral Health Sciences and Director of Graduate Nutrition Programs, has been appointed to a six-year term on Pennsylvania's State Board of Nursing. She is the only dietitian/nutritionist representative on the board.

GEORGE DEMIRIS PHD FACMI. the

Mary Alice Bennett University Professor and Penn Integrates Knowledge (PIK) University Professor has been appointed the next Associate Dean for Research and Innovation. This appointment will begin on June 1, 2023. He holds a secondary appointment in the Informatics Division of the Department of Biostatistics, Epidemiology, and Informatics at the Perelman School of Medicine, is a member of the National Academy of Medicine, and a fellow of the American College of Medical Informatics, the Gerontological Society of America, and the International Academy of Health Sciences Informatics. Demiris also directs the Penn Artificial Intelligence and Technology Collaboratory for Healthy Aging and co-directs the Penn Community Collaboratory for Co-Creation.

Three Penn Nursing faculty were inducted as 2022 Fellows of the American Academy of Nursing (AAN): DALMACIO DENNIS FLORES PHD ACRN, Assistant Professor, Department of Family and Community Health; SARA JACOBY PHD MPH MSN, Assistant Professor, Department of Family and Community Health; and MARGARET SOUDERS PHD **CRNP**, Associate Professor, Department of Biobehavioral Health Sciences.

SHARON Y. IRVING PHD CRNP FCCM FAAN FASPEN, Associate

Professor in the Clinician Educator track and Vice-Chair of the Department of Family and Community Health, has been appointed the Miriam Stirl Endowed Term Chair in Nutrition. She also practices as a pediatric nurse practitioner at Children's Hospital of Philadelphia (CHOP), where she provides patient care in the pediatric intensive care and progressive care units. In addition, she was honored with the 2023 Women of Color at Penn (WOCAP) Award for faculty.

SARA JACOBY MPH MSN PHD, Assistant Professor of Nursing in the Department of Family and Community Health, has been appointed the Calvin Bland Fellow at the School of Nursing. This Fellowship is awarded to select individuals in the Schools of Nursing, Social Policy & Practice, and the Graduate School of Education, as part of the Penn Futures Project, which was established in 2015 to enhance the health and wellbeing of area children and families.

MATTHEW D. MCHUGH PHD JD MPH RN CRNP FAAN the

Independence Chair for Nursing Education, Professor of Nursing, and Director of the School's Center for Health Outcomes and Policy Research, was named the recipient of the 17th Claire M. Fagin Distinguished Researcher Award, honoring the best scholarly qualities that Dr. Fagin, the School's third Dean, exemplified.

ADRIANA PEREZ PHD ANP-BC

FAAN, Associate Professor of Nursing in the Department of Family and Community Health, has been appointed the Anthony Buividas Term

Chair in Gerontology. Dr. Perez is a scientist at the Center for Improving Care Delivery for the Aging (CICADA), Penn's Resource Center for Minority Aging Research (RCMAR), funded by the National Institute on Aging (NIA)

The National Academy of Medicine named MARY D. NAYLOR PHD RN FAAN, the Marian S. Ware Professor in Gerontology and Director of the NewCourtland Center for Transitions and Health, the recipient of the 2022 Gustav O. Lienhard Award for Advancement of Health Care for improving the lives of millions of older adults living with complex health and social needs through her role as the architect of the Transitional Care Model and pioneer of the field of transitional care.

Governor Tom Wolf and First Lady Frances Wolf recognized 11 women, including Professor Emerita **NEVILLE** STRUMPF PHD RN FANN, as Distinguished Daughters of Pennsylvania, highlighting their extraordinary achievements and contributions to the Commonwealth at an event at the Governor's Residence

DEAN ANTONIA VILLARRUEL PHD

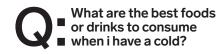
RN FAAN was appointed to the Board of Regents of the Uniformed Services University, a Federal Advisory Committee within the Department of Defense. The Board provides advice and guidance to the Secretary of Defense, the Under Secretary of Defense for Personnel and Readiness, the Assistant Secretary of Defense for Health Affairs, and the USU President to ensure that the operation of USU is effective, in compliance with all applicable accreditation standards, and in the best traditions of academia

Media **Spotlight**

What Should I **Eat or Drink When** I Have a Cold?

From hot toddies to chicken soup. there are a few important things to keep in mind, experts say.

In a recent edition of 'Ask Well' in The New York Times, Penn Nursing's Assistant Professor in Nutrition Science, Colleen Tewksbury PHD MPH RD CSOWM LDN, weighs in with some expert auidance.



If you search for the answers online, you will find plenty of articles claiming that certain "immune-boosting" foods or drinks—like garlic, citrus, cranberries, chili pepper, and pomegranate juice can ease symptoms or speed recovery from a common cold.

But "we do not have strong enough information suggesting that everyone should be eating specific foods during a viral infection," said Colleen Tewksbury, an assistant professor in nutrition science at the University of Pennsylvania School of Nursing.

That said, it's important to feed yourself well, Dr. Tewksbury said. A coldespecially if it affects your sense of taste and smell—can squelch your appetite, yet your body still needs calories and nutrients to function and fight the infection, she said. "Anything you can do that will help you feel a bit more comforted and meet some of your nutritional needs during that time will be helpful."

Dr. Tewksbury suggested turning to hydrating and nourishing foods and drinks that are also comforting, such as the ones you were given when you were sick as a child or those grounded in your cultural traditions.



Soup is soothing, and backed by a bit of science

"Soup tends to be a good go-to," Dr. Tewksbury said—especially if it includes a healthy balance of nutrients, including protein (like beans or chicken), carbohydrates (rice, noodles, or potatoes), some fat (from meat, oils, or dairy), and "veggies that will pack in some additional vitamin and mineral punches."

Soup is "filling, it's nourishing, it helps with fluid intake," Dr. Tewksbury said.

And in fact, said Dr. Stephen Rennard, a professor of pulmonary, critical care, and sleep medicine at the University of Nebraska Medical Center, there's a little bit of lab-based science to back it up...

Go easy on alcohol

Some cold sufferers may seek comfort in a hot toddy, which traditionally includes a splash of whiskey and honey in hot water. But keep in mind that drinking alcohol when you're also taking medications for cold, cough, and allergy symptoms can be dangerous, especially if the medications include acetaminophen, which can cause liver damage if mixed with alcohol, Dr. Tewksbury warned. Alcohol can also be dehydrating, and though there isn't much research on this point, it stands to reason that drinking while sick with a virus might worsen how you feel, Dr. Tewksbury added. That being said, if a hot toddy is what you're craving when you have the sniffles and you're not taking any medications that will negatively interact with alcohol, Dr. Tewksbury said she wouldn't discourage mixing up a drink. Just remember that it probably won't help you heal any quicker...

The milk-mucus effect is murky

Many people believe that drinking cow's milk increases mucus production, but research testing this belief is limited, with mixed results.

Several Australian studies published in the 1990s found no link between milk drinking and mucus, including among people infected with a common cold virus. Yet in a recent trial of 108 adults who didn't have colds but who suffered from chronic overproduction of mucus, researchers found that those following a dairy-free diet for six days had reduced self-reported snot secretions.

"There is little evidence that dairy universally increases mucus production for everyone," Dr. Tewksbury said. But this may vary from person to person, so if dairy makes you feel phlegmy, avoiding it when you have a cold is reasonable, she said. Otherwise, dairy products can be a convenient and balanced source of nutrition. The Academy of Nutrition and Dietetics recommends blending frozen fruit with milk (or soy milk) for a nutritious and hydrating smoothie for children when they are sick.

In the end, "food is so personal," Dr. Tewksbury said. When you're feeling flattened by a cold, she suggested asking yourself: "What are the things that can help me feel most nourished during this time, to help support myself? And that's different for everybody."

The above is an excerpt from the January 10, 2023 edition of 'Ask Well' by Alice Callahan in The New York Times.





Your support of the Penn Nursing Annual Fund is vital and helps students like Katie access the educational resources that will make them future nursing leaders.

Will you make your gift? Your leadership makes a difference and every dollar counts!

When you donate to the Penn Nursing Annual Fund, you give our students access to additional financial aid, academic enrichment, and opportunities that help them succeed.

3 Ways You Can Support Penn Nursing **Students Who Need Your Help**



Mail

Visit www.nursing.upenn. edu/giving/how-to-give/ to find out more.



Making donations is easy with a few clicks. Just visit: www.nursing.upenn.edu/spring

Did you know that you also have the option to make a gift with your digital wallet on our secure website?



Phone

Give us a call at (215) 573-8975.

Practice & Community

Sepsis Management

Positioning nurses to lead initiatives to improve patient care is strengthening the academic practice partnership between Lancaster General Health (LGH) and Penn Nursing—and saving lives—especially when it comes to earlier diagnosis of sepsis.

In response to the Centers for Medicare and Medicaid launching sepsis core measures in 2015, LGH went to work. They created electronic medical record (EMR) best practice advisories (BPA), a set of orders for patients with sepsis, and templates for sepsis documentation, resulting in a major improvement in core measures compliance, from 36 to 48 percent. There was more that could be done, though, this time with the help of a new sepsis coordinator role, filled by Teresa Cranston MS RN **ССRN-**к. After a thorough evaluation, she concluded there was the need for 24/7 sepsis monitoring.

LGH's nursing department stepped up to the challenge and committed to the idea, and it was there that their existing Continuous Monitoring Unit (CMU) was expanded to include sepsis BPA monitoring (the CMU previously

monitored only telemetry and video). Since early 2021, the CMU RN team has been trained in Early Sepsis Recognition; they review all sepsis BPAs that occur in the emergency department and inpatient areas, evaluating BPAs

for accurate sepsis data. When a patient meets the criteria for sepsis, the nurses contacts the provider and advises on sepsis bundle completion. Due to the efforts by Cranston and the CMU team, LGH has seen significant additional core measure compliance.

Going one step further, **Katharine** "**Kit" Thompson MSN RN-BC AG-CNS** joined as a clinical nurse specialist for pulmonary and sepsis care. Together, Cranston and Thompson complete walking rounds in the nursing units providing one-to-one education on everything related to sepsis, including education for patients and caregivers and sepsis survivor discharge plans.

Christian N. Burchill PHD RN CEN GNU'89, the Director of Nursing Research and Evidence-based Practice at LGH, says, "Thanks to nursing leaders who believe that a culture of nursing inquiry and innovation is essential to improve the health of the community we serve, there are a lot of resources available to support nurses in solving clinical problems through research, evidence implementation, and innovation. The hospital-wide sepsis monitoring program is just one example of many ongoing research and EBP projects happening here at LGH."

Kathryn H. Bowles PHD RN FAAN FACMI GR'96, the van Ameringen Chair in Nursing Excellence at Penn Nursing, is leading the School's National Institutes of Nursing Research-funded implementation science study to assess the facilitators and barriers to effectively transition sepsis survivors from hospital to home health care to receive timely post-acute care—and LGH is playing a role in her team's research. She says, "We have found that LGH is well-positioned for success, with many facilitators and rapid response when barriers are encountered. It is a pleasure working with Teresa Cranston and the LGH team—they have produced exceptional work and outcomes to optimize care



AIDS Day at Penn Nursing.

for growing numbers of sepsis survivors. Bowles' study, i-TRANSFER (or Improving TRansitions ANd outcomeS oF sEpsis suRvivors), has committed participation from all Penn Medicine entities, including LGH.

Fundraising for AIDS Day

Nurses for Sexual and Reproductive Health club (NSRH)—in collaboration with the Asian Pacific American Nursing Student Association (APANSA)—hosted a fundraiser online and at Fagin Hall on World AIDS Day in December to benefit AIDS Fund Philly. Over 45 nursing students participated, from organizing and baking sweets to sell, to donating, to providing AIDS awareness information, and how to be involved in the fight against AIDS. Penn Nursing student Tara Teipel says, "It was very rewarding to connect with our community in this way—with brownies, cookies, condoms, and more to sell or give away, we were excited to bring up the conversation surrounding HIV and nursing with our classmates."

Impacting Period Poverty

Penn Nursing student Caroline Dillon is no stranger to menstrual activism work—as a high school student she

≺ Kathryn H. Bowles PHD RN FAAN FACMI GR'96

helped write a New Hampshire bill that, when it was signed into law in 2019, required high schools and middle schools to provide free and accessible menstrual hygiene products in girls' and gender-neutral restrooms. Now-through a campaign spearheaded by Always and Walmart-Dillon received a donation of 50,000 sanitary napkins to be routed to the organization of her choice. In consultation with Penn Nursing's Center for Global Women's Health, the pads went to No More Secrets, a local nonprofit that distributes menstrual products to Philadelphians in need and provides vaginal health education programming via a mobile van. The Always and Walmart campaign donated a total of 2.5 million sanitary napkins to organizations across the country.



Always to the rescue.

Human Trafficking Webinar

The Center for Global Women's Health (CGWH) marked Human Trafficking Awareness Month by co-hosting a free webinar titled Human Trafficking: What is the Outlook? It provided information about human trafficking, its national and global impact, and the role that active bystanders play in reducing its incidence. Monique Howard EDD MPH, Sr. Director of Women's Health Initiatives at CGWH, moderated a panel of four speakers: Lillian Agbeyegbe DRPH **CHES CPH**, Sr. Manager of Community Engagement at Polaris; Abbe Horswill, Director of Human Rights and Social Impact at Marriott International; **Heather LaRocca LCSW**, Director of The Salvation Army's New Day to Stop Trafficking program; and Natashia

Wilson, a trafficking survivor, advocate, speaker, and spokesmodel. Cohosting with CGWH was Penn Women's Center, Ortner Center on Violence and Abuse, Penn Center for Public Health, Philadelphia Commission for Women, and the Perelman School's Center for Global Health.

Health Education and Homework Assistance

Two Penn Nursing students, senior Jacqueline Santis and second-year Traci McEachern, provided in-person health education and homework assistance for approximately 20 to 30 Kindergarten to eighth grade students at the Common Place every Monday afternoon during fall semester. Health topics included balanced diet, what physical health means, and injury prevention realistic tips that can be implemented in students' daily lives. McEachern says, "This engagement work is so important to me because it allows me to have conversations with young students that I did not get to have when I was in elementary school. Students are eager to find connections between their health, personal lives, and spiritual values." Santis notes that it was an amazing project, one she hopes will have a lasting impact on the lives of the students she and McEachern taught. The Common Place is a community center serving children and their families in Southwest Philadelphia.

New Penn Partnerships

Penn Nursing is excited to announce new Community Champions partnerships with RISE Philadelphia, Philadelphia Senior Center, and The Center Philadelphia. Fourth-year undergrad **Hayley Siegle** says, "We are thrilled to continue to form relationships with individuals and groups beyond the Penn community and further explore the ways that we can engage with the greater city of Philadelphia."

RISE, a nonprofit founded during the early part of the COVID-19 pandemic, gathers graduate and undergraduate students to provide free tutoring, mentoring, and companionship to low socioeconomic South Jersey and Philadelphia students in need of academic help; Penn Nursing students will have an opportunity to be paired with Kindergarten through twelth grade students to provide virtual tutoring across all subject areas. Additionally, The Center Philadelphia is dedicated to helping local communities and at-risk populations, including persons experiencing homelessness—and the School's students engaged in Community Champions will provide companionship and assist individuals attending the Center with tasks such as computer use, writing resumes, etc.

Penn Nursing has long had a relationship with the Philadelphia Senior Center, including nurse practitioner students leading an initiative there as part of their community course; however, Community Champions—as undergraduate nursing students—will now lead the initiative starting in the current semester (spring 2023). Students visit the center once each month to provide nutrition education, and they are hoping to have a hands-on food demonstration.

Maternity Leave Resolution

Over the fall 2022 semester, the Resolutions Committee of Student Nurses at Penn (SNAP) researched and wrote a national resolution titled, "In Support of Increased Nursing Advocacy for Patients with Inadequate Maternity Leave." The resolution advocates for paid maternity leave and—through delivering a copy of the resolution to a variety of local and national health care organizations-encourages widespread adoption of this stance in nursing. Authors of the resolution include Penn Nursing students Emma Hovestadt, Tracy Zhang, Zarah Huo, Andrew Kim, John Palmer, Megan Laubacher, Alissa Brubaker, Elizabeth Zabolotneva, Margaret Benson, Julia Badolato, and **Sofia Perfetti**. Resolutions—once presented at conference, voted on by multiple schools of nursing, and adopted as an official stance of the National Student Nurses Association (NSNA)become a tool for students to better understand one mechanism by which to effect change in health care. SNAP Vice President Emma Hovestadt says, "Understanding the importance of patient advocacy & the role nurses have in legislature is key to creating a nursing class that is equipped to tackle the issues the nursing profession faces."

Around the Globe



Renfield Awardee Presents

The 2022 recipient of the Penn Nursing Renfield Foundation Award for Global Women's Health—Gabriela Meléndez-Peláez, a Guatemalan nurse-midwife, maternal health advocate, and the Founder of Asociación Corazón del Agua—was invited to present on the pros and cons of task shifting in Guatemala at the 14th annual CHOP Pediatric Global Health Conference: Frontiers in Global Child Health. Nadina Deigh, Penn Nursing's Vice Dean for Advancement, says, "The relationships our School develops with recipients of the Renfield Award has multiple benefits—it is truly a gift to see our most recent winner showcase her expertise across the Penn community."

Improving Nursing in the Americas

Colombia, Peru, and Ecuador

Penn Nursing was redesignated as a WHOCC—and continues to support WHO and PAHO efforts to increase knowledge and understanding of maternal health and mortality as well as build capacity in nursing education. As part of this, Penn Nursing's CGWH is developing technical papers on a range of adolescent health topics specifically for RNs in Colombia, Peru, and Ecuador (in addition to two training webinars), all authored by faculty and staff, including Carmen Alvarez PHD CRNP CNM FAAN; Abigail Howe-Heyman PHD CNM RN; Dalmacio Dennis Flores PHD ACRN FAAN: Monique Howard EDD MPH; and Catherine C. McDonald PHD RN FAAN. Howard says, "CGWH is honored to have a part in in this exciting opportunity to build nursing capacity in Colombia, Peru, and Ecuador. The collective expertise at Penn Nursing represented in these papers and webinars speaks to our School's mission to advance science and promote equity."



