MIZZOUNURSING NEWS FROM THE UNIVERSITY OF MISSOURI SINCLAIR SCHOOL OF NURSING | SPRING 2022 Path to INNOVATION



FROM THE DEAN

There are great things happening all around the Sinclair School of Nursing, especially in research and innovation, as is evident in this Spring issue of Mizzou Nursing. Not only are we scientists who are innovating at a rapid pace in labs and clinical trials across the country, but we are the best conduit to bring these amazing discoveries to fruition in the communities that we serve. Here at the university, nurse scientists are working on devices to help our parents and grandparents age at home. We are creating curriculum for the pressing issues of today, like COVID-19 vaccine hesitancy. And we are partnering with other scientists across our fully comprehensive campus including our NextGen Precision Health colleagues to move research to boundless possibilities.

It's an exciting time here this spring as we congratulate the new class of 2022 graduates, and we anticipate the move to our new building in late July. Our building project is a dream that is becoming a reality in just a few short months. This new state-of-the-art building will provide us many more opportunities to teach and train the Mizzou nurses of tomorrow to be the next generation of great nurse scientists, expert clinicians, educators and innovators.

Sauch Chorpon

Dean Sarah Thompson

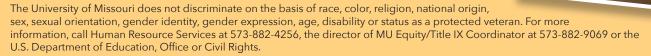
Path to

INNOVATIO

MIZZOUNURS



Please send feedback about this issue, or submit suggestions for future articles in *Mizzou Nursing*. You can write to us at nursing@missouri.edu or send mail to: Sinclair School of Nursing - Marketing 327 Math Science Building, Columbia, MO 65211.



03 The Precision START Lab

The Nursing School's Research Accelerator Written by Jack Wax

O6 From Lab to Life in the Community

Moving evidence-based interventions into health care practice.

Written by Kelsey Allen

10 The Spirit of Inquiry

MU Health Care's Professional Nursing Practice Journey to Excellence Written by Joe Walljasper

12 Anne Sales

The Implementer Written by Kelsey Allen

14 <u>Nursing Alumni Organization</u> <u>Award Recipients</u>

19 <u>Student Highlight</u> <u>Malaika Gallimore</u>

Written by Elesha O'Neil

20 Graduate Highlight Gabrielle Machado

Written by Elesha O'Neil

ON THE COVER

Photo by Elesha O'Neil Innovation in our Simulation Labs gives our students a state-of-the-art learning opportunity to practice clinical scenarios in real time.

















From the Nursing Alumni Organization

"Spring is the time of plans and projects."

- Leo Tolstoy, Anna Karenina

Fellow Nursing Alums and Friends of the Sinclair School of Nursing,

Spring is a time when nature awakens and is

abuzz with activity. So too is your Nursing Alumni Organization and the Sinclair School of Nursing. We are busy with exciting projects which include YOU and Mizzou-Made Nurses all over the world!

Where have you chosen to make your Mizzou-Made mark? What bricks have you laid and whose hearts have you touched along the way as part of your black and gold legacy? We want to know, and we want to tell YOUR stories - all of them. The Nursing Alumni Organization's historical preservation project, Charting Mizzou's Nurses: Year 1 to Year 120+, honors every individual Mizzou-Made nursing graduate, your story and your legacy. As this important project kicks off this Spring, be on the lookout for PCI (Publishing Concepts Inc.) to reach out to you to share your oral history. We cannot do this without you – help us share your story and preserve your history...our history... and light the path for future Mizzou-Made nurses.

Another exciting project is on track for completion

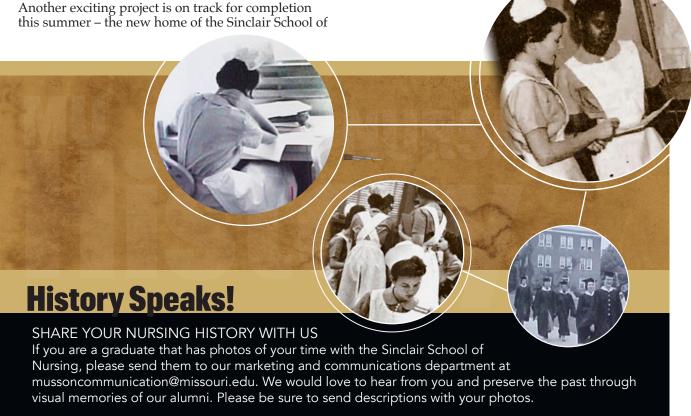
Nursing. Complete with convertible classrooms, student study and lounge space, expansive lab and simulation areas and much more, the building will enable us to stay at the forefront of nursing education and equip our students with the knowledge and skills to be leaders in a dynamic health care environment. To accomplish this, the Nursing Class of 1977 is on a mission and has already raised \$10,000 to purchase equipment for the new simulation center. The Class of '77 is challenging you and your classmates to help raise money for trainers, supplies and technology to benefit nursing students for generations to come. Every IV arm, chest tube drainage system, syringe and gauze pad make a difference to students. You CAN contribute – no amount is too small. To donate, visit our giving website at nursing.missouri. edu/giving/.