PANMCC Annual Meeting

atin America and the Caribbean

The World Health Organization Collaborating Centers (WHOCC) and Pan American Health Organizations (PAHO) in the AMRO region were able to meet inperson for the Pan American Nursing & Midwifery Collaborating Centers (PANMCC) annual meeting, held in Miami, Florida. PAHO/WHO requested assistance developing advancing nursing research journals and publication in Latin America and the Caribbean (LAC)— Dean Villarruel; Edith Clemmer Steinbright Professor in Gerontology Eileen T. Lake PHD RN FAAN GNU'97 GR'99; and Center for Global Women's Health (CGWH) Senior Director of Women's Health Monique Howard EDD MPH attended. Lake, as the Editor in Chief of the nursing research journal Research in Nursing & Health, says, "We will survey editors of all nursing journals in LAC with the intention of informing action by PAHO to support nursing journal editors as one way to increase the impact of LAC nursing research on population health in the area—and help editors raise the profile of their journals."

Learning Health Care

Chile

Students from the Penn Global Seminar 'Health and the Healthcare System in Chile'—led by Eileen T. Lake PHD RN FAAN—traveled to Chile to learn about their health care system by visiting clinical sites in Santiago. They also had a working session at a university-based survey research center that conducts national household health-related surveys for the Chilean Ministry of Health. Students collaborated with the Universidad de Los Andes School of Nursing in Santiago, an institution that has partnered on research projects with Penn Nursing's Center for Health Outcomes & Policy Research, of which Lake is Associate Director. Assisting in Chile was Marta Simonetti PHD APRN, Lake's mentee and a 2019 graduate of Penn Nursing's PHD program, and faculty at the Universidad de Los Andes School of Nursing. Simonetti says, "Guiding the students during their field trip to Chile always gives me an opportunity to learn something new about my own health care systems and students bring new perspectives on its strengths and weaknesses that may enlighten my own."

Global Nursing Fellows

Rwand

The Global Nursing Fellows program, supported by the Renfield Foundation. provides opportunities for Penn Nursing's graduates and faculty to engage in health-related projects. The second cohort of Fellows working with Partners in Health (PIH) is supporting its Global Nurse Executive Fellowship Program, endeavoring virtually to improve health service delivery, access, and equity, and to strengthen health systems globally. Katie Buhikire, a Global Nursing Fellow and Penn Nursing PHD student, along with her faculty mentor and former Global Nursing Fellow, Alison Ercole, traveled to Rwanda in early 2023 to further the PIH initiative. Nancy Biller MPH MA says, "The innovative Global Nursing Fellows program continues to serve vulnerable populations, bringing Penn Nursing excellence to organizations with critical needs. It's a rewarding experience and as our successes grow, so do the opportunities for future alumni fellows and faculty mentors."

Coverdell Fellow

Madagascar

Eagerness to learn more about birth culture is what drew Julia Kelley, Penn Nursing's newest Paul D. Coverdell Fellow, to the Peace Corps. She says, "After volunteering [as a doula] for several years, I was curious about what birth looked like outside the U.S.—and how culture shapes the way birth is perceived and experienced." Kelley's Peace Corps experience took her to Fianarantsoa. Madagascar for almost a year, volunteering as a community health worker at a health center on the island of larintsena. Her experience was cut short by the pandemic, but the work she started continues: she collaborated with a local middle school teacher to design a youth reproductive health curriculum, which is currently being taught to students. Kelley will graduate with her BSN in 2023 and plans to become a certified nurse midwife, focusing on helping to better birth outcomes in the U.S.



Thai Connections

Thailand

Jianghong Liu led a group of 20 students to Bangkok, Thailand and, with support from Penn Global and the China Education Initiative, provided students an opportunity to learn about complementary and alternative medicine techniques such as acupuncture, cupping, and Gua Sha (skin scraping). Students also took an interactive Qi Gong class with Master Yin Quan, the Soad Hussein Hassan Visiting Global Scholar in 2018. Liu, the Marjorie O. Rendell Endowed Professor in Healthy Transitions, says, "It is incredibly fascinating to students how qigong can improve heart conditions, reduce swelling, and so much more. Students mentioned that they would encourage family members to practice gigong due to its numerous health benefits." Liu's students were also connected with Dr. Usavadee Asdornwised, Professor at Mahidol University, at a Penn Thai alumni event; she is a Penn Nursing alumna and long-term friend to our students studying abroad in Thailand.



Prize Winner Continues Pediatrics Work

Sierra Leon

Alaina Hall Ms RN Nu'18 won a President's Engagement Prize in 2018 for her nurse-led multi-interventional health-promotion effort in partnership with Nuestros Pequeños Hermanos orphanage in Miacatlán, Mexico—and will now spend a year working with Doctors Without Borders/Médecins Sans Frontières (MSF) in Sierra Leone, Africa. Hall's role will focus on peripheral health units (PHUs), primary health centers supported by MSF that primarily focus on women and children's health. She will manage PHU nursing activities that center on MSF trainings, staff recruitment, and medication/supply acquisitions. Hall says, "I am passionate about pediatric health and excited to work with the PHUS to reduce pediatric morbidity and mortality in the country."

14 PENN NURSING — SPRING 2023 — PENN NURSING 15

Policy

The Environmental Justice League

Penn Nursing is committed to training the next generation of nurses on sustainability and the climate crisis, retooling its curriculum, transforming its physical footprint, and conducting research on how the environment affects vulnerable populations. By Michele Berger

ARAH HOPE KAGAN PHD RN FAAN FGSA AOCN GCNS-BC has always focused her clinical practice and research on aging populations and the support systems they need to live healthy, fulfilling lives. A decade or so ago, she started integrating the climate crisis into this work.

"As nurses, if we don't address what's going wrong with planetary health and global heating, if we don't look at the environment, air, soil, water, if we don't think about sustainable health care, we're all going to be in trouble," says Kagan, the Lucy Walker Term Professor and a professor of gerontological nursing. "If we don't act now, we're going to miss our chance."

Kagan isn't alone in those feelings, and she's one of a growing number of faculty, staff, and students at Penn Nursing who have incorporated climate and environmental justice into their research and syllabi, extracurriculars, and activism. The School itself has committed to this work at the highest level with support from Dean Antonia Villarruel, adding courses focused on the subject, creating a sustainability program, and more.

"Environmental justice is all about looking at what's been put upon vulnerable populations," says Assistant Dean Lucia DiNapoli, who co-chaired the school's Green Team with Joseph Gomez, Director of Operations. "Nurses play a huge role in the mitigation of the impact on these populations. At Penn Nursing, we're aiming to give students the ability to consider and have a clearer eye toward the inequities happening in health care spaces and in neighborhoods. It's so important."

The sustainability movement at Penn Nursing began subtly—with energy-saver reminder stickers on lights and sorting primers near recycling bins championed by the school's three Eco-Reps, which included Gomez. When he came on board in 2010, he joined DiNapoli and Jim Dorn from the finance department as the School's delegates to the University-wide Penn Sustainability program, which focuses on greening offices and lab space.

"Environmental justice is all about looking at what's been put upon vulnerable populations."



"We leveraged every opportunity we could," Gomez says. "When Penn Sustainability or, at the time, the Green Campus Partnership, offered pilots or initiatives, we'd raise our hand. All of those initiatives became conversation starters to get buy-in. That's really where we started."

Fortunately, Fagin Hall had just undergone a multi-year phased renovation. That meant a chance to think strategically about the environmental implications of the space and construction materials, to push for energy-efficient lighting and recycled carpeting, for instance, or a living landscape in the fourth-floor courtyard (still there today). For the Eco-Reps, the renovation offered a jumping off point to turn the school's attention to the Green Office Program. "We wanted to create a culture of change around climate change," Gomez says.

The appointment of Villarruel as Dean in 2014 gave the effort momentum; she challenged the School to become Penn's first to achieve 100% Green Office certification, a goal it reached in 2017. A year later, she made the Green Team official—a standing committee of the School—with Gomez and DiNapoli at the helm.

Though the pandemic paused the efforts temporarily, the team is now full steam ahead again, regrouping and reenergizing to increase participant numbers on the committee itself, figuring out ways to communicate internally and share progress, and return to projects that had previously only partially materialized, like a full course on climate change and nursing and a sustainability-focused orientation program for incoming first years. They've also run two pilots in the simulation lab testing virtual and augmented reality as tools to not only teach students effectively but that could also limit waste in the process.

Kagan, in her role as Undergraduate Curriculum Committee Chair, is advancing how the School's curriculum addresses environmental justiceand creates synergy with School efforts. "Where roads are placed, poor housing, poor attention to K through 12 education, lack of information for children and families to have agency for themselves-these all factor in," DiNapoli says. "Student nurses are out in the environment in their clinical practice and their volunteerism, so everything and anything we can do to impact that knowledge base and that agency is crucial."

Several courses in the School of Nursing already touch on this explicitly, like one Kagan teaches called "Comparing Health Care Systems in an Intercultural Context." The class includes in-person clinical exchanges abroad at places like the University of Queensland in Australia. "When the pandemic broke, we had students there," she says. Uncertain whether travel the following year

would be feasible, Kagan and Peter Lewis, her counterpart at Queensland, started discussing ways to continue the exchange remotely.

With support from Penn Global and the help of Penn Nursing fourth-year doctoral student Nina Juntereal BSN RN and Advanced Senior Lecturer Maria White MSN RN CCRN, the team launched its inaugural virtual exchange in spring 2021 focused on the effects of the pandemic. "At the end of that first year, we reflected on how it went and how we should move forward," Kagan says. "I suggested we think about the climate crisis as a theme. We always thought this was going to be an exchange about global public health crises, and there is nothing bigger than the current climate crisis."

From then on, the subject and the remote nature of the exchange became permanent. Emma Pascale Blakey, a nurse and recent chief sustainability officer clinical fellow for England's National Health Service, joined as a content expert. Blakey, Juntereal, Kagan, and White now co-host the exchange and lead operations, including content delivery and course logistics for the dozens of people taking part in the exchange. "Human health is so intertwined with planetary health," Juntereal says. "It's a vital aspect to teach the next generation of nurses."

Seventeen partner institutions on five continents now participate, and once a week for 11 weeks students learn from leaders around the globe on topics like clinical operations in green hospitals, environmental activism, and more. "We spend time walking them through the foundational knowledge—this is what the climate crisis looks like in health carethen we take it topic by topic, from reproductive health to mental health," Kagan explains.

"As a profession, we've been trying to play catch-up for some time," she adds. "That's not a position that nurses or any other health professionals, for that matter, can maintain given what the science has shown us. Penn Nursing is part of a much larger movement saying we understand the interconnections between human health and environmental health."

A new community-based course from Jennifer Pinto-Martin PHD MPH, the Viola MacInnes/ Independence Professor of Nursing, and Monique Dowd MA RD LDN CDE CSG, a lecturer in the Department of Biobehavioral Health Sciences, speaks directly to that. Partnering with the Penn Food and Wellness Collaborative and using Penn Park Farm as a learning laboratory, Pinto-Martin and Dowd plan to focus the class on how climate change affects food insecurity, as well as physical and mental health.

In addition, two other courses in the Penn Nursing undergraduate curriculum-"Health, Sustainability, Built Environment Design," and "Environmental Health Issues and Global Implications," a separate global engagement

"Regardless of your race, background, or income, you should have the same environmental protections. But that's not always the case."

seminar that Jianghong Liu PHD RN FAAN taught in 2017 and 2018—put climate center stage. Liu, the Marjorie O. Rendell Endowed Professor in Healthy Transitions and faculty director of Penn Nursing's Global Health minor, brought students to China to study the global implications of environmental health, capping a course that integrated environmental justice throughout. For the past two decades, Liu has also studied environmental exposure on health outcomes there.

Liu has a background in maternal and child health, and she helped get off the ground two projects looking at lead exposure in early childhood, one in China in 2004 funded by the National Institute of Environmental Health Sciences and another in Philadelphia called the Health Brain Behavior Study in 2008. "I wanted to understand what happens to cognition and behavior when there's consistent exposure," she says. "What is the mechanism at play?"

In Jintan, a city in Jiangsu province on the eastern coast of China, industrial waste and air pollution put children in frequent contact with lead. There, Liu and colleagues recruited 1,600 preschool age children, participants they followed through late adolescence. In Philadelphia, the researchers, which included colleagues from Penn's Perelman School of Medicine and the School of Arts & Sciences, recruited 450 11- and 12-year-olds.

Parsing the data collected—which, over the years, has included EEGs and brain imaging, as well as variables around environment toxicology, neurocognition, nutrition, demographic risk, and more—Liu has learned a significant amount about how lead affects young bodies and minds. "We determined that lead exposure was related to a drop in IO and to behavior problems. We also reported that it affects sleep and nutrition," she says.

A recently published study, done with Pinto-Martin and others, focused on heart rate and more specifically, the link between lead and the body's physiological response to stress. They found that even limited contact with lead affected the heart's ability to regulate. "Lead exposure is a risk factor for

many different outcomes, but it doesn't have to be someone's destiny since there are many protective factors like good nutrition," Liu says. To that end, she and Pinto-Martin are part of Penn's Center of Excellence in Environmental Toxicology (CEET), the aim of which is to "identify environmental health questions of concern," then mobilize experts to answer them.

The same could be said of work from Karen Glanz PHD MPH, the George A. Weiss University Professor of Epidemiology and Nursing and founding director of the Center for Health Behavior Research. Glanz focuses her attention on the intersection of psychology, public health, and epidemiology.

For the past 30 years, she's worked on skin cancer prevention, and in 2021, was appointed to a National Academy of Sciences committee asked to assess the connection between sunscreen and impacts on aquatic environments, including damage to coral reefs. (The group found the current science inconclusive.) She's also collaborated with CEET colleagues to analyze the effect of air pollution in low-income areas. "For many of these issues, environmental health and environmental science go head-to-head with human health," Glanz says. "We need to find a balance between the two."

Striking that balance between caring for patients and caring for the planet can be a challenge in health care, something the pandemic made abundantly clear as disposable PPE and other single-use resources became the greatest protection against a new and unknown virus. COVID-19 is still around, and it likely won't be the last such disruption. "How can we move forward taking that into account, but also thinking about sustainability, environmental justice, and healthy living?" says Ph.D. student Juntereal.

It's a notion Kagan contemplates a lot. "For a long time, nursing writ large has imagined that health and well-being must come first, and we rarely made the connection between what we're doing in health care, what we're doing outside of health care—in our personal lives, communities, and the world—and how that all fits together," she says. "In a strange way, a lot of what we do to help people maintain and recover their health and well-being can paradoxically harm it and the environment."

This holds true for some communities more than others, another notion COVID-19 reinforced. "Regardless of your race, background, or income, you should have the same environmental protections, but that's not always the case," Liu says. Understanding and challenging those environmental inequities motivates Liu in her research, Kagan in her teaching, Gomez and DiNapoli in the work they do with the Sustainability Committee. And it's what undergirds Penn Nursing's momentum in this area.

"Nurses have always been social justice champions. They've always had an eye toward the environment. They live and work in these spaces and with populations in need," DiNapoli says. "The question now is, where do we take the conversation from here? How do we dig even deeper to continue to integrate community, diversity, and justice? How do we bring it all together as opposed to keeping them separate? Environmental justice is right in the middle of all of that." ...



partner

institutions

continents

participate in a virtual exchange program that launched in 2021

Discovery & Innovation

At Your Service

At Penn's new outpost of the Warrior Canine Connection, highly-trained service dogs are matched with U.S. Veterans, all thanks to alumna Paula Crawford-Gamble. By Christina Hernandez Sherwood

HEN PAULA Crawford-Gamble MSN CRNP GNU'85 at the National Intrepid Center of Excellence, a Bethesda, GNC'93, head of Penn Medicine's Veterans Care Excellence Program, is on campus, she's always accompanied by her service dog, Dollie, a twoyear-old black lab. Lately, Dollie has had more four-legged company at the University of Pennsylvania, where Crawford-Gamble has established a new outpost of the Warrior Canine Connection, a national program that trains service dogs and pairs them with veterans.

The program is close to Crawford-Gamble's heart—it's how she was matched with Dollie. "You don't know that you really need a dog," says Crawford-Gamble, who spent a quarter-century in the armed forces and now lives with a visual disability, "until you spend time with a dog."

Warrior Canine Connection provides two key services, Crawford-Gamble says. First, it enlists veteran volunteers to train service dogs using a "mission-based recovery model" that both prepares the dog for service and provides a sort of therapy for the veteran trainer.

(Studies by Warrior Canine Connection showed that levels of the feel-good hormone oxytocin in the brain increase with the development of human-animal bonds, including relationships with service dogs, explains Crawford-Gamble. Oxytocin is known to act as a buffer from the stress hormone cortisol and has been shown to help regulate the psychological symptoms of post-traumatic stress disorder.)

After training, the program matches these highly-skilled service dogs with veterans who need them. "The dog serves multiple purposes," says Crawford-Gamble.

Crawford-Gamble first encountered the Warrior Canine Connection when she was a nurse with the U.S. Navy serving

Maryland-based hospital specializing in traumatic brain injury care. "[Warrior Canine Connection] is a phenomenal group that has a major impact with the treatments of these warriors," she says.

Dollie helps Crawford-Gamble when her light sensitivity causes debilitating headaches. "[Dollie] was able to put pressure on my neck and my head, which really alleviated the pain," she says. "I can't believe they can train a dog to

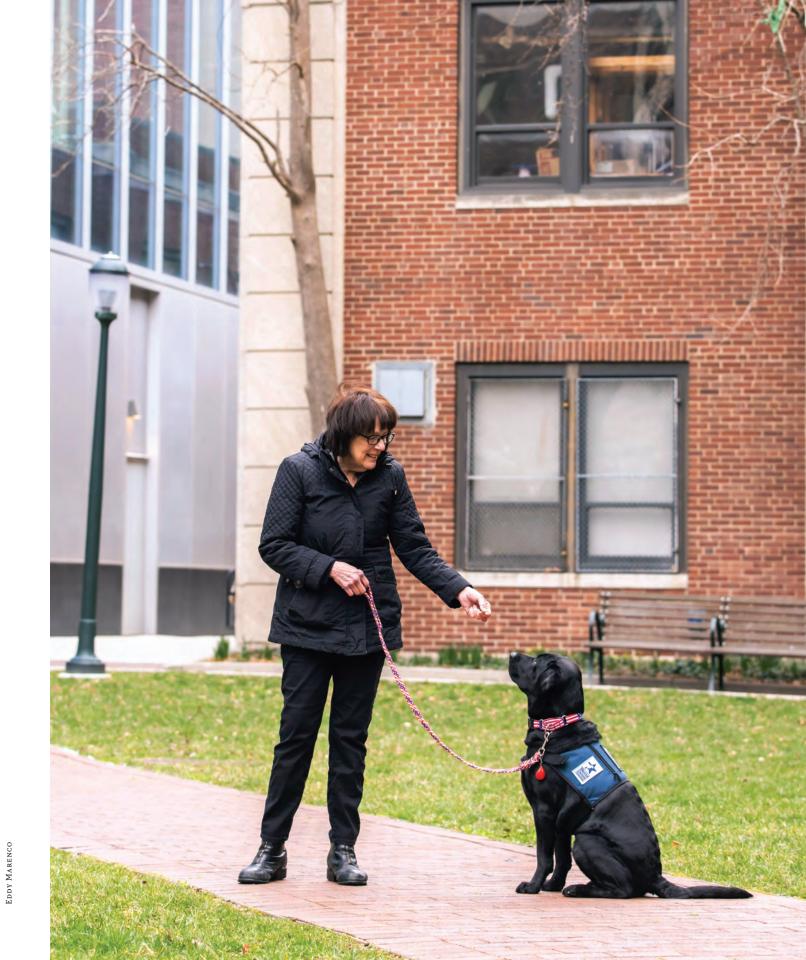
Last fall, Crawford-Gamble helped make Philadelphia the newest Warrior Canine Connection location, establishing a program office and full-time trainer at the University of Pennsylvania. The effort is a collaboration between the Schools of Nursing, Medicine, Dental Medicine, and Veterinary Medicine. "Without the support of the leadership we wouldn't be where we are today," Crawford-Gamble says. "Now is the time for this."

Already, six service dogs are training there—each named after a service member or veteran who made a significant contribution to the country. The dogs who don't complete training-Crawford-Gamble says about half don't go on to become service dogs—are usually placed with veteran families to provide psychological support.

The group is also training a future "facility dog," a service dog who would work at the Hospital of the University of

Pennsylvania, Crawford-Gamble says. They hope to eventually add facility dogs throughout the Penn system. "We're taking it slow," Crawford-Gamble says, "because we want to do it right." ..

Paula Crawford-Gamble with service dog, Dollie.



Amplify Nursing: Pavilion Edition

Interdisciplinary collaboration improves emergency department workflow.

HROUGH AN INNOVATIVE collaboration that brought Penn Nursing together with the University of Pennsylvania's Stuart Weitzman School of Design and Penn Medicine, nursing and design students parachuted into the Pavilion Emergency Department to find ways to make the space work better for providers. The project's leaders spoke with Marion Leary RN MSN, Director of Innovation at Penn Nursing, on the Amplify Nursing podcast.

The effort was initiated by Neil Ray MD, clinical assistant professor of emergency medicine at the Perelman School of Medicine. "We had this new emergency department, but it wasn't quite designed with health care providers in mind," he said. "We were fitting a space that was already made for us."

Ray approached Mikael Avery, a lecturer at the design school with a background in health care architecture, who volunteered his students for the "unique opportunity to work in the new Pavilion." Mikael reached out to Marion Leary, who runs the Penn Nurisng Innovation in Health: Foundations of Design Thinking course to partner nursing students with the design students. The team also looped in Jacquelyn Taylor, a PhD student and MSN-prepared nurse who worked in the Pavilion.

"The idea of collaborating with multidisciplinary professors and bridging the gap between Penn Medicine and the University of Pennsylvania was exciting," Taylor said. "It was a great opportunity to do a research project that could directly benefit everybody."

Their conversation has been edited for length and clarity.

Marion Leary: Talk us through what the project looked like.

Mikael Avery: It began with Neil [Ray] preparing a thorough briefing document. One of the best things for design students when they're working in a health care space is the language learning that happens and knowing enough to have knowledgeable conversations with clinical staff. They completed many observations in the emergency department, followed by hands-on working sessions with clinical staff. This turned the tide on the way [the students] were viewed. They were no longer outsiders imposing the potential ideas, but partners creating ideas together. [The students] developed a series of ideas and then pitched them to the administrators of the emergency department. They ran some trials to implement some of these ideas. They've now handed them off to individuals in the emergency department to [fully] implement.

From beginning to end, it was collaborative. One of the design students [mentioned] the amazing benefit of having content experts on the team—not as consultants, but as actual members of the team. It shortens timelines. It gets better outcomes.

Leary: Neil [Ray], you have a background in humancentered design and design thinking. What about these methodologies fits in with health care in general, and as the framework of this project?

Neil Ray: Medicine itself is a very traditional and, in some ways, conservative field that's hard to budge. Fundamentally, human design is a field that's trying to shake things up. Inherently, those two disciplines don't mesh well together. But that's how remarkable it is when you can take something that's very stoic and resistant to change and then implement some fresh ideas that stir some conversations and make some changes.

Leary: Can you talk about the steps in the design thinking process, and how that forms the basis for the structure of this project?

Ray: The design thinking process is extensive, but it starts with observation and getting a sense of the unmet needs. That's important, because sometimes people working in a certain environment might not know what their problems are. Some frustrations are actually opportunities for innovation. Part of these observations [was] discovering the problems and figuring out where we can move the needle.

[The students] spent several hours shadowing us. They came across something subtle, which was improving our closet spaces. There are closets around the ER that all have different supplies. There's no consistency, and often we spend time going from one closet to another looking for supplies. It's a lot of wasted movement. The students will

try to standardize our closets. They came up with a solution that would increase the signage and make it easier for us to track items and reduce the items we don't use. They did a phenomenal job during their final presentation. They showed that their changes could have huge cost savings and time savings.

One of their designs was icons to demonstrate, for instance, where cardiac supplies are versus pulmonary supplies. They're trying to make drawer labels bigger so it's easier for us to see them. They also want to standardize labeling across the different closets.

Leary: It seems like a simple idea, but it has a big impact on the work the providers are doing in the ED.

Ray: It's one of those things that can be overlooked. It's a project in which a design student team can make a huge impact.

Leary: Jackie [Taylor], talk about the conflicts that could come up in these types of projects. We had four students interviewing and observing clinicians in the ED. What was the reception to this project?

Jacquelyn Taylor: The ED went through a massive change in October making the transition to the Pavilion. Everything was different, even though it was done flawlessly. In February, we had [this] project kick off.

Health care is constantly evolving. We're adaptable to that. But there was some frustration that we already changed, and now other people were coming in to implement further change. There was hesitancy from some nurses because the [students] had never worked in an ED.



Collaboration in action.

But it was amazing to see the transition from nurses saying, 'We don't want this,' to 'Wow, they're bringing up some great ideas.' It was a nice turnaround. The staff became familiar with the students, and this paved the way for future collaboration.

Leary: Co-collaboration is an important part of humancentered design and design thinking. Can one of you speak to the co-collaboration during this project?

Ray: Jackie [Taylor] was both an ED nurse working clinically and one of the leaders in this project. She helped bridge the gap. Initially there was a bit of weariness when we were first doing observation shifts. But at the design sessions everyone came together at the same table with ideas. The nursing staff and clinicians saw that [the students] were genuinely interested in working with us to come up with the design.

There are a lot of reasons to say 'no' to something. That's not necessarily the point of these sessions. The point is to go crazy, to think about what's out there, and then draw lessons from it. In medicine, there's so much bureaucracy and regulation that we're quick to dismiss an idea rather than taking something valuable from it.

Leary: Mike [Avery], from your design background and point

of view, why is it so important to have co-collaboration sessions?

Avery: It's in literature that this collaborative model—where those who will be experiencing the changes that are proposed are actually part of the conversation—is essential. At the end of the day, the designer will move onto the next project. But those individuals who are going to be living with it long term need to take ownership of it. If there is ownership, then it can evolve after the [designers] are gone. Whether it's an ED or a neighborhood or a building, it will change over time. If the people interacting with it are empowered to understand the process, then the design process continues. It doesn't die with a five-page write-up or a PowerPoint. It's a living, breathing thing that changes as needs change on the ground.

Leary: That's a great point. If we're not including the people living with these new designs, they're not going to continue into the future. Speaking of continuing, I know the students created a low fidelity prototype they could quickly implement into the ED. What's the status of the project now?

Taylor: [We hope] the project will be implemented soon. But just that bit of prototype implementation primarily in the resuscitation bay has been greatly beneficial. It has cut down time [gathering supplies] drastically, especially in critical scenarios.

Leary: The students are excited that the work they did is going to continue and be implemented and tested in the ED. I hope that we can continue working on projects like this into the future. Thank you all for being willing to do this type of innovative project in the ED Pavilion.

22 PENN NURSING — SPRING 2023

Discovery and Innovation



The Accidental **CEO**

How one Penn Nursing alumna is centering health care around NPs, leading to happier providers and healthier patients. By Christina Hernandez Sherwood

arly on in the COVID-19 pandemic, around the birth of her third child, Sylvia Hastanan ■ Nu'04, stepped back to reflect on her career. Educated as a nurse, Hastanan had spent years as a strategist, helping physician groups, health plans, and hospitals improve health care delivery on a system level.

"In my seat within these medical groups, I noticed that nurse practitioners were underutilized and overlooked," Hastanan said. "There was an opportunity to wrap our arms around nurse practitioners and enable them to work at top of license."

Her realization gave way to Greater Good Health, now a two-year-old, Los Angeles-based health care company that works to give nurse practitioners a front

seat in the delivery of care. With the nation facing a shortage of primary care physicians, and the health care system moving toward a value-based care model, Hastanan said nurse practitioners are well positioned to take a greater role.

Greater Good Health partners with risk-bearing entities, such as insurance plans or other groups with financial responsibility for patients, then builds programs that supplement traditional physician care. The company employs more than two dozen nurse practitioners who facilitate these "embedded services," such as in-home and telehealth primary care.

Its next effort—a collaboration with a major national insurance payer-involves building nurse practitioner-led practices in underserved areas. In these markets, where there is a large population but a too-small primary care

"We want to be an employer of choice for nurse practitioners. If we can create a work environment where providers are happy, that in turn yields healthier patients."

presence, the wait time for a doctor appointment can reach six months or more.

"This insurance payer sees that there's a shortage," Hastanan said. "They want to provide good access and patient experience-that's their livelihood-and they need to partner with providers that can do that."

Because 26 states now allow nurse practitioners to operate more independently, Hastanan said nurse practitioners will be the primary providers in these practices—taking full accountability for their patients. The first four practices are expected to open in Montana

At a time when patient-centered care is a major trend in health care, Greater Good Health is flipping the script to center around nurse practitioners. "We want to be an employer of choice for nurse practitioners," Hastanan said, adding that the crushing burnout during the COVID-19 pandemic highlighted the importance of a healthy workforce. "If we can create a work environment where providers are happy, that in turn yields healthier patients."

Hastanan, who calls herself an "accidental CEO," credited her education at the University of Pennsylvania with her innovative approach to her nursing career. She supplemented her Penn Nursing classes with business courses, and noticed the striking juxtaposition between the sophisticated financial world and the antiquated health care system.

"I probably wouldn't have been exposed to all that if I didn't go to Penn," Hastanan said. "I love all the cross-pollinating programs [Penn has] because it yields more well-rounded and better understood leaders." ...







"My time at Penn Nursing has given me knowledge, opportunity, and a voice I could have never imagined possible."

Brianna Garcia, MSN, AGNP-C Adult-Gerontology Primary Care NP

Master Your Profession

Highly-ranked MSN programs with a wide range of specialty areas.

Nurse Practitioner Programs

- Adult-Gerontology Acute Care
- Adult-Gerontology Primary Care*
- Family*
- Neonatal
- Pediatric Acute Care
- Pediatric Primary Care*
- Psychiatric-Mental Health*
- Women's Health / Gender-Related*

Advanced Practice Specialist Program

• Nurse-Midwifery*

Administration Programs (Non-Clinical)

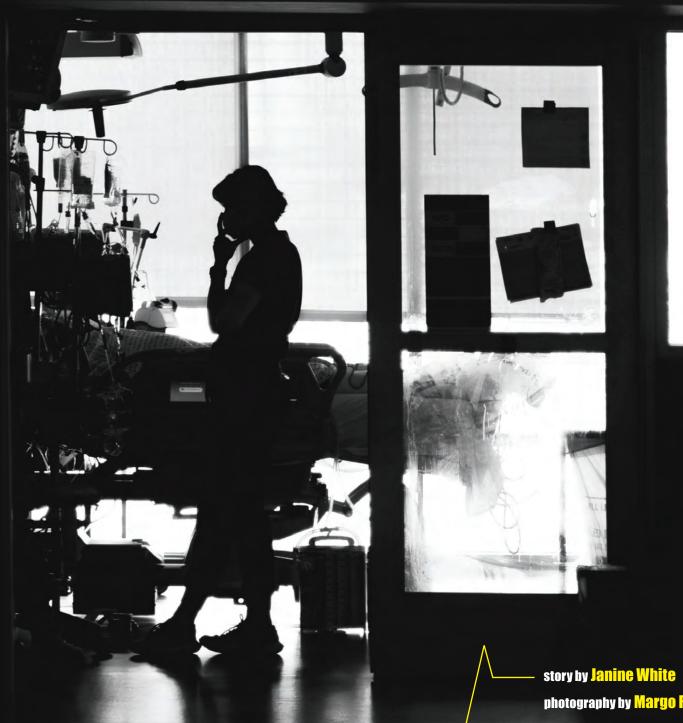
- Health Leadership
- Nursing and Healthcare Administration



Visit us at **nursing.upenn.edu/get-your-msn/** APRN Certificate Programs also available. Scan the code to learn more.

*Eligible for the Leonard A. Lauder **Community Care Nurse Practitioner** Program Fellowship

Critical care unit patients teetering on the edge of life and death need the best on their side. The urgency of these highstakes environments requires nurses who have been prepared to be highly responsive critical-thinkers, with tremendous attention to detail and aptitude for an ever-evolving discipline. Read on to learn why Penn Nursing-educated nurses have the advantage and how Penn Nursing has shaped, and continues to lead, the profession.



photography by Margo Reed





Sometimes we have hours of advance notice. Sometimes moments."

March 9, 2023

The photographs accompanying this story document a day in the life of a critical care team at the Penn Presbyterian Medical Center.

THAT'S THE WAY Ellen Dreibelbis AGACNP-BC NU'11 GNU'20 describes how long a Penn Medicine surgical and trauma critical care team has to prepare for a patient in the intensive care unit (ICU). Someone with a traumatic brain injury from a car accident. A woman who just had a liver transplant. A man with a gunshot wound.

The critically ill patient might come from the emergency department or arrive from surgery. They may be transferred from another facility that didn't have the resources to treat them. Dreibelbis's team acts fast to manage airways and blood pressure. They collaborate with specialty services and arrange for surgeries, if necessary. Post-surgery, they closely monitor for signs of complications.

The team Dreibelbis works on covers three hospitals in Philadelphia: the Hospital of the University of Pennsylvania (HUP), Penn Presbyterian Medical Center, and Pennsylvania Hospital. Penn Medicine's ICUs are organized into specialties, including medical, surgical, neuro, and heart and vascular. In these units, bedside nurses focus intently on one to two patients, while nurse practitioners like Dreibelbis work with each of them, overseeing care.

Though critical care nurses can be found working throughout the U.S. healthcare system, most are drawn to ICUs where they care for the sickest of the sick patients, who need constant monitoring, continual interventions, and the support of cutting-edge technology.

"You're checking vital signs every 15 minutes, or every hour at a minimum, because things can change so drastically," says James Ballinghoff DNP MBA RN NEA-BC GRN'17, University of Pennsylvania Health System Chief Nurse Executive. "It can be a matter of life and death at any moment. [Nurses]

get to work with the technological bells and whistles that give you data to analyze and intervene, but you have to be able to pivot very quickly with the information that you're given."

The cases are complex. Often, multiple body systems are affected. Mechanical ventilators help people breathe. Sophisticated heart-lung machines allow blood to be oxygenated outside the body, so a patient's organs can rest. Critical care nurse practitioners use tools such as ultrasounds and echocardiograms at the bedside to assess, prescribe medications, and advance care plans day-by-day. "It's like a puzzle, where you're trying to put all the different data together to figure out and diagnose what's going on with the patient," Dreibelbis says.

With patients intubated or sedated, Dreibelbis's team communicates with their families about their status. She believes it's important to get a sense of the person underneath the machinery. Recently, she learned a patient, an older gentleman, loved to ride his motorcycle.

"So to have that frame of mind—this was someone that last week was riding their motorcycle and now they're very severely sick—that gives us a goal. How can we get them back to that?" she says.

ICU patients who recover may not even remember their first hours or days in the ICU. But, she says, "it's very rewarding to play a role in taking care of patients who are so critically ill. Especially with trauma patients. Within a matter of seconds, the trajectory of their lives has been completely altered. It's always amazing when you see them get better," she says.

Preparing Nurses for Critical Care

There's no such thing as "too soon" when it comes to pursuing a critical care nursing career, says Amanda Bettencourt PHD APRN CCRN-K ACCNS-P GRN'19. As an Assistant Professor, she dispels myths students may have about whether they can go into critical care roles right after graduating.

"I always share with them that I did that. Penn is preparing exceptional nurses, and I think each one of them is a leader in their own right," says Bettencourt, who is currently serving as president of the American Association of Critical-Care Nurses (AACN) board of directors. "I always encourage students to let go of this idea that they have to do other things before they could do critical care. If that's what they're passionate about, that's what they love, then go for it."

There's certainly a need.