With your help, this Spring will be one of the most exciting yet for the Sinclair School of Nursing!

M-I-Z!

Suefowler

Sue Yun Fowler, BSN'11, MA'97, BJ'95 President, Nursing Alumni Organization



STREPRECISION STARIA D

Sinclair School of Nursing's Research Accelerator

Written by Jack Wax

Associate Professor Blaine Reeder, his colleagues and grad students are building bridges to a healthier high-tech future.

Some of their bridges cross health care disciplines; others link communities, spanning the distance between technology research and health care settings, even extending into patients' homes. From their digital lab in the Sinclair School of Nursing, they are connecting the newest advances in consumer-grade wearable technology to researchers who are investigating foundational issues confronting health care professionals – how to improve the health and well-being of patients, their families and communities. As might be expected of someone who is both an associate professor in the Sinclair School of Nursing as well as in the MU Institute for Data Science and Informatics, Reeder also spans the gap between the world of data and health care.

Reeder is the director of the Precision Smart Technologies and Applications for Rapid Translation (START) Lab. It's a one-of-a-kind lab that provides nursing and health researchers the certainty they need to explore the potential health benefits of wearable consumer-grade technologies, mobile apps and smart home innovations. Researchers on the MU campus and health care professionals throughout the nation rely on the accuracy of findings that originate in his lab. Not content to limit his research to technological and software questions, he also co-founded the Age-friendly Sustainable Smart and Equitable Technologies (ASSETs) for Access Intervention Research Team. Basically, Reeder has created a research assembly line that begins with evaluations of technology in the Precision START Lab, leading to the testing of interventions by the School of Nursing's ASSETs Intervention Research Team. Not only is his assembly line speeding the delivery of new interventions that connect people in their homes to

resources in the health care community, but it also generates dissertation possibilities for grad students in nursing and other health care professions.

Although other labs throughout the world are also testing smartwatches and other wearables, the Precision START Lab has the distinction of being a unique technology lab that is an integral part of a nursing school. "Our mission is to use these consumergrade technologies in intervention research," says Reeder. "We are purpose-driven, helping to find the technology that nurses and allied health researchers need to influence specific outcomes. And our advantage is that we're embedded with the interventionists who actually work with people, versus being completely technology focused."

Smartwatches and other wearable devices are becoming everyday accessories that millions of people throughout the world use to monitor their oxygen levels, pulse, stress levels and other metabolic indicators that previously required an in-person visit to a doctor or nurse. Sold to the public for their promise of a healthier lifestyle, the devices are being cautiously implemented by health care providers and researchers for more critical applications. Some are used in monitoring patients who need to keep close tabs on chronic health conditions or alerting otherwise healthy people to barely perceptible symptoms. Sensors in beds and in other locations in smart houses can help detect sleep problems or changes in gait and activity level, indicative of cognitive and behavioral changes. And some older adults, who are struggling to age in place and maintain their independence, rely on a wearable to call for help should they fall. But realizing the full potential of these devices to improve health requires extensive research – replicable studies, such as those of the ASSETs Intervention Research

Team. The School of Nursing is helping to open a new field of research, one that couldn't have been imagined before the invention and popularization of smart wearables and smart home technology.

Unlike consumers, researchers need more than advertising and anecdotal evidence to decide which device is the right one for a specific intervention or study. Before asking a research participant to put on a wearable or trust a home sensor, the reliability of these tools must be assured and their accuracy level confirmed. That's where the Precision START Lab is playing a crucial role in evaluating these devices. "Oftentimes, things like smartwatches, smart rings and mobile apps will come out, and the manufacturers or vendors of those devices will say, 'these things do A, B or C for a health-related purpose.' But it's not understood whether these things work as advertised — whether or not they're useful or even if they measure what they're supposed to measure," Reeder says.