"We have a growing number of ICU beds in the country and patients with ICU needs filling those

beds," says Jessica Strohm Farber DNP CRNP CPNP-AC PPCNP-BC CCRN CFRN CMTE NU'94 GNU'99. Strohm Farber is a nurse practitioner at Children's Hospital of Philadelphia (CHOP) and Program Director of Penn's Pediatric Acute Care Nurse Practitioner Program. "We need to make sure we're continuing to prepare enough providers to take care of those patients, both as bedside nurses as well as advanced practice nurses."

@ **#**

Penn Nursing's baccalaureate programs allow students to gain experience by requesting a clinical rotation in adult or pediatric ICUs. And most hospitals have residency programs in critical care for new-to-practice nurses. For example, Penn Medicine's Gateway to Critical Care Program offers classroom instruction, workshops, and clinical experience over 16 to 20 weeks.

"All critical care nurses receive extensive training in their specialty area to ensure they have the knowledge, skills, and attitude to effectively care for this very complex and challenging patient population," Ballinghoff says of Penn Medicine's approach.

For nurses who want to pursue a higher degree and advance their practice, Penn Nursing has three paths: the

Adult Gerontology Acute Care Nurse Practitioner program (AGACNP), the Streamlined Adult Gerontology Acute Care NP Post-Graduate program, and the Pediatric Acute Care Nurse Practitioner program.

AGACNP and the pediatric program take a little over one year to complete at a full-time pace, but both also offer part-time flexibility. There's didactic and clinical curriculum, with in-person classes taught by accomplished faculty and lecturers who are leading practitioners, educators, and researchers in their field, skills labs with expert specialists, and high-fidelity simulations that are held at the Helene Fuld Pavilion for Innovative Learning and Simulation.

Pediatric students can choose from one of three concentrations: oncology, critical care, and acute chronic.

"A lot of times our students come to school looking to specialize. There's no 'introduction to critical care.' They are high-achieving nurses at the bedside who want to take this next step," explains Kerry

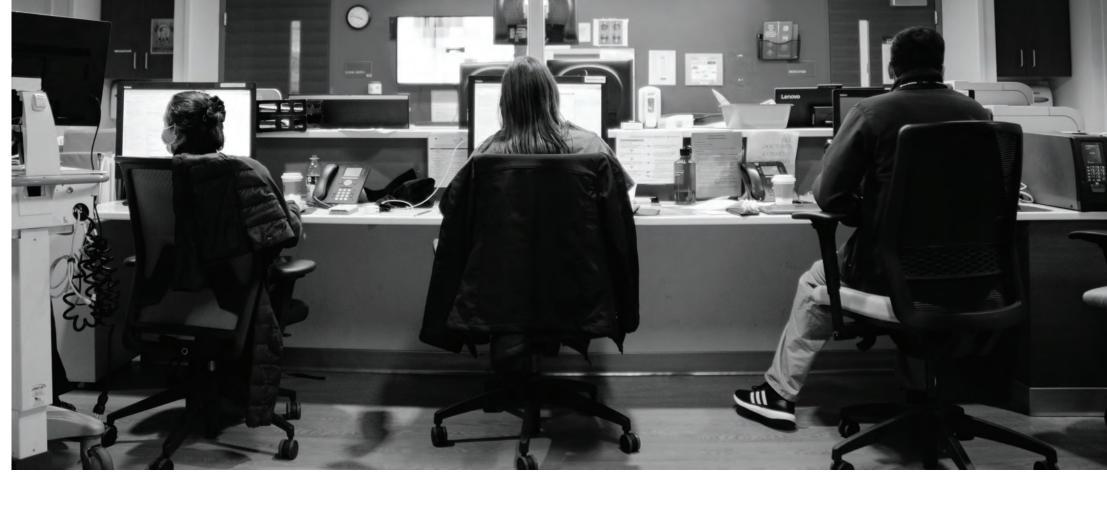
I always
encourage
students to let
go of this idea
that they have
to do other
things before
they could
do critical
care. If that's
what they're
passionate
about, that's
what they love,
then go for it."

Shields MSN CRNP GNU'03. Shields is the Associate Program Director of the critical care concentration, and a nurse practitioner at CHOP. "They're sitting in the classroom after practicing, and light bulbs go off because they think 'I've seen that. Now I know why that happens."

Students can also shape their own education. When Janakiram "Jani" Rameswaran MSN MPH CPNP-AC CCRN CPEN PHRN MPH'21 GNU'22 wanted to combine his passions, he spoke with Strohm and Shields and ended up combining a master's in nursing and master's of public health.

"I really wanted to bring together pediatric critical care and community health," Rameswaran says. "The combination hadn't been done before. But they were very enthusiastic about helping me make this a dual degree program of my own. I was able to bring my clinical experiences into the public health classroom and my MPH program really helped me approach the NP coursework with a public health lens."

To prepare nurses for adult patients, the School once had separate programs for acute care and



30 PENN NURSING — SPRING 2023

critical care, but they blended those in 2000. In today's health care environment, says Practice Assistant Professor Patricia Pawlow PHD ACNP BC GNU'94 GRN'20, "it's hard to separate out acutely ill and critically ill. Even though some of our graduates may work in an ICU, some may work on floors, or even with outpatients. But they're taking care of patients who could decompensate, who could get critically ill, quickly. And so they have to be prepared to take care of all of those patients," explains Pawlow, who will become the program director in July.

The school works closely with students in the AGACNP and pediatric programs, to arrange clinical placements with preceptors around the country.

"We don't have a prescribed way of moving through clinical, so no two students have the same clinical sequence of rotations," says Patricia Griffith MSN CRNP ACNP-BC GNU'94, who manages placements for the adult program. (Griffith will become associate director for the AGACNP program in July.) "There's so much to experience out there, and we let students give us some direction about how they want to progress, and we guide them. It's personalized. We also find preceptors for students, which is helpful to them to know that we're going to take care of that."

Students in both programs also sharpen their research skills through projects that prompt them to examine clinical questions and consider how research is translated into practice. "We give our students the advantage of seeing the power of nurse-led research on patient outcomes," says Professor Martha A. Q. Curley PHD RN FAAN, who engages with students at all levels on pediatric critical care research.

Jarae Payne MSN CRNP GNU'20 was at the bedside in CHOP's cardiac intensive care unit for five years before she was drawn to enroll in the pediatric program part-time. She says she never thought she'd pursue publishing, but that quickly changed. In 2022, her examination of at-home administration of milrinone for cardiac support was published in *Pediatric Nursing*. Today, she's a nurse practitioner in the same unit, and she's working with a physician-mentor to look at rates of necrotizing enterocolitis in single ventricle neonates.

"The program made sure research was an integral part, and developing that skill for us was very helpful and very empowering. It made me realize I can do it. I have the tools," Payne says. Exploring nurses' clinical questions, she adds, "can help make patients safer."

One course is particularly popular with both the AGACNP and the pediatric nurse practitioner students—and it happens to be one they take together. Advanced Technologies & Clinical Decisions in Acute Care covers all the technologies that patients may require while they're in an ICU, and their risks and benefits. (cont. on p. 36)



Amanda Bettencourt

PHD APRN CCRN-K ACCNS-P GRN'19



Before Amanda Bettencourt first set foot in a pediatric burn hospital, she expected she would find sadness there. She found the opposite.

"It was the happiest place I've ever worked. It was a place where nurses made our optimal contribution on patient outcomes. I saw resilient, happy children thriving after burn injury," says Bettencourt PHD APRN CCRN-K ACCNS-P GRN'19 of her time at Shriners Children's Boston.

An exercise physiologist before becoming a nurse, Bettencourt headed directly into a pediatric ICU after graduation. "I was really inspired by this idea that being able to he p a child and their family recover from one of the most stressful things imaginable would make such an impact on the future of society," she says. "Those kids are going to grow up, they're going to be something someday."

The positive experience at Shriners inspired her to investigate the "secret sauce" of healthy workplaces while pursuing her PhD at Penn, encouraged by Linda Aiken. "My dissertation was me chasing down what was the magic in that place. We know from Dr. Aiken's work that any patient anywhere has a worse outcome, a higher risk of mortality, when there aren't enough nurses, when staffing is inadequate, or the work environment is not healthy," she says. Eventually, her research showed that

this effect is magnified for burn patient mortality. "I wasn't surprised by those findings, but it was really nice to use science to demonstrate something that I had seen in my practice."

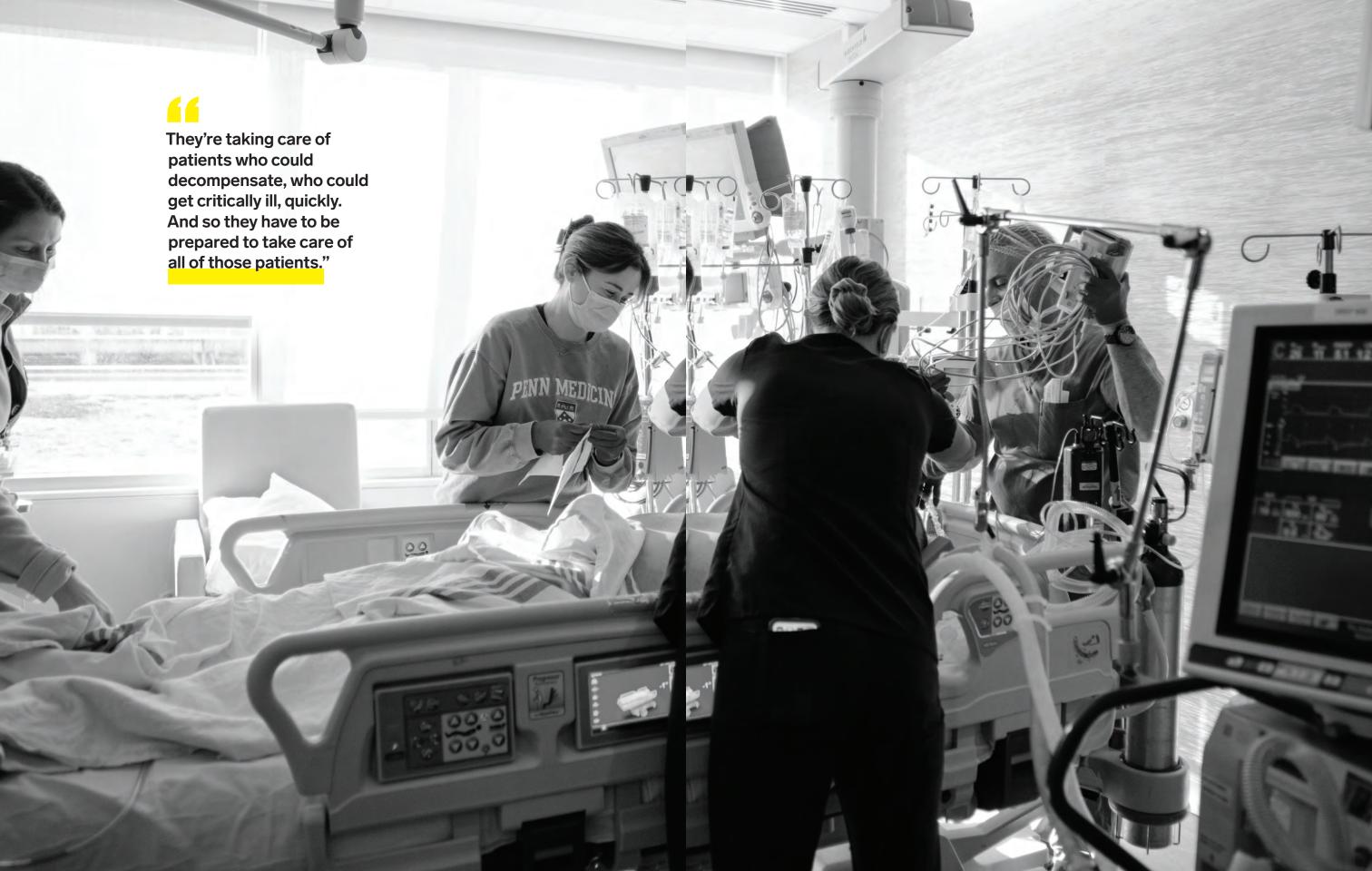
As current president of the American Association of Critical Care Nurses (AACN) board of directors, Bettencourt has a national platform to advocate for workplaces where nurses can "thrive and make their best contribution." The AACN has healthy work environment standards.

"There is a gap between what we know needs to happen, and how to do it. So these days I focus on implementation science," she says. As an Assistant Professor teaching undergraduate nurses at Penn, she adds, "I teach them about what to expect from the environments they're going into, no matter where they practice."

She hopes that AACN will continue to be a place where members can turn for the latest evidence-based knowledge, and to find community. "Especially after everything nurses have been through during the pandemic," she says. "Nurses need healing right now, a place to get inspired to learn, to grow, to connect, and to find leadership opportunities."

Her high standards were shaped in part by the Penn faculty and alumni whose footsteps she follows.

"I'm thinking of people like Drs. Martha Curley, Terry Richmond, Kathleen McCauley (a past AACN president), and Penn Alumna Kathryn Roberts (another past president of AACN). There are so many Penn faculty and alumni that have been impactful AACN volunteers and leaders," Bettencourt says. "Each of them modeled for me what it means to be a leader, change agent, excellent clinician, and impactful researcher. I stand on each of their shoulders."



"It's a really nice opportunity for the adult and the pediatric students to learn from one another, and really learn about differences in practices even within critical care. We use many of the same technologies, but differently with different ages," Shields explains.

That experience is particularly relevant in today's critical care environment.

"In the beginning of the pandemic there were adults being taken care of in pediatric ICUs, and a lot of pediatric critical care nurses were moved to adult units, or their units became adult units," Shields notes. "Then with the respiratory viral surge we've seen this past fall, a lot of children were being cared for in adult emergency departments and adult units because there weren't available beds in some areas of the country in children's hospitals."

Graduates who go on to work in the Penn Medicine system have plenty of chances to continue their learning with post-graduate fellowships. There's the year-long Penn Medicine Advanced Practice Provider Critical Care Fellowship that sees NPs and PAs rotate through every specialty ICU. CHOP offers a 16-week fellowship program for new graduate NPs and PAs, a mix of didactic classes and clinical experiences for the transition into the new provider role.

The Streamlined AGACNP Post-Graduate program is the newest of the offerings and was developed in response to the National Council of State Boards of Nursing sponsored 2008 Consensus Model for APRN Regulation, which called for nurse practitioners to align their scope of practice with the types of patients they are managing.

That meant many nurse practitioners with primary care training, even those with ICU experience, found themselves in need of further formal education and certification. While not every state mandates the Consensus Model guidelines, many hospital systems have embraced them.

"Penn Medicine hospitals jumped on it right away," says Professor Deborah Becker PHD ACNP BC CHSE FAAN GNU'91, AGACNP Program Director. "We worked together, with our UPHS partners, to come up with our Streamlined program."

The Streamlined program consists of asynchronous online courses and requires 250-500 clinical experience hours, depending on previous primary care training. Pawlow recalls when they launched, some students "weren't happy they were being required to go back to school." But she noted that as they worked through the content, there was a change. "They could see the benefit."

That resonates with Janelle Gibson DNP APN-C GNU'22. She applied for the Streamlined program to pursue a goal of working in the medical ICU at Newark Beth Israel Medical Center, which requires acute care certification. But she admits she was hesitant at first.

"

I look at things a lot differently than how I would have before. If you want to be a better clinician, then your knowledge base must be on point. It just helps your overall clinical judgment and expertise."

"I got my DNP in 2019, and in 2014, I graduated with my NP. So I felt like, oh my God, I have to go back to school again," Gibson says. However, it was soon clear that she was gaining important knowledge—from looking at a CT scan to manage a patient with a subdural hematoma, to deciding care for a decompensated liver cirrhosis patient.

"Even the stuff that I thought I knew. For example, I learned a different way to look at a blood gas. I never used a Winter's Formula to calculate anything," Gibson says. "Now I look at ABGs, I look at chemistries, I look at things a lot differently than how I would have before. If you want to be a better clinician, then your knowledge base must be on point. It just helps your overall clinical judgment and expertise."

Influencing a Field, Yesterday and Today

Penn Nursing has a long history of influencing the field of critical care. This legacy continues to the present day, with faculty and alumni leading cutting-edge research.

The AGACNP and pediatric acute care programs were among the first to develop critical and acute care nurse practitioners, in the 1990s. Rosalyn Watts EDD FAAN RN, Associate Professor Emerita of Nursing, led the shaping of the first iteration for adult gerontology, and Jane Barnsteiner PHD RN FAAN NU'70 GNU'73 created the pediatric program. Barnsteiner, a former Director of Nursing Practice and Research at CHOP and Director of Nursing for Translational Research for the University of Pennsylvania Health System, was recently named a Living Legend by the American Academy of Nursing.

(cont. on p. 39)







James Ballinghoff
DNP MBARN NEA-BC
GRN'17

What was your first nursing job?

I worked in critical care as a nursing assistant at Cooper University Hospital while I was going through nursing school. I was just so impressed with the nurses, and a lot of them took me under their wing. I was fortunate to be able to start my career in critical care.

What drew you to critical care?

I was always drawn to the technology and the critical thinking piece of it. It's fastpaced, and I'm a fast-paced type of guy.

What ways does nurse leadership impress you in Presbyterian ICUs?

I see examples of critical care nurses providing amazing care just about every day on every shift. It could be a nurse picking up on subtle changes in hemodynamics and intervening and potentially saving a life. We have extracorporeal membrane oxygenation, ECMO, basically bypass, so that the heart and lungs can rest. It's a lot of machinery and technology. The patients literally have tubes coming out that are in their heart, in their lungs, oxygenating their blood. And the nurses developed a program to get the patients up and moving, which strengthens their bodies and decreases length of stay at the hospital.

We've had otherwise healthy pregnant women whose bodies fail on them. It could be COVID or an immune response. They're near death—and we bring them back, and deliver their babies. Then there are kids with multiple gunshots who have basically lost all of their blood. Through critical care interventions and the care that they receive here, they end up walking out or at least getting to rehab. It's amazing.

What feedback do you get from patients?

It can be very, very difficult for families. For the most part, people are very grateful. But families can also be mistrusting. They Google "car crash" and see you should have this or that, and we're doing something a little bit different. Maybe the scenario's different, there could be underlying diseases.

So communication with families is important in ICUs?

When I was at the bedside, I would always go into the patient room and introduce myself and say, "This is what's going to happen for the next 12 hours while I'm here. These are the goals. You're going to hear alarms and dings and sounds from the machinery—and it may look like nobody is responding. But if there is an emergency, there will be five to 10 people in this room within seconds, I assure you."

James Ballinghoff **DNP MBA RN NEA-**BC GRN'17 is Chief **Nursing Officer and Associate Executive** Director at Penn **Presbyterian Medical** Center. In December, he took on an additional role, as University of Pennsylvania Health **System Chief Nurse Executive. He works** closely with the School of Nursing, maintaining the strong partnership between **Penn Medicine and** the school, where he serves as Assistant **Dean for Clinical** Practice. Ballinghoff's nursing career started in critical care, and in 2015, he was one of the leaders in moving level one trauma care from the Hospital of the University of Pennsylvania to Presbyterian. Dr. Ballinghoff was the first graduate of Penn Nursing's Post-Master's DNP program.



"Roz Watts, Anne Keene, and Jane Barnsteiner were thought leaders in saying we need to do this," says Therese Richmond PHD RN FAAN GRN'95, Associate Dean for Research & Innovation. "I had colleagues out in California calling me up saying, 'What are you doing? How?' It's a tribute to Penn Nursing."

Ultimately, the graduates of the programs needed to be board certified. And once again Penn Nursing, collaborating with a few other universities, Richmond says, "was right in the mix."

She represented the AACN Certification Corporation in helping to create the American Nurses Credentialing Center's first certification program.

The school's positive impact on the field of critical care is not lost on the students.

"I was fortunate enough to have Dr. Maureen Madden as my clinical preceptor at Robert Wood Johnson University Hospital. She is a pioneer in the pediatric nurse practitioner world. Her name is on our textbooks, so it was intimidating walking in on that first day," Rameswaran says. Madden DNP RN CPNP-AC CCRN FCCM GNU'94 co-authored Pediatric Acute Care: A Guide for Interprofessional Practice. "She took me under her wing, and she still continues to give me advice."

Also in pediatrics, Strohm Farber says, Sharon Irving PHD CRNP FCCM FAAN FASPEN GNU'93 GRN'11 has been "instrumental in writing some of the guidelines for nutrition in pediatric ICUs and moving that practice forward not only nationally, but internationally. One of the unique things about kids who are ill and healing—they're growing too."

Guidelines and systems are key. "Unless we have valid and reliable tools to better describe critically ill patients' phenomena or risk, nurses can't lead in intervening to decrease patients' risks or better describe patients' status," says Curley, who received the 2022 Asmund S. Laerdal Memorial Lecture Award from the Society of Critical Care Medicine.

Before Curley collaborated on the development of the State Behavioral Scale (SBS), there wasn't an instrument for nurses and others to use to describe a critically ill child's level of sedation. Similarly, she designed the Braden QD Scale so that nurses could identify a pediatric patient's risk for pressure injuries related to immobility or the use of medical devices—and then implement interventions to prevent such injuries.

Curley's longtime interest in how nurses use sedation to manage critically ill children was behind her leading of the RESTORE trial. When she L—R:
Deborah Becker
GNu'91 GNC'98;
Patricia Pawlow
GNu'94 GNu'15
GR'20; David
(Hyunmin) Yu
GNu'18; Jani
Rameswaran
GR'21 GNu'22;
Patricia Griffith
GNu'94 GNu'18;
Leonard Mancini
Nu'10 GNu'17

38 PENN NURSING — SPRING 2023 — PENN NURSING 39



first started practicing, Curley says, heavily instrumented patients in the ICU were "essentially rendered unconscious through sedation to keep them immobile. We learned that if you lighten all that sedation up and you help parents interact with the kids while they were critically ill, that you could get by with less sedation." Curley also evaluated how nurses can control the environment in a way that embeds a child's normal rhythms into the pediatric ICU. "We are getting ready to publish what worked and what didn't," she says. "And then we will be able to implement strategies to help make the ICU a little bit more tolerable to critically ill infants and children."

According to Becker, the AGACNP program regularly incorporates the work of faculty into lectures and coursework—including health policy research by Matthew D. McHugh Phd JD MPH RN CRNP FAAN GNU'98 GRN'04, and Mary D. Naylor's Phd RN FAAN GNU'73 GRN'82 transitional care model. She also cites the work of Amy M. Sawyer Phd RN GRN'07 on patient sleep in the ICU, and Professor Emerita Lois Evans's Phd FAAN RN influence on moving away from physically restraining critically ill patients. And, "hot off the presses," is how Becker characterizes the recent introduction of Patricia Griffith's de-biasing strategies for diagnosing patients.

Becker herself has played a role in helping to define critical care nursing on an international scale. She and Pawlow were part of a team that helped Linkoping University in Sweden develop an acute care program for nurse practitioners.

In the ICU

ICUs have been challenging places to work since the first units were established in the 1950s, and they have made headlines more recently for overflowing capacity during the pandemic and the fall RSV surge.

Further, nurses who've been in the field for decades say those "sickest of the sick" are sicker today than they were decades ago. Part of the reason is advancements in medicine and technology.

"Many of those patients in the past probably would've died. And now we're able to keep them alive," Ballinghoff says.

Becker hopes that the U.S. emphasis on primary care will make the patient population healthier, but she guesses that will take a few decades. Meanwhile, she says, "there has to be a recognition that we need more acute care nurses and acute care advanced practice providers."

Though the pandemic raised public awareness somewhat, Becker still worries that when people hear nursing shortage, they don't realize that "we're talking about acute and critical care prepared nurses. We're talking about the patients who actually need the most nurses."

She points out there are no scholarships for students preparing to be acute care nurse practitioners. "We need to find ways to provide more financial support for individuals who are interested in non-primary care education," she says. Meanwhile, she has the perfect recruiting pitch. "When I started nursing there were diseases and specialties and subspecialties. Now there are sub-sub-specialties. Not only cardiac care, but a particular arrhythmia. The specialties are getting more and more refined, and you can really find your niche. There are hundreds of opportunities."



There has to be a recognition that we need more acute care nurses and acute care advanced practice providers."

Recent graduates of the AGACNP and pediatric acute care programs acknowledge that burnout is also a concern for nurses. Patient mortality looms continuously, and advances in medicine have introduced an ethical dilemma. "It can be frustrating when we're making very aggressive efforts. If the patient is never going to get better, we're just prolonging the inevitable," says Dreibelbis. Though, she notes, "helping someone pass peacefully can be rewarding, too."

Absent systemic change, nurses carve out their own strategies for coping wherever possible, as they have done for generations.

At CHOP, Payne says she seeks out colleagues to "decompress." She also attends the hospital's summer "heart camp," where patients who have had heart or lung transplants gather. "It's really good to see kids out of the hospital and thriving because I see them when they're the sickest they could ever be, and it weighs down on you in a unique way," she says. "The camp is always reinvigorating in terms of why I do what I do."

Faculty are also seeking out opportunities to influence the future of critical care nursing. Bettencourt says educating students to expect healthy workplaces is important. "On the first day of class I share work environment standards from AACN, and I talk about how they will be the standards for our classrooms. How we will respectfully communicate, and how we will collaborate," she says.

She is hopeful improvements will come. "Right now everybody's saying our health care system is on the verge of collapsing, nurses are leaving their positions. I see that, I validate it, and I don't like it at all. At the same time, I see an opportunity for these problems that have been long-standing in our profession to actually change," Bettencourt says. "This is the moment for us to capitalize on. Everyone's looking for solutions and we have evidence and we know what patients need. Now's the time to give change a chance."



The Life Cycle of Injury How Penn Ni the field of in improving heat Science How Penn Nursing is defining the field of injury science and improving health around the world.

by Miles Howard
illustrations by Keith Negley

SHOSHANA ARONOWITZ'S first nursing job brought her to a methadone clinic in Vermont, where she worked with people experiencing substance use disorders and, in some cases, people who had survived opioid overdoses. "This was before fentanyl had changed the drug supply and led to this massive spike in opioid overdoses," Aronowitz PHD MSHP FNP-BC recalls. She became increasingly interested in how clinician hesitancy to prescribe opioids in the context of the opioid overdose crisis might impact how they managed the pain experienced by patients with serious injuries, especially violent injuries such as gunshot wounds and stabbings. Before long, this led Aronowitz to Penn Nursing to pursue her PhD as a Robert Wood Johnson pre-doctoral fellow associated with the Penn Injury Science Center (PISC).

It was here, at one of the U.S. injury science research centers with funding from the Centers for Disease Control and Prevention, where Aronowitz found herself engaging with an intriguing question—what if the American opioid overdose crisis could be classified as an event of mass injury?

Injuries are often thought of as physical events arising from bad luck—an ankle fracture from slipping on ice, or whiplash suffered in a car accident. But at PISC, the definition of "injury" and our understanding of why injuries occur is expanding and acknowledging the context in which injuries happen. "Oftentimes, policies that come from the War On Drugs make it hard for us to offer evidence-based treatment to overdose survivors, or to pursue interventions that can prevent future overdoses," Aronowitz says, nodding to the historic criminalization of substances in the U.S. Underscoring contexts like this—the backdrop against which injuries can occur—reflects the way that health care providers and researchers are pinpointing the physical and social forces that shape health outcomes in the U.S. As racial and economic inequalities, and outdated public policies contribute to disparate standards of living, injuries are increasingly being recognized as structural problems, which must be addressed with structural thinking.

At the Penn Injury Science Center, this type of holistic "systems mindset" is the guiding light for nurse scientists whose research focuses on not just injury treatment and recovery, but also on prevention. It's a three-step framework stop injuries from occurring, fix injuries at the right time and place, and make it possible for those who've suffered injuries to heal and live on. And the best way to see this model in action is to meet Penn Nursing's injury science researchers.

What Makes An Injury?

To successfully prevent or treat an injury, it's necessary to agree on what an injury can be. But defining "injury" is more

than just expanding the list of physical and psychosocial events that can lead to pain and suffering for an individual person. The total impact of those events is also a crucial consideration for injury science researchers. Sara Jacoby PHD MPH MSN, an Assistant Professor of Nursing whose work focuses on structural inequities and health outcomes in urban areas, once worked as an ICU nurse in Philadelphia: an experience which illustrated how surviving an acute hospitalization is often just "the tip of an iceberg" for people who've suffered injuries. "The social, economic, and psychological ramifications of injury can alter the course of an entire life," Jacoby says. "There's still this tremendous invisibility of the actual consequences of an injuring event."

According to Jacoby, recognition of that invisibility in relation to the tremendous burden that injuries create for individuals and populations, is one of the things that helped spark the recent interest in growing injury science as a research field in the U.S.

"Historically, most of the national data on injuries culled through federal agencies like the CDC is based on the reporting of injury-related deaths," Jacoby explains. "We know a lot about people who die from injury, but many more people will survive their injuries and what's difficult is understanding the true burdens they face. Especially within privatized health systems where data that would give us a clearer picture isn't necessarily routinely shared or available for research." The job of researchers in injury science, at a foundational level, is to create that picture by engaging with people who've suffered injury—to understand the etiology of injurious events and identify interventions.

This holistic approach to better understanding the story of injury is exemplified in the preventative research of Catherine C. McDonald PHD RN FAAN, a pediatric nurse scientist appointed as one of PISC's co-directors in 2022. McDonald notes that injury is the leading cause of death among adolescents in the U.S.; one of the most deadly causes of preventable injury—motor vehicle crashes—is a pillar of her research. "We are seeing in transportation safety an attention to not only reduction of motor vehicle crashes, but also ways to promote safe, independent driving that helps address inequities," McDonald says. "Access to safe, independent transportation can help an adolescent access education, employment, and health care. Yes, we want to reduce motor vehicle crashes, but we don't

want to unnecessarily restrict driving to only those with resources."

Bearing in mind equity of access to driving support systems, McDonald is currently teaming up with colleagues from the University of Edinburgh, Universities of Alabama Birmingham and the Children's Hospital of Philadelphia, recruiting parent-teen pairs to test the effects of a comprehensive driver safety program-Drivingly-that was specifically developed for their research. "The Drivingly program involves two health coaching sessions for parents, access to online psychoeducational curriculum for parents and teens, an interventional on-road driving assessment and self-reflection session for teens, and a debrief for both the parents and teens after the on-road driving assessment," McDonald explains.

Toward the opposite end of the age spectrum, George Demiris PHD FACMI, a Penn Integrates Knowledge University Professor, has focused his research on the impact of injuries that older adults can suffer as they

"There are potential physical and emotional injuries that come from motor vehicle crashes among adolescents. An unexpected event ...exposes them to visual, auditory and sensory

traumas."



age. "Falls and fall-related injuries are common among older adults," Demiris says. "And as we think about injury from a fall, we've come to recognize that the consequences are not only measurable in terms of hospitalization costs and use of health care services. The psychological impact can often lead to frailty." Much of Demiris's work has involved using smart home technology to create fall risk predictions in spaces where elders must contend with housing that lacks supports like grab bars and railings. But physical hazards can extend well beyond the home. "It's often recommended that people with mobility limitations walk more outside their residence," Demiris says. "But their residence may not be in a walkable area, so engaging in physical activity outdoors may not be a safe strategy. Air quality, ice or excessive heat, traffic, and pollution are all factors that can affect an older adult's health, well-being, and their safety."

What Demiris and McDonald's respective research makes clear is that injuries don't just happen to people. They are often precipitated by forces and circumstances that are often beyond any one person's control. This means that injury science researchers have to move in two directions: venturing upstream and downstream to prevent injury from occurring, or to help patients begin the long process of recovering from injuries that have happened and the related traumas that linger.

Environmental Roots

"People tend to think about injury differently," says Therese S. Richmond PHD RN FAAN, the Andrea B. Laporte Professor of Nursing. "You can look at it as an acute physical moment where energy damages the body, but injury is so much more. It is the result of a web of social, economic, and environmental factors experienced by an individual that increase the chance that an injury will occur." Richmond has spent more than 30 years studying the impact of injuries on people from marginalized communities and identifying the environmental forces-physical and social-that can lead to suboptimal recovery and lay the groundwork for subsequent injury. "We are now examining upstream factors such as adverse childhood experiences (ACEs) which tend to be hidden within the home and unknown, and neighborhood factors related to injury risk and recovery," Richmond says.

In the U.S., some people are more affected by ACEs (adverse childhood experiences) than others. This includes Latina immigrant women. Carmen Alvarez PHD CRNP CNM FAAN, an Associate Professor of Nursing, witnessed the physiological effects of ACEs when working in community clinics and providing care for patients with chronic diseases such as diabetes and hypertension. "The people that I have been caring for are often very low income with low educational attainment, and with that comes managing crisis after crisis, day after day," Alvarez says. "And so, I noticed that people who had a history of trauma in their lives whether it was experiencing abuse in childhood or in a domestic partnership—really struggled a lot more with dealing with crises and managing their chronic diseases with steps like remembering to eat well or getting physical activity." Alvarez's clinical experience inspired her to study the impact of both ACEs and intimate partner violence on mental and physical health. To her surprise, suffering an ACE appeared to foreshadow more challenges with stress management in adult life. With this finding, interventions came into focus.

"In one research project, I adapted a program for Latina immigrant women with a history of early-life adversity and depression symptoms, that focuses on self-management of depression symptoms. In this program we tell women about how their early life adversities could be contributing to their health experiences as adults," Alvarez says. "Quite often, these women were pretty mortified that they might be practicing the same behaviors with their children. Most parents want better for their children and are not intentionally trying to do harm. Raising these moms' awareness and providing them with strategies that they can use to manage their symptoms and their behavior can be really helpful."

Alvarez's work with Latina women exemplifies how recognizing warning signs of injury upstream can double as a preventative measure and a means of treatment for the injured. It also reflects the medical sector's increasing awareness of social determinants of health—the non-medical factors that can raise or lower the risk of injury for specific populations. These factors are at the heart of Richmond and Jacoby's joint research on links between injury recovery, adverse childhood experiences, and neighborhood-level exposures in cities

Q&A:

Helena Addison

Penn Presidential PhD Fellow 2021-2023 Jonas Scholar ANA/SAMHSA MFP Fellow

How do you feel that our definition of "injury" is changing, and how do you see this reflected in your work/field?

I believe the definition of injury is becoming much broader to include the myriad harms that people can experience over a lifetime and the vast causes and effects of those harms. With my research area, in particular, I appreciate the growing recognition that social-structural determinants are relevant to every aspect of injury prevention and recovery, as well as the growing emphasis on mental health. As I continue to research the role of incarceration on health outcomes, including mental health, substance use, and healthcare access—I do not feel out of place sharing my work with injury scientists and clinicians that focus on outcomes that are more readily associated with the term injury, like falls, car accidents, or traumatic brain injuries.

Thinking about your injury science work with formerly incarcerated Black men reentering communities, have you been able to play any role in advising policymakers who could potentially address health outcome disparities? Either way, is this something you'd like to do in the future?

Although I have not had any significant role in advising policymakers yet, the potential for research to impact policy was always one of my primary motivators for pursuing a PhD. In my work with formerly incarcerated Black men, I've gained quite a bit of exposure to how policies at the local, state, and federal level can directly impact health outcomes of this community—whether it is the



city of Philadelphia's diversion and reentry programs or the Medicaid Reentry Act at the federal level—such policies can have a significant impact on the resources that are available to formerly incarcerated people to address their health needs.

Can you recall any recent experience or exchange within your research that offered a sense of hope for how injury science can improve health outcomes in the environments and populations that you study?

I'm not sure I can name a specific experience or exchange. In the past few months, I have been working with a formerly incarcerated person for recruitment and data collection for my dissertation study and I have interviewed over 20 formerly incarcerated Black men; this experience has been invaluable. Community engagement has always been important for me, even working as a research assistant as an undergraduate student. It gives me hope to see how community engagement is continually embedded in the work of injury scientists, especially as we focus more on social justice and health equity.

like Philadelphia. Jacoby points to discriminatory policing as one example of a force that can render a neighborhood more injurious to residents, par-

ticularly in the context of structural racism. "My interest is to move away from the idea that a person embodies injury risks based on behavioral choices, and to show how they embody the social and environmental context in which they live and spend time," Jacoby says.