The wide diversity of devices, data formats and ongoing rapid technological changes complicate the development of health research projects that depend on this class of technology. Consumer-grade wearables are a continually and rapidly changing technology. An app that works as intended today may be outdated or unsupported in months after being introduced to the market when a newer version comes along. In 2019, Reeder realized that a technology lab embedded in the School of Nursing could help overcome many of the barriers that

"The lab is getting

tools to researchers

in a more efficient

way."

prevent the timely use of this class of consumer-grade wearables and smart home devices. That's when he created the Precision START Lab to shorten the lag time between release of new sensor technologies, their management applications and their safe and effective use by patients or others. Over the past three years, his lab has been using a stepwise systematic evaluation

methodology that depends on a wide variety of testing methods, including focus groups, surveys and one-on-one interviews. User perceptions are as much a part of the lab's evaluations as reliability testing of the technology itself.

Knowledge generated in the lab can be applied immediately, "Once we understand how one of these devices work, every nurse or researcher who wants to use a particular smartwatch in our school can have access to the knowledge necessary to be able to use it," Reeder says. But the Precision START Lab's findings go far beyond the Columbia campus. "My colleagues and grad students use our findings, proceeding with their own research, which

is disseminated through journals and presentations. What we are doing here is pushing research forward."



Jo-Ana Chase, PhD'14, associate professor, who has examined physical activity research using wearables among older adults, appreciates the speed at which the lab evaluates devices. "The lab is getting tools to researchers in a more efficient way. The researcher doesn't have to wait years and until other studies of the device determine its validity and reliability," she says. In addition, the Precision START Lab positively impacts students. "It's a great way of helping students understand the research process and

preparing them for using these devices," Chase says.

Reeder's professional and educational background equip him with a unique skill set for creating and heading the lab. He's not a nurse, yet he's a faculty member of the Sinclair School of Nursing. "I'm not a computer scientist, but I do technology research. I am an informatician by training," he

says. He earned his bachelor's in sociology from the University of Washington, going on to earn CIS certification before continuing on to his PhD in biomedical and health informatics. He topped off his education with a post-doctoral fellowship in aging and technology as a National Institute of Health and National Institute of Nursing Research fellow. His diverse background and interests have prepared him for his role at the Sinclair School of Nursing as a lead investigator and mentor to students. "I've had to come up with a research approach that supports my focus on independent aging. My work falls between health outcomes research and basic scientific technology breakthroughs," he says.

Just as Reeder envisioned, the Precision START Lab has become a springboard for School of Nursing grad students and researchers from other MU schools and departments to launch and test their intervention research. Their innovative approach is evidenced in the broad range of research topics they are exploring – from developing apps to improve vaccine confidence in vaccine-hesitant parents of young children to apps that help older adults manage their diabetes to monitoring the activity level of residents of a long-term care facility.

Malaika Gallimore, a PhD student in nursing, is conducting the vaccine-hesitancy study, a timely topic that she conceived before the COVID-19 pandemic started. It was through the Precision START Lab that she gained the knowledge needed to develop her study. "I'll be making a prototype of an app, and I'm using some of the methodology I learned in the lab. I'll be doing think-aloud sessions, where we ask a person to go through the steps of using the app and literally 'think out loud' about their experience," she says.

The days when smartwatches were seen as accessories for professional athletes and amateur fitness buffs are long since over. With the help of researchers at the Sinclair School of Nursing, more and more people of all ages and health conditions will benefit from this wearable technology. "People are interested in monitoring their own health and being part of the decision-making process along with their health care providers," says Chase.

The Precision SMART Lab is taking this promising trend and turning it into an everyday occurrence. "As these devices continue to become more sophisticated, more widespread and better understood, they'll become just another source of information that patients, nurses and other health care workers can use to understand people's health and wellness," says Reeder.



Christina Hoff-Vollrath, DNP, RN, NE-BE

MU Health Care's SSON Alum Spotlight

As a proud SSON graduate (BSN'92, MSN'09, DNP'21) Christina Hoff-Vollrath serves as the executive director and director of nursing at MU Health Care's Women's and Children's Hospital. In her leadership capacity, Hoff-Vollrath has responsibility for providing executive guidance and vision for the Women's and Children's specialty hospital, nursing, ancillary and support services.

As a nursing leader, Hoff-Vollrath focuses on advancing patient care, patient safety and workforce resilience. She drives evidence-based, patient-centered care through her commitment to teamwork and communications with interdisciplinary care team members. She is currently responsible for the clinical integration of Women's and Children's service lines to one campus. During the initial phase of patient transfers to University Hospital, she served as the incident command to help ensure a safe and effective process.