When it comes to injury science and the preventative side of the equation, an "environment" can be as vast as a major city or as localized as the interior of a single family household. In a house where there are firearms, prevention may mean ensuring that those guns are stored safely. This is an area of interest for Katelin Hoskins PHD MBE CRNP, an Assistant Professor of Nursing. "Many people own firearms for personal protection, and the presence of firearms may confer a feeling of safety for some," Hoskins says. "But here's the paradox: research shows that access to firearms in the home is linked with increased risk for suicide, unintentional injury, and homicide." With firearm purchases surging since the onset of the pandemic, Hoskins has been hard at work with colleagues studying effective and equitable ways to implement safe firearm storage programs in pediatric settings. Going forward, she aims to make it easier

for clinicians and organizations to expand such interventions to families, "especially for those who have been historically underrepresented in suicide prevention research," Hoskins adds.

Living On

Even with the most sound injury mitigation practices in place, recuperation poses its own challenges and opportunities. In theory, treating an injury during its acute phase and helping a patient make a full recovery are two tasks that should go handin-hand. But often, the length of a recuperation process and the needs of a recovering patient are underappreciated. Shoshana Aronowitz sees this reflected in the hurdles that often stand between patients with substance abuse disorders and the proven medications like methadone which can help them recover from an opioid overdose. "There's no real comparison between treatment that involves

medication and treatment that doesn't," Aronowitz says. "And sadly, not everyone is offered medications."

Lingering symptoms in people who've been injured can

some survivors may experience both "My interest is to move away from the idea that a person embodies injury risks based on behavioral choices. and to show how they embody the social and environmental context in which they live and spend time."



kinds. A concussion sustained in a car vehicle accident can impact a person's cognition, concentration, processing speeds, and their reflexes-all of which could make resuming driving difficult and dangerous. More than half of the 1.9 million concussions suffered by Americans each year occur in adolescents, and through her research, McDonald has found that many of these young people are returning to the road within two weeks of their injuries: even before returning to sports and exercise. "There are potential physical and emotional injuries that come from motor vehicle crashes among adolescents," McDonald says. "An unexpected event for an adolescent like a motor vehicle crash exposes them to visual, auditory, and sensory traumas." Treating injuries must account for these realities—especially in a country like the U.S., where a modest social safety net and a historic racial wealth gap can contribute to disparate health outcomes for different populations.

be physiological or psychosocial, and

In the same way that preventing injuries necessitates a close investigation of whether a person's environment is helping or impeding their health, promoting recovery can also be a question of environmental

assessment. In cities across the U.S.-cities that were once designed to accommodate cars at the expense of pedestrians and cyclists-streets are being re-shaped and modified to force safer driving behavior. Speed humps, serpentine curves in the road, and rounded curb extensions are just a few of the traffic calming measures that urban planners are deploying. The benefit of these design changes can be dual fold: accidents are prevented and local streets are rendered calmer, which can help people suffering from the reverberating trauma of a motor vehicle crash regain mobility—whether it's getting behind the wheel of a car again or being able to take a walk or a bike ride without lingering memories of their injury event.

On a neighborhood-sized scale, there are many other forms of environmental enhancement that can address injury upstream and downstream. "In a city, some interventions for injury recovery may have benefits that go beyond intent," Sara Jacoby says. One tangible example of this is the expansion of public green spaces in neighborhoods that have been deprived of trees and safe park spaces. "Turning a vacant lot into a green space might facilitate healing in residents who've

SPRING 2023 - PENN NURSING 47 46 PENN NURSING - SPRING 2023

experienced physical trauma. But it may also improve the mental health of people who live in proximity," Jacoby says.

But the flipside here is that it can be challenging to recover from injury in neighborhoods where environmental characteristics aren't being realized—where people still have to deal with injurious factors such as gun violence, broken

"Nurse scientists

advantageous

position to convey

the importance

that policy has

injuries, as well

in preventing

as promoting

recovery."

are in an

windows, policing, or dangerous roads. "Years ago, we worked with 10–16-year-old youths who lived in west and southwest Philadelphia," Richmond recalls. "They talked about what it was like to navigate their environment, to go to their home or a rec center, and how nuanced their antennae were. Is this a safe place right now? Should I walk somewhere else?" Richmond has studied the links between environment and recovery by interviewing hundreds of seriously injured Black men, many of whom are from under-resourced urban communities where they were violently injured. "When you're thinking about physically and psychologically healing, and you're discharged from a hospital to the same neighborhood you came from, you can find yourself traversing the streets you traversed before and being unsure if the person standing next to you is the person who shot you," Richmond says. "The psychological burden experienced here can be harmful to one's ability to make a full recovery."

Ultimately, the question of who fully recovers from an injury—who

lives on—is a question of equity. As the field of injury science continues to evolve, the role of nurse scientists will extend beyond injury mitigation and treatment. Policy advisement could become a larger part of the job.

A Responsibility to the Public

"Nurse scientists are in an advantageous position to convey the importance that policy has in preventing injuries, as well as promoting recovery," McDonald says. As she sees it, nurses are already in the position of educating the public on what it might take to prevent or fix injuries: translating injury science into something that can be absorbed more broadly. It's a competency that can be tailored for engagement with different audiences, including elected officials and public officials who are tasked with policymaking. "Nurses are equipped with skills in therapeutic communication and health education that help convey in concise ways the scope and potential strategies to solve complex problems," McDonald says. Given this occupational advantage, one might argue that policy advising isn't just an opportunity for nurse scientists, but an obligation.

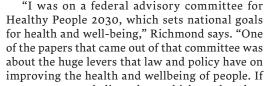
"I was on a federal advisory committee for

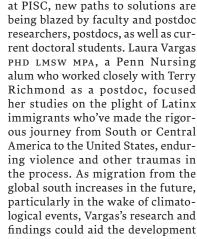
we believe that-which we do-then we have no option but to get the data, build the science, and package it so that policymakers can easily digest. That's our responsibility, period."

The structural inequities that shape injury occurrence and recovery will not be fixed overnight, but at PISC, new paths to solutions are being blazed by faculty and postdoc rent doctoral students. Laura Vargas PHD LMSW MPA, a Penn Nursing her studies on the plight of Latinx ous journey from South or Central ing violence and other traumas in the process. As migration from the logical events, Vargas's research and findings could aid the development of interventions and public policies that promote good mental health outcomes among immigrants.

Helena Addison MSN RN-a fourth year doctoral student at Penn Nursing-is busy digging into a sim-

ilar issue: the experiences of formerly incarcerated Black men in the U.S. How does exposure to violence, trauma, and stress while incarcerated impact the process of reintegrating into a community, upon release? It's a pertinent question to be investigating today, given the historic, disproportionately high rate at which Black men are sentenced to prison in the U.S., where over two million people are currently incarcerated. "In my work, I've gained quite a bit of exposure to how policies at local, state, and federal levels can directly impact the health outcomes of this community," Addison says. "Whether it is the City of Philadelphia's diversion and re-entry programs or the Medicaid Reentry Act at the federal level, such policies can have a significant impact on the resources that are available to formerly incarcerated people to address their health needs. It gives me hope to see how community engagement is continually embedded in the work of injury scientists, especially as we focus more on social justice and health equity." ...







Leadership

Catching Up with HUP Alumni

135 years later, graduates from the Hospital of the University of Pennsylvania Training School for Nurses are just as relevant.

AST YEAR MARKED the 135th anniversary of the first graduating class of the Hospital of the University of Pennsylvania Training School for Nurses, the precursor to what is known today as Penn Nursing. Nursing education at Penn has changed tremendously over the years, but one thing has remained the same: the impression HUP's 5,000-plus graduates have made on nursing.

From Mary J. Burns, the first HUP School of Nursing graduate in 1887—to Minnie Hogan-Clemens, the first African-American to graduate from HUP in 1890—to HUP'20 graduate Theresa Lynch, who founded and served as the first dean of the Penn's current School of Nursing—to Maurie Glick, the first male nursing student to graduate from HUP in 1972, these trail-blazers have been part of professionalization of nursing. They also have played key roles in public health, impacting health and wellness across a range of spectrums, and in history, creating a path for women who wanted to have careers outside the home, and encouraging men to join the ranks of nurses everywhere.

The HUP Training School for Nurses ("HUP") closed its doors in 1978—but the community of alumni remains strong and vibrant, their accomplishments as nurses too numerous to recount in full. Their legacy shines brightly at Penn Nursing as examples of what great nurses can do, and many of them continue to impact the world of health and health care.

Here are five of them.



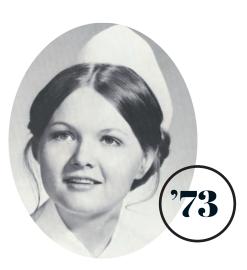
Lori T. Pierangeli PHD RN FCN

Dr. Lori Pierangeli volunteered as a candy striper in a hospital as a girl. Her options for a career at the time were limited—be a nun, a nurse, a secretary, or a teacher—and with seeing the hospital health team in action and having great nurse role models, applying to HUP felt like the obvious choice. She was right: she credits her education and experience at HUP with igniting a lifelong passion for community health in her work at the bedside, in hospice care, as an educator, and beyond—a passion that continues into Pierangeli's retirement. An exercise to instill empathy in her students at East Stroudsburg University by engaging them in the Point-in-Time ("PIT") Count, a nationwide count in January of sheltered and unsheltered people experiencing homelessness, led to a homelessness awareness exercise during which she realized having a bicycle would make it easier for unsheltered persons to locate the resources they need. This resulted in an effort, alongside her husband, Joe (a whiz at fixing bikes) to start rescuing, repairing, and rebuilding used bicycles in their Gouldsboro, PA home and distributing them to local agencies serving homeless populations. They named their endeavor "Pierangeli's Pedals." In the past eight years, they have revived 699 bicycles and expanded their distribution beyond the homeless population. "Giving back to my community is important, and it is my time at HUP that really lit a fire in me to work with underserved communities to improve health and to understand that health includes environmental issues, psycho-social factors, and the way people live."



Nancy A. Crecco Long CRNP RN

Nancy Long came to HUP by accident—she and a friend took a bus into downtown Philly for a shopping trip and got off at the wrong stop: right in front of the Hospital of the University of Pennsylvania. She knew as she walked into the hospital that this was the place for her. "It was the best mistake I ever made," Long says. "Attending HUP was a very special time in my life—many of the things we learned were not from a textbook and were never forgotten." Long spent the majority of her time as a nurse caring for women, working in a gynecologist's office, in obstetrics, and teaching childbirth and breastfeeding classes. Despite being immersed in women's health, Long missed the signs and symptoms of ovarian cancer in her own body and was diagnosed with late-stage ovarian cancer in 2004, a diagnosis that changed the trajectory of her career. "My education at HUP and my experience as a Women's Health Nurse Practitioner prepared me to deal with a serious illness," she says, "yet it was still difficult to find someone to talk to who had survived ovarian cancer." The National Ovarian Cancer Coalition (NOCC) became a useful resource, and when Long discovered a friend also had ovarian cancer, they decided to start a local chapter in Annapolis, MD in 2009. Now retired, she continues her volunteer work with the NOCC, organizing support groups, health fairs, and presentations on ovarian cancer. She has helped to raise \$2 million through NOCC's annual September walk/run since her chapter's inception. She even mentors patients of her daughter's, a GYN/Oncologist in New York. "I am grateful for every day," Long says, "and I am grateful for the opportunity to help women recognize the symptoms of ovarian cancer."



Julia Tierney Davis MSRNRVT

Julia Tierney Davis has been involved with the HUP Alumni Board since 2003, acting as secretary/treasurer, and helping with alumni reunions and newsletters—her drive to learn the stories of other HUP alums drives her in the latter role. "Everyone has such an incredible background," she says. "The military nurses, the Deans of nursing schools—our alumni include a lot of amazing people who have made an incredible impact on nursing and health care." Davis herself is one of those people: she was among the first nurses to ever be trained as a technologist in the then-new field of vascular testing. As a HUP graduate with an interest in surgery, she tried out several nursing positions at the Hospital of the University of Pennsylvania—med-surg, outpatient surgery, plastic surgery—but in 1979 she was offered a position at the hospital's first vascular lab. "It was such a new field," she says. "There were no certified technologists as we have now—they hired a few nurses and trained us how to perform the tests, including ultrasounds." Davis credits her HUP education and her experience as a nurse with driving her curiosity and, after being named the Manager and Technical Director of the lab, ensuring the lab was a top-notch facility, with well-trained employees and high-quality care for patients. She retired in 2017 from the vascular lab and is enjoying post-career life in Havertown, Pennsylvania, but she didn't know when she took the job that she would help expand roles for nurses everywhere. However, she says, that's par for the course with HUP alumni: "When you meet another HUP alum, you immediately have a shared experience—and part of that is knowing you were both part of something special that helped to change the field of nursing."

50 PENN NURSING — SPRING 2023 — PENN NURSING 51



Pat Marcozzi RN

Pat Marcozzi considers herself a facilitator. She likes to be behind the scenes, making things happen. As a nurse, that attitude has helped her be effective for her patients—and it has also made her a great asset on the HUP Alumni Board. In 2015, Marcozzi was awarded the Alumni Spirit Award for outstanding contributions to the achievement of Penn Nursing Alumni goals—primarily for her tireless dedication to organizing HUP Alumni reunions, something she's been doing for the last 35 years (most recently working with Julia Tierney Davis, also profiled). She is also part of the team responsible for celebrating the 125th School of Nursing anniversary with the installation of the well-known "The History of Nursing as Seen Through the Lens of Art" mural in Fagin Hall. Her career has been one of doing double or triple duty over the years, simultaneously working as the business manager of her husband's landscaping business and as a nurse, including stints working with an oral surgeon and as head nurse at a convent infirmary, as well as contributing to the HUP Alumni Board. She may have been perpetually busy, but it never lessened her dedication to patient care. She says, "We as nurses have an opportunity to get to know patients and their health needs in a very hands-on way—nurses are so vital to patient care. With the way that we so closely interact with patients, you never know what kind of difference you'll make in someone's life... well beyond the length of a hospital stay." While Marcozzi retired from nursing in 2000, she continues to facilitate and make a difference—not only through the HUP Alumni Board but also with her family and community.



Mary L. Wilby PHD MPH CRNP ANP-BC RN

When Dr. Mary Wilby recalls her HUP education, it is inexorably tied to the fact that her class was the last before HUP closed permanently. "There were no underclassmen left to mentor," she says. "For our faculty, many of whom had graduated from HUP as well, it was a bittersweet time. It was the end of the line—and it made me think about the incredible legacy and history of the training school." Staying connected to that legacy and history has been important to Wilby, so much so that she is currently serving on the Board of Directors of the HUP Alumni Association for the second time; she also chairs the Social Committee to ensure alumni have events through which to stay in touch. "I am inspired by the incredible things our alumni have accomplished, both the older generation and those of my generation," she says, "and my career has likely been so varied because their work has been so energizing." Wilby has worked in med-surg nursing, hematology-oncology, end-of-life care, integrative medicine, and more—and she currently teaches fulltime at LaSalle University in Philadelphia, PA. At the end of this academic year, though, she plans a change retiring to work part-time and seek new degrees and certifications, and perhaps traveling more for service work. It is primarily her service work for which she was presented a special recognition award at the 135th HUP reunion in 2022; she has long contributed her skills and knowledge to the Lasallian Women of Hope and the ministry in Haiti, an effort that began after the 2010 earthquake to advance education and provide health care, especially to women. "Like so many HUP alumni, I'm passionate about sharing my gifts and talents where they might be needed," Wilby says, "and you never have to look far to find someone in need."

A Capitol Internship

AST SUMMER, Marissa O. Kesse, a senior at Penn Nursing, took on Washington, D.C. and stepped into the policy world. Marissa was placed in Congressman Dwight Evan's office through the Congressional Black Caucus Foundation and spent three months on the Hill. On campus, she serves as Nursing Chair on the Senior Class Board, Vice President of the Onyx Senior Honor Society, Programming

Chair for the Black Student League, and Executive Director for Penn Model Congress. She is a student intern in the Sweeten Alumni Office and serves as a STEM Virtual Instructor for STEM Center USA teaching primarily migrant students based in CA and Colorado. Marissa's main interest areas include education, healthcare, and policy, and she is dedicated to fostering her interests through service. ...



"This image marks the last day of orientation and the day before my first day on the Hill. The entire cohort gathered together-63 members placed in Black Congressional Member's office and C-Suite offices. This day marked the beginning of a life-changing experience. It was such an amazing feeling of comradery as we stood together prepared to take up space in an institution tainted with elitism."

52 PENN NURSING — SPRING 2023 — PENN NURSING 53

Be True To Your School: An Alumni Guide To Giving Back

ENN NURSING ALUMNI are leaders in health and health care—and that leadership drives alumni to seek ways to support the School and show Penn Nursing pride long after graduation. The 15,000-strong global alumni community provides networking, education, and self-care opportunities, but for nurses who view their Penn Nursing experience as foundational, that is often not enough. Penn Nursing Vice Dean of Institutional Advancement Nadina Deigh often speaks of "time, treasure, and talent" as the trifecta of giving back. It is the time and talent aspects that offer unique possibilities to directly impact students, faculty, and the future of Penn Nursing. Here are just a few meaningful ways to get involved as an alumni volunteer.



Are you an organizer at heart? Have a passion for fostering alumni involvement?

Whether you love the programming the Penn Nursing Alumni Engagement team offers or you have great ideas to shake things up, consider applying to be part of the 23-member Alumni Board. With three committees within the Board's structure, there are a range of opportunities to match your skills and interests. More than that, it can offer a connection to Penn Nursing that fills a need, as it did for Elissa Acevedo RN NU'16 GNU'22, whose term as Graduate Student Representative to the Alumni Board ended in 2022.

Acevedo returned to Penn Nursing to earn her MSN just prior to the COVID-19 pandemic, simultaneously working as a NICU nurse in New York City. When the pandemic shut down Penn's campus and transitioned learning online, she missed the sense of community that comes with interacting in-person with her peers. She says, "The thought of reconnecting



with Penn alumni, tapping back into the goings-on of campus, and contributing to the future of the Nursing School excited me, but I was hesitant to apply to the Alumni Board. The time commitment seemed daunting, and self-doubt crept in when I questioned my qualifications." As it turns out, it was the best decision Acevedo made-her time on the Board enriched her graduate experience and fostered her growth as a young professional. She volunteered to remain as part of the board after her initial term ended, this time co-chairing the Student-Alumni Connections Committee with Ellen Dreibelbis AGACNP-BC NU'11 GNU'20 GNU'22.

The Student-

Connections

Committee

is just one of

for Alumni

interested in

finding out

more about

open Board

positions

or Committee

should contact

nursing.upenn.

Nursingalumni@

Alumni

many options

Board members.

Alumni

Acevedo, Dreibelbis, and their committee members are planning a number of virtual events and gatherings to help connect students and alumni, particularly after the pandemic impacted the Alumni Board's reach—this includes a panel for early career nurses that will expose students to the wide range of opportunities for nurses at this stage and an advanced practice panel where alumni will discuss roles and responsibilities with students considering an advanced nursing degree.

Alumni Interview Program
Penn Nursing alumni know

first-hand what it takes to be successful in the School's rigorous program—and that experience as an alum is invaluable when high school students are considering Penn Nursing as the springboard to their future.

The University of Pennsylvania is committed to offering an interview to every undergraduate applicant as a way of making Penn more accessible, and you can help make interviews possible for applicants to the School of Nursing. Participants in the program can choose a time commitment that fits their schedule—Stephanie Chu CCRN-K MPH NU'10, for instance, does two-to-three interviews every month, which takes a total four or five hours when she factors in the written evaluation

Interested in getting involved?
Get more information from Monica Stepanow, Director of Penn

Alumni Interview

215-573-3846

or mmontiel@

Program, at

upenn.edu.

for each student interviewed. Chu has been involved with the Alumni Interview Program for a year and usually interviews as part of the Nursing Committee or QuestBridge Committee (QuestBridge is a program that connects the nation's brightest students from low-income backgrounds with leading institutions of higher education, including Penn).

The interview process is relatively simple—reviewing a candidate's resume to get a feel for their commitment to the activities listed, then formulating open-ended questions—but Chu says the most rewarding part for her is when a student looks at her trajectory to and through Penn and realizes their own dreams are possible. "My interactions with prospective students have prompted me to remember what my 18-year-old self set out to do," she says. "It brought me back to the reasons why I became a nurse and was definitely a contributing factor in me making a career pivot to take part in the Penn Nursing Alumni Global Health Fellowship, which allowed me to spend three months working in Cusco, Peru." She also credits the interview program with helping her to establish a closer connection to the Penn community—and provide a way for her to give back to the Penn alumni network that has made such a difference in her own life.

3 Me

Mentor Program

Put your career success to work as a mentor for Penn Nursing students or young alumni.

You don't need to have forty years at the bedside or a high-level position to qualify—but you do need to have enthusiasm and a willingness to help others achieve. Formally launched in fall 2020, the program has made 150 matches to date, with mentors tasked with giving career guidance, school advice, and more. Matches are carefully made, based on area of need, duration of match, etc. In the case of Serena Luong RN NU'20, she was in the final semester of Penn Nursing's ABSN program when she applied to be matched with an alumni mentor in California, seeking social support and guidance in anticipation of a move back to her home state. She says, "I was worried that I was at a disadvantage in the California job market because I did not have as many opportunities to network with nurses in California."

Luong was matched with Isabelle Oka RN NU'17, who had once been in Luong's exact shoes. They met over FaceTime at first. "It felt like she had been a friend that I'd known for a long time," Luong says. "I felt very comfortable asking for advice and guidance in a time of uncertainty and change, especially since there was not a demand in the market for new grad nurses at the time of my graduation due to COVID-19. She was supportive, encouraging, and so knowledgeable." The mentorship gave Luong confidence as a future nurse in a tight job market—and thanks to Oka's encouragement, Luong was able to build her skills, resume, and network within California, and she found a job that was right for her. Their relationship has changed over the last three years, from mentee-mentor to friends—a great side benefit that often occurs among matched pairs. .*

Contact

Maddie Nicol,
Assistant
Director
of Alumni
Engagement
(nicolmad@
nursing.upenn.
edu), for more
information
on mentoring,
or to apply to
the program
as a mentor or
mentee.

54 PENN NURSING — SPRING 2023

A Love Story: The Patricia Ann Teetsell Carson Nursing Endowed Scholarship

A love for nursing inspires one HUP alumna's true love to name an undergraduate scholarship in her memory. **By Shannen Gaffney**

NESTHESIOLOGIST Dr. John Carson M'50 RES'55 would never have thought that the nurse he met at the HUP urology department's 1954 Christmas party would one day be his wife; in fact, he saw her as arrogant, and sort of unfriendly. "She was a beautiful girl that everyone knew...but I always thought she was a snob," he says, with an infectious laugh of gratitude at having been wrong.

Patricia Ann Teetsell had just finished her three-year HUP Nursing diploma at the time. And though by the end of the party Carson's vision of her as a snob was dispelled, he could see why others may have also thought of her that way. "No one messed with Pat," Carson says. "She was not a pushy person—but if you started to push Pat around, she'd hand you your head." This penchant for assertiveness worked to her advantage in the operating room.

The internationally renowned Dr. Ravdin (for whom HUP's Ravdin wing on 34th street is named) was chief surgeon in the medical school at Penn at this time, and

known for running as tight a ship there as he did while serving as a major general in World War II. He had two excellent instrument nurses that were on all his cases, who "knew what instrument Ravdin wanted before he even did," according to Carson. When new nurse Patricia Teetsell filled in one day on one of his cases, Dr. Ravdin made an unusual move.

"One of the cardinal rules of operating room etiquette is that a surgeon will never, ever reach up onto the nurse's instrument stand to grab something. He holds out his hand, and the nurse will hand him the instrument" Carson explains. But for whatever reason, on this day when Pat filled in, he reached up on her station to take an instrument himself. Pat immediately pushed his hand away and handed him the instrument, following protocol. Dr. Ravdin then turned from his operation, looked at Pat, and shot her a hostile growl. Not skipping a beat, Pat growled right back. Suddenly the oper-



Patricia Ann Teetsell Carson graduated from the HUP Training School for Nurses program in 1954.



ating room came to a halt. Everybody in the room thought that Pat's first day would also be her last. To their surprise, the seemingly strict Dr. Ravdin welcomed and requested Pat's assignment on his future cases, appreciating her ability to stay calm and procedural in the operating room.

"Our first date after meeting at the Christmas party was on the 3rd of January, 1955. We were engaged in June and married in September," says Carson. Their plan was to wait a few years to have kids so that Pat could continue to study for her bachelor's degree, and work before becoming a mother. But Lynn, their first daughter, came along a little earlier than planned, a year after they were married. Still, Pat worked in Dr. Ravdin's operating room up until she was eight months pregnant. Eventually, all three of their children were born at HUP.

HUP Nursing students from the class of 1954.

time, her passion for the field and interest in learning the profession was always close to her heart. Going through her desk after she passed away, Carson saw that she had saved all her report cards and assignments (straight A's on every one). The Patricia Ann Teetsell Carson Nursing Endowed Scholarship has been providing support to undergraduates entering their senior year and preparing to graduate from Penn Nursing since 2007. Why honor Pat with a scholarship? For Carson, it was an easy choice for a tribute. "It was just something I knew I wanted to do. She had so many good friends in the Nursing department at Penn, loved being a nurse, and more importantly, loved being a student. I've missed her every day for the last fifteen years." ..

Alumni Notes

We want to hear from you! Send us a personal or professional update at NursingAlumni@nursing.upenn.edu or call us at **215.746.8812**. Photos are encouraged. Notes may be edited for space and style.

1970s

JoAnn Linda Vatcher, Nu'74, retired almost two years ago from her position as the Director of Education at a local hospital. JoAnn is still active, volunteering for a local VNA, facilitating a monthly session for CareGivers, and coaching a Matter of Balance course for local seniors. She shares, "Never a dull moment. I don't know how I did everything when I

Denise G. Link, GNu'79, retired in May 2020 from her position as Specialty Coordinator for the Women's Health DNP program at Arizona State University Edson College of Nursing and Health Innovation. Denise enjoys having more time for writing, traveling, and spending time with family, especially her five grandchildren.

was still working."

1980s

Susan Beidler, GNu'81, GGS'02, GR'02, is a Professor at Kennesaw State University.

Elaine Henson, GNu'85, completed 25 years as the Founder of a women's medical center in rural Arizona, Lake Havasu City, from 1987 through 2021. Elaine continues her work in women's health with a board certification as well in clinical densitometry. Elaine also received her DNP from the University of San Diego in 2020 as she continues her work in adult primary care.



▲ Loretta Reilly, GNu'86, **GNC'00**, serves as an Advanced Senior Lecturer in the Penn Nursing Pediatric Acute Care NP Program. She also works as a Nurse Practitioner in Sedation/ Radiology at the Children's Hospital of Pennsylvania. Dr. Reilly was named a Fellow in the Academy of Association of Radiologic and Imaging Nursing. The honorary designation of Fellow is bestowed upon Association for Radiologic and Imaging Nursing (ARIN) members who have made outstanding contributions to the profession of radiologic nursing. Each Fellow has demonstrated commitment to the advancement of the profession at the local, chapter, national, or international levels.

1990s

Heather McKnight-Menci, Nu'90, GNu'97, is an Advanced Nurse Practitioner, Endocrinology at Children's Hospital of Philadelphia.

Jennifer Eschenauer-Travers, Nu'91, is a Staff Nurse at St Francis Hospital.

Sherri Duarte, Nu'92, is a Nursing Informatics Senior

Project Manager at Children's Hospital of Philadelphia.

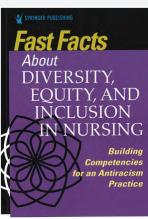
Kristvn Elish, Nu'96, is a Nurse Practitioner at Catholic Health Services.

Yukiko Takaya, GNu'96, is an Associate Professor at Yokohama Soei University.

Kimberly Updegrove, **GNu'96,** is the Executive Director at Mothers Milk Bank of Austin.

Anna Berrian, Nu'97, is a Pediatric Nurse Practitioner at Northshore Community Health Center.

Virginia Biddle, Nu'97, GNu'98, GNu'01, was awarded the 2022 Jefferson Health Advanced Practice Provider Excellence Award for Clinical Scholarship. As a Psychiatric/ Mental Health Nurse Practitioner, Virginia continues to pursue her passion for suicide prevention.



∧ Anne-Marie O'Brien. C'89. GNu'98, and Sandra Davis, GNu'97, recently co-authored a book titled, "Fast Facts about Diversity, Equity, and Inclusion in Nursing" (Springer Publishing). The American

Journal of Nursing awarded the book third place for their 2022 Book of the Year Awards in the category of Nursing Education/ Professional Development/ Continuing Education. Additionally, Anne-Marie is currently an Assistant Professor in Nursing at Gwynedd Mercy University, while Sandra is the Deputy Director of the NLN/ Walden University College of Nursing Institute for Social Determinants of Health and Social Change.

2000s

Nicole Parone, GNu'02, is a Gynecology Clinical Manager at Penn Medicine.

Erin Brown, Nu'04, **GNu'06**, is a Psychiatric Nurse Practitioner at Jefferson Hospital

Susan Flavin, GNu'04, serves as the Senior Scientific Director at Horizon Therapeutics.

Amrita Naipaul, GNu'04, is a Professional Practice Pain Specialist at Children's National Medical Center.

Ashlev Ritter, Nu'07, GNu'10, GR18, was inducted as a fellow of the Philadelphia College of Physicians. She also received the Nancy Tatum Registered Nurse Award from the Eastern Pennsylvania Geriatrics Society.



△ Julia Jurkiewicz, Nu'08, recently celebrated 10 years at Lehigh Valley Health Network (LVHN) and currently serves as the Nursing Administrator of Population Health. This year she was the recipient of LVHN's 2022 Guildin Award for Efficiency and Innovation in the Clinical Workplace, highlighting her passion for changing the landscape of health care and improving health equity in a diverse, medically underserved population.

Stephanie Johnson, Nu'09, GNu'11, recently celebrated the first year of her start-up medical practice, Pathway Geriatrics. The practice provides primary care to homebound older adults in the greater Seattle area. She partners with her husband Dustin Johnson, W'08, to manage the business, marketing, and technology aspects. She says, "Our vision is to be a nurse practitioner-driven practice, empowering NPs professionally and financially. We see great opportunity as a platform for other types of specialty care at home, too, expanding out with pediatrics, midwifery, podiatry, and dental, to name a few."

Sydney Upah, Nu'09, GNu'12, is a Consultant at Health Advances LLC.

2010s

Mackenzie Douglass, Nu'10, **GNu'12,** is a Certified Nurse Midwife at Salud Para la Gente.

Meredith Hunter, GNu'10, is a Lead Midwife Laborist at Virtua Health.

Michelle Lu, Nu'12, W'12, GNu'18, is Director of Clinical Innovation at Patina.

Victoria Maffey, GNu'12, is an Outpatient Endocrinology at Holmdel Township.



^ Abi Schnapf, GNu'11, was awarded the Advanced Practice Provider (APP) Education Award for the University of Pennsylvania Health System. Since 2012, Abi has been an inpatient acute care nurse practitioner in general and plastic & reconstructive surgery at Pennsylvania Hospital in Philadelphia, PA.

Dedra Sally, GNu'13, is a Nurse-Midwife for the NC Department of Health and Human Services. She investigates cases of maternal death for the NC Maternal Mortality Review Committee. She has investigated over 60 cases in the last year.

Stephanie Bosche, **GNu'14,** recently accepted a new role as Associate Director of Credentialing Programs at the Pediatric Nursing Certification Board. Stephanie says, "I have loved crossing paths with so many Penn Nursing alumni who are PNCB volunteers. Such a great network of truly amazing PNPs!"

Melissa Christie, Nu'14, **GNu'15**, began a new position as a Nurse Practitioner with the Special Care Clinic at Children's Hospital Colorado.

Sandra Afrifah, GNu'15, is a Family Nurse Practitioner at UChicago Medicine Medical Group.

Seth Reed, GNu'15, is a Nurse Anesthetist at Penn Presbyterian Medical Center/ UPHS.



FROM THE PENN NURSING ALUMNI BOARD **PRESIDENT**

Dear Penn Nursing Alumni,

The COVID-19 pandemic highlighted the crucial role that nurses play in the world. The nursing profession was amplified and celebrated in a new light. As the pandemic fades and we enter

our new normalcy, it's more important than ever for our nursing community to continue to step up and showcase our talents and strength. How can we use this spotlight to advance the nursing profession? Whether you are looking to challenge yourself with a new career opportunity, further your education, or engage with your community, the time is now.

Your continued engagement with the Penn Nursing community advances our network and profession. Our goals with the Penn Nursing Alumni Board are to increase alumni engagement with the Penn Nursing community and amplify our Penn Nursing alumni leaders. Last semester our Student Alumni Connections committee hosted a successful hybrid event to help our graduating advanced practice provider students prepare for their career search. With a diverse panel of advanced practice providers, we shared interview and networking strategies and preparation techniques for taking on a new role. Our awards committee is also in the process of finalizing our alumni award recipients. We had a very strong applicant pool and are excited to announce our awardees soon. I'd like to highlight our newest award—the "Social Justice and Health Equity Alumni Award"—which recognizes a graduate for exceptional contributions in the areas of equity, access, inclusion, and social justice through health and wellbeing. I hope to see many of you at our award ceremony on May 12 to celebrate our alumni leaders and award recipients.

I also encourage you to join us for Alumni Weekend 2023, May 12-14, for a variety of events including the annual parade and the Penn Nursing tent at the picnic. Are you interested in getting involved? Email us at nursingalumni@nursing.upenn.edu.

We invite you to join us in creating more opportunities for Penn Nurses to be celebrated, promoted, and supported. There is much to celebrate within our Penn Nursing community, and I look forward to all that we will continue to accomplish together. Go Quakers!

Jodi Feinberg, Nu'15 **President, Penn Nursing Alumni Board**

58 PENN NURSING - SPRING 2023 SPRING 2023 - PENN NURSING 59 **Mia Spinelli, Nu'15, GNu'18,** is a Lead Nurse
Practitioner at SoCal Food
Allergy Institute.

Jaya Sondhi, Nu'16,
GNu'18, currently served as
Manager of Clinical Operations
at NYU Langone Health. Jaya
graduated with her MBA from
NYU Stern School of Business
in September 2022 and recently
launched Virtual Constant
Observation at NYU Langone
Health, which uses Artificial
Intelligence to observe patients.

Christopher Reese, Nu'17, GNu'19, is a Surgical Care Unit Registered Nurse at Children's National Health System.

Sara Whitner, GNu'17,
joined the CNS team at
Overlake Hospital Medical
Center in Bellevue, WA as
the Cardiac Clinical Nurse
Specialist. In this role, Sara
works to support nursing staff
development and works with
cardiac practice throughout the
entire hospital. She continues
to serve as part time faculty at
Columbia Gorge Community
College, as well.

Austin Angelidakis, Nu'18, GNu'21, is a Nurse Practitioner, Genitourinary Medical Oncology at University of California, San Francisco.

Sara D'Arpino, Nu'18, GNu'20, is a Palliative
Care Nurse Practitioner at
Massachusetts General Hospital.

Jessica Wagner, GNu'18, is a Pediatric Critical Care Nurse Practitioner at Baylor College of Medicine.

2020s

Stephanie Dixon, Nu'20, W'20, is a Consultant at Boston Consulting Group.

Riley Hasche, GNu'20, Nu'20, is a Registered Nurse at Sierra Vista Regional Medical Center.

Alicia Go, Nu'20, GNu'21, is a Clinical Nurse at Stanford Children's Health.

Sean Legg, Nu'20, is a Registered ICU Nurse at Penn Medicine Health System.

Janet Odufunade, Nu'20, GNu'22, is a Registered Nurse at Hospital of the University of Pennsylvania.

Elizabeth Sun, Nu'20, is a Senior Associate at Ernst & Young LLP.

Allison Burwell, Nu'22, GNu'24, is a Registered Nurse at University of Washington Medical Center.

Felicia Chen, Nu'22, GNu'24, is a Registered Nurse, Cardiac Care Unit at Children's Hospital of Philadelphia.

W'22, is an Analyst at IQVIA.

Delaney Wilkinson, Nu'22,
is a Registered Nurse at Children's
Hospital of Philadelphia.

Greis Kapexhiu, Nu'22,



^ Penn Nursing's Alumni Engagement Team hosted a Happy Hour for our NYC Alumni on February 5th, 2023. Alumni Board President, Jodi Feinberg, Nu'15, shared brief remarks before attendees had the chance to mingle and network. Also in attendance for the happy hour: Laine Mulcahy, Nu'15, GNu'19, Allison Squire, Nu'95, Christine Oliva, Nu'21, Clara Cho, Nu'21, Deborah Gross, Nu'17, Elissa Acevedo, Nu'16, GNu'22, Josephine Hu, Nu'21, Michelle Teicher, Nu'18, Ryan dos Reis, GNu'21, Sheila Olira, GNu'18 and Zeyan Li, GNu'03.





It has been a very busy year for the HUP Alumni Association. The 135th Reunion celebrating the founding of the Hospital of the University of Pennsylvania School of Nursing was held this past September. The program opened on Friday with a short program featuring two guest speakers from the School of Nursing.

George Demiris, PHD, FACMI spoke about the use of technology to help elderly adults maintain independent living in their own homes. The second speaker was Ashley Ritter APRN, PHD who talked about her role as CEO of *Dear Pandemic*. This is a website started by Ashley and a group of female scientists in the early days of the COVID pandemic, to provide information and to answer questions from healthcare workers.

On Saturday a half-day program was held in Fagin Hall. A panel discussion was held comparing the differences in nursing education between HUP and the Penn School of Nursing. Two HUP graduates, Bev Barton Emonds HUP'68 and Mary Wilby HUP'78 and two Penn Nursing undergraduate students, Daisy Arizmendi Nu'24 and Megan Laubacher Nu'24, were panel members. It was an enlightening and at times comical discussion.

Next, Rosemary Polomano gave a visual tour of the new Pavilion at Penn. Following the presentations, we had a tour of the Helene Fuld Center for Innovative Learning and Simulation. We were introduced to the high-tech simulation equipment used to provide nursing students with clinical practice experience in a safe, controlled setting. Most of us were impressed with how advanced simulated learning has become. Most of the HUP graduates were educated in the "see one, do one, teach one" era.

Saturday evening ended with a banquet, awards ceremony, and an address by Dean Antonia M Villarruel PHD, RN, FAAN who spoke of the history of the HUP School of Nursing and how our legacy has contributed to the Penn School of Nursing being named as the best Nursing Program in the world.

This will be the final weekend reunion for the HUP School of Nursing Alumni. The number of attendees has decreased over the past few reunions, as our alumni are ageing making travel difficult. The Board is working on alternatives to a 3-day reunion, such as having a one-day program or meeting during PENN's Alumni Weekend held in May, the same weekend as graduation. The School of Nursing always has a tent where graduates can meet and mingle. Stay tuned for more information.

We will be having a spring luncheon for the first time in three years. It will be held on April 29th at the Museum of Nursing History at LaSalle University. Jean Uribe PHD, RN will speak about the history of the museum. A tour will follow Jean's presentation.

Linda S. Knox, RN, Ph.D., HUP'74, Nu'81, GNu'86, GRN '95

In Memoriam



Barbara S. Jacobsen, GED'58, a professor emerita in Penn's School of Nursing who taught many generations of nursing students how to employ statistics in research, died on December 13, 2022. She was 91. Ms. Jacobsen received a bachelor's

degree from the Indiana University of Pennsylvania, then taught in an elementary school for more than a decade. She went on to earn a master's degree from Penn in measurement evaluation in 1958, then joined Penn Nursing's faculty as an associate professor in 1964, where she taught statistics and research design. "During her 28 years with Penn Nursing, she was one of the school's most popular teachers and was known especially for her humor, quick wit, and energy," her colleagues wrote in an online tribute. She received

the Christian R. and Mary F. Lindback Award for Distinguished Teaching from Penn in 1975, and she was also active in the school's research community: as primary statistician for much of the early research in the school, her scholarship and application of mathematical disciplines created the foundation on which Penn Nursing's research, now nationally and internationally renowned, is based. Ms. Jacobsen's research helped launch the Center for Nursing Research. She served on the University Council throughout the 1970s and 1980s, chairing its committee on recreation and intramural sports and also served on several additional university-wide committees. In 1991 she became a full professor; she retired soon thereafter and took emeritus status. After retiring from Penn, Ms. Jacobsen pursued an interest in lapidary arts, serving as a member of the Tuscarora Lapidary Society in Philadelphia, and later the Roxy Ann Gem and Mineral Society in Medford, Massachusetts. She was active in the society, teaching classes, leading tours, and presenting her work in gem and mineral shows.

"During her 28 years with Penn Nursing, she was one of the school's most popular teachers and was known especially for her humor, quick wit, and energy."

1940s



∧ Nettie Tate Graham, HUP'41, on November 12, 2022. After receiving her RN at the University of Pennsylvania in 1941, she joined the U.S. Army, stationed at Camp Mackall, NC. After her honorable discharge at the rank of captain in 1946, she returned to the University of Pennsylvania to complete her BS in Nursing. She had a long nursing career in obstetrics, pediatrics, and private care. In 1967, she became the founding director of the licensed vocational nursing program at Allan

Hancock College. She retired from the the College in 1980. **Margaret Pack, HUP'48,** on August 17, 2021.

1950s



A Dolores Stark, HUP'50, on August 10, 2022. Dolores (Dee) was a proud Penn nurse throughout her adult life. After earning her RN, she worked as a Private Duty Nurse in local hospitals. A trailblazer and an advocate for women's rights and opportunities in the workplace, she became a successful and dynamic Licensed Nursing

Jersey, at one time running three facilities. She held the highest standards for patient care. Well-liked and highly respected, she encouraged women to achieve success and leadership positions. She formed lifelong friendships at the Hospital of the University of Pennsylvania School of Nursing and throughout her career. She was a role model for many nurses, who admired her leadership abilities, her warmth, her caring, her intelligence, and

Home Administrator in New

Naomi Sayers, HUP'51, Nu'58, on August 9, 2021.

her moxie.

Mary Joyce Jones, HUP'53, Nu'56, on October 30, 2022.

Phyllis Touchstone, HUP'53, Nu'53, on September 23, 2021.

Katherine Weibel, HUP'53, on October 25, 2022. Frances Portnoy, HUP'54, Nu'54, on January



△ Joanne Geayer, HUP'55, Nu'61, on July 14, 2022. Born in Lehighton, PA, she was a graduate of Lehighton High School and the University of Pennsylvania School of Nursing. She was a loyal supporter of the Penn Nursing Annual Fund. A registered nurse, she was employed for many years at Rancocas Hospital in Willingboro, NJ and retired from the Peer Review Organization of NJ in 2000. She enjoyed sailing with her late husband, traveling the world with her friends, and living every day to the fullest.

Geraldine McLaughlin, Nu'55, on December 21, 2021.

60 PENN NURSING — SPRING 2023

In Memoriam



^ Nancy C. Crumling, HUP'56, on March 26, 2022. She earned her BS in Nursing and her MS in Nursing Administration at U of P. A lifelong member of the U of P Alumni Association she was a member of Sigma Theta Tau, XI Chapter and the Van Rensselaer Chapter 256. Her nursing career spanned forty-nine years during which time she worked at Albany Medical Center, Hershey Medical Center, and the Presbyterian University of Pennsylvania Medical Center. Members of Nancy's HUP class knew her as a steady, hard -working nurse with a ready smile and generous personality.



^ Doris Morgan Huegel, HUP'56, on January 22, 2023. Doris was a nurse educator, and Nurse Practitioner who practiced in Western Pennsylvania. Her nursing brought praise and appreciation from her patients and Special Recognition from the Hospital of the University of Pennsylvania School of Nursing.

Irene Hurst, HUP'57, on April 19, 2022.

Esther Warner, HUP'57, on June 14, 2022.

Josephine Shore, HUP'58, on February 17, 2022. Rita Sonntag, Nu'58,

GNu'77, on September 15, 2021. **Antoinette Voss, Nu'58**, on September 1, 2022.

Regina Wielga, Nu'59, GNu'63, on December 8, 2021.

1960s



∧ Elaine Dreisbaugh, HUP'60, on February 15, 2022. Elaine graduated with High Honors from The Hospital of the University of Pennsylvania and served many terms as President of the HUP Nursing Alumni Association. Her career as a nurse and nurse educator spanned 50 years, where for many of those years she was the Nurse Manager of Pediatrics at Chester County Hospital. After receiving her MSN from West Chester University, she began teaching at the Chester County Hospital School of Nursing; she later joined the faculty of Delaware County Community College and taught there until her retirement. She was the recipient of numerous awards throughout her career. These include the Gould Award from Delaware County Community College, Dr. Susan C. Slaninka Award from West Chester

University, and The National League of Nursing Award. In addition to these awards, she received many other accolades, served on multiple boards and committees, and was a member of Sigma Theta Tau International Honor Society of Nursing. Her love for her family, friends, patients, and students is legendary, and she will be missed by all.

M. Severiens, Nu'60, GED'62, on January 1, 2022.

Linda Buchman, HUP'61, on November 30, 2022.



∧ Jorge Grimes, GNu'66, on October 5, 2022. Over his career Jorge taught nursing at Russell Sage College and served as Program Chairman at Keuka College and as a member of the nursing faculty at SUNY Buffalo, then becoming Chairman of the undergraduate program in nursing at Penn State. In 1985 Jorge accepted a faculty position at the SUNY Health Science Center in Syracuse, College of Nursing, where he retired as Professor Emeritus. Jorge was one of the first Nurse Practitioner in New York State. He was an awardwinning author of Health Assessment in Nursing Practice that was in a fourth edition, and he helped create the Nurse Practitioner program at SUNY Upstate University.

Alice Harkins, GNu'66, on October 26, 2021.

In Memoriam



▲ Geraldine Paier, HUP'66,

Nu'68, GNu'85, GR'94, on December 24, 2022. Despite lifelong health challenges, she accomplished much in her life. After graduating high school, she left northeastern Pennsylvania to obtain her diploma in Nursing from the Hospital of the University of Pennsylvania and went on to earn her B.S. in Nursing from Penn in 1968. While at nursing school, she established many meaningful friendships that lasted a lifetime. Before starting her family, she worked as a public health nurse in Philadelphia for several years. In 1985, Gerri went back to the University of Pennsylvania to earn her M.S. in Nursing while raising three children. After obtaining her Master's degree, she worked as a Geriatric Nurse Practitioner at Foulkeways at Gwynedd and loved caring for her patients. Gerri went on to earn a Ph.D. in Nursing in 1994, also from Penn, and joined the Nursing faculty at the University of Arizona in Tucson. She served as a board member both at the School of Nursing as well as at the Museum of Archaeology and Anthropology.

Janice Cox, HUP'68,

on September 5, 2022. Born in Berwick, PA, she was the daughter of the late Michael Harry and Mary Kuchka. She was also the beloved wife of Douglas Lynn Cox for 53 years Janice worked as a hospital registered nurse for 44 years.

Nellie Swensen, GNu'69, on December 21, 2021.

1970s



▲ Elizabeth Nissley, Nu'70, GNu'89, on September 25, 2022. Elizabeth graduated from the Lancaster General School of Nursing in 1964, then from the University of Pennsylvania with a bachelor's in nursing (1970) and a master's in psychiatric nursing (1989). Elizabeth lived and worked as a nurse and educator for nine years in Somalia between 1966-1986. She worked as a psychiatric nurse and an outpatient therapist with Philhaven and later as a full-time pastor, retiring from James Street Mennonite Church in 2013.

Marian Fox, GNu'72, on July 29, 2022.

Maryjane Scruggs, Nu'72, on November 30, 2022.

Rita Du Brey, GNu'74, on August 24, 2022. Ruth Gage, ED'49,

GNu'75, on August 20, 2022. **Lynn Karasik, GNu'77**, on July 20, 2022.

1980s



▲ Roberta McGady, GNu'80, on November 19, 2022.

Linda Smith, GNu'84, on October 14, 2022.



∧ Nicole Price Fisher, Nu'02, on February 26, 2023. Nicole was a registered nurse, nurse manager, tireless volunteer, and a mother of four. She attained her dream job as a nurse at Children's Hospital of Philadelphia in 2004, and, knowing how it is to have been helped, constantly reached out to everyone she could. "She wanted to be a blessing to somebody else," said her husband, Adarrel Fisher, "especially those who may be forgotten or abandoned. She had a sense of someone who had been helped." Caring for her patients seemed more like a calling than a job for Mrs. Fisher. Creative, friendly, and talkative once she got to know you, she focused on people's emotional health as well as the medicine they took.



∧ Tamara "Tami" Herold Sharma, GNu'07, on December 27, 2022. Tami passed away after a hardfought battle with cancer. She received her Masters of Science in Nursing from the University of Pennsylvania in 2007. She moved to California in 2003, where she met and married Pranav Sharma on May 24, 2008. Two daughters, Marielle and Vivienne, were born to them. Tami was a labor and delivery nurse, certified nurse midwife and nurse practitioner at Kaiser Permanente LAMC, White Memorial Hospital and Adventist Health in the Central Valley. In 2018 she became a Professor of Nursing at West Coast University.

62 PENN NURSING — SPRING 2023 — PENN NURSING 63

Path



Born in Guyana, South America as one of five siblings, spent first many years of childhood being raised by his grandmother. Parents immigrated to the U.S. and he followed with siblings around age seven. Grew up mainly in the New York City area.

In 2004, started dating his now-wife and felt the time was right to leave the Army. Spoke with a good friend who was a nurse practitioner and ran the Swarthmore **Health Center about** interest in combining fields of health care, data, and tech. She encouraged him to pursue nursing. As a child of immigrants, was always pushed towards being a doctor but never felt a pull in that direction. Nursing was different.

Was part of the gifted and talented program in middle school and started taking college-level math and science classes; also introduced to computer coding and developed a passion for this area. Mother worked as a nurse, and he would go to the hospital with her—inspired a lifelong interest in helping others.

Attended Swarthmore College and majored in Biology and Anthropology—wrote senior paper on the cultural constructions of infectious diseases and how public perception impacts public health.

Following stints in a Chicago lab and an IT department for a Philadelphia-based HMO, started his own business, Night Kitchen Media, creating multimedia projects. Jumped into the world of health care data as a consultant.

Due to long-time interest in community service and giving back, enlisted in the Army as an infantryman. Initially had planned to stay on with Night Kitchen but found striking the right balance difficult so sold his share of the business. Eventually joined the National Guard but was called to active duty again after September 11th attacks—completed two additional tours.



Enrolled in Columbia
University's second-degree
BSN program and worked
as a staff nurse at New YorkPresbyterian Hospital during
the night and as a clinical
analyst during the day—with a
focus on projects to improve
patient safety using the
hospital's electronic systems.

Pursued a PHD in Clinical Informatics at Columbia's School of Nursing, then joined their faculty as an assistant professor/nurse researcher looking at using data science to investigate ways of improving patient safety, quality of care, and individual health.

Arrived at Penn Nursing in 2023 as Standing Faculty Clinician-Educator with a joint appointment as a Professor of Informatics at the Children's Hospital of Philadelphia (CHOP). Committed to solving the ethnic/racial bias in clinical workflow and decision support and ensuring equitable health care on a national level.

Kenrick Cato PHD RN CPHIMS FAAN

Standing Faculty Clinician-Educator and Professor of Informatics at CHOP

Join us for Alumni Weekend!

May 12–14, 2023

Graduates of all years and programs, students, faculty, family and friends are invited! We can't wait to see you back on campus!



- Connect with classmates at a variety of events from Penn Nursing and across campus
- Join Penn Nursing as we celebrate the exciting work of our programs, centers, faculty and students
 - Walk in the Alumni Parade and show your nursing spirit

Register today! www.nursing.upenn.edu/alumniweekend





Claire M. Fagin Hall 418 Curie Boulevard Philadelphia, PA 19104-4217

www.nursing.upenn.edu

BOARD OF ADVISORS

Krista Pinola, Nu'86, Chair

Dr. Joshua Berlin, W'95
Anthony Buividas, WG'79
Gilbert Casellas, L'77, PAR'08
Alberto Chamorro, W'78, PAR'05, PAR'09, PAR'10
Kelly Crowley, Nu'97
Bruce Darringer, C'91, W'91

Bruce Darringer, C'91, W'91 Eleanor Davis, Nu'82

Dr. Carladenise Edwards, C'92, GED'93

José Ramón González, W'89

Stephen Heyman, W'59, PAR'89

Steven Hoffman, C'91, W'91, PAR'21, PAR'22, PAR'25

Andrea Laporte, Nu'69

Maria Magliacano, Nu'98

Dr. Patricia Martin, M'85

Melanie Nussdorf, Esq., CW'71, PAR'02, PAR'04

Jean Renfield-Miller, PAR'15

Ralph Reynolds, W'84, PAR'17, PAR'20, PAR'23

Randi Roy, C'87, WG'91, PAR'19

John Rydzewski, W'75, WG'77

Marc Saiontz, W'95

Dr. Martin Sepulveda

Jan Sigmon, C'82, PAR'13, PAR'17, PAR'21

Patricia Silverstein, C'81

Ex-Officio

Jodi Feinberg, Nu'15

Emeritus
Cornelius C. Bond Jr.
Vivian W. Piasecki
Marjorie O. Rendell, CW'69



Please visit our online calendar at www.nursing.upenn.edu/calendar for current information on virtual and in-person events. We hope to see you soon!