She assumed leadership responsibilities for numerous complex change management workgroups during her career, including systemwide initiatives to foster safe patient care and a psychologically safe environment for her team members. Hoff-Vollrath joined MU Health Care's nursing team in 1991. She has over 30 years of health care experience, with five years' experience as a critical care nurse and 25 years in leadership.

From Lab to Life in the Community

With a focus not just on what works but also on what works where and why, MU Sinclair School of Nursing scientists are critical to moving evidence-based interventions into health care practice. Here's a look at how the nursing school is helping MU's NextGen Precision Health initiative create a translational pipeline.

Written by Kelsey Allen

Scientists proved in 1982 that beta-blockers significantly reduce mortality after a heart attack. Yet 15 years later, only a third of Americans hospitalized after heart failure were prescribed these agents, and beta-blocker therapy was not universally adopted as routine practice until 2007. This is not unique. It has been widely reported that it takes 17 to 20 years to get clinical innovations incorporated into routine general practice in health care, and fewer than 50% of evidence-based practices ever make it into general usage.

One reason is that most research does not account for the realworld context in which it will be implemented, yet personal behaviors cause more than 50% of illnesses. For example, people self-administer prescriptions; however, millions of Americans don't take their medicines as prescribed because of their high cost. Turns out changing behaviors is a complex process. Because nurses spend a great deal of time interacting with the patients they care for, they are in the best position to not only educate each patient who crosses their path but also to learn more about disparities and barriers to health behavior change in the communities they serve.

MU's NextGen Precision Health initiative and recently opened Roy Blunt NextGen Precision Health building will help accelerate critical health care discoveries by looking at a person's genetic material, environment and lifestyle to optimize research in clinical treatment. Its ultimate objective is to shorten the time it takes for lab research findings to reach clinical practice. MU Sinclair School of Nursing scientists are critical to closing this research-to-practice gap. Their research is informed by the patient's and family members' experiences and are an essential mechanism for the translation of evidence from lab to life.

"Our eyes may see a situation a little bit differently than other members of our multidisciplinary team that cares for patients," says Jane Armer, professor emerita in the MU Sinclair School of Nursing.

For example, Armer, known for her extensive research on lymphedema after breast cancer treatment, found that breast cancer survivors often won't follow proven techniques to manage the swelling associated with lymphedema or they will use alternative treatments and not discuss them with their doctors. To facilitate an improvement in the use of the most effective treatments — and the quality of life of these

women — she researched the ways they self-manage their chronic symptoms. She then launched a national, multidisciplinary collaboration to establish and maintain up-to-date best practices supported with evidence-based lymphedema treatment guidelines for health practitioners.

"If you find a promising medication for the treatment of any disease but patients do not take it, the discovery by itself will not be of benefit to people," says MU Sinclair School of Nursing Dean Sarah Thompson. "Discoveries require a health care provider to translate the discovery into patient care or behavioral interventions for individuals, families, communities and populations. That's where nurses come in. We are at that translation point from discovery to implementation."

The Role of the Nurse Scientist

There are more nurses in the frontline of health care than any other health care profession. Historically, nurses have been framed as caregivers at the bedside. But today's nurses are scientists, too.

MU Sinclair School of Nursing scientist, practitioner and Assistant Professor, LeeAnne Sherwin, for example, studies those who suffer from chronic gastrointestinal disorders to develop a smartphone reminder application that improves medication compliance. Another nurse scientist at MU, Assistant Professor Allison Anbari, studies rural breast cancer survivors' experiences managing lymphedema, an at-risk population that is underrepresented in cancer research. Her findings will lead to a tailored intervention to improve their quality of life.

Nurses also partner with scientists in other fields, such as medicine, psychology, public health, social work and engineering. These collaborators share data, evaluate research, study emerging interventions and address obstacles to their use, build solutions to complex issues and even improve equipment. Nurse scientists are in a unique position to contribute as they can share the patient perspective and have the ability to interpret research findings through a clinical- and patient-centered lens.

"Say the NextGen bench scientist finds a gene that increases cancer survivors' propensity to develop some condition in the future and is connected to the way a breast cancer survivor needs to be monitored or followed up with," says Anbari, who is collaborating with MU Extension to identify rural breast cancer survivors willing to participate in a qualityof-life intervention trial. "Just because you live in a non-urban ZIP code doesn't mean you should not have access to participating in clinical trials or in translating research to practice. As nurses, we take a holistic approach. So, we're always thinking about the bigger picture and pointing out what-ifs. Have we thought about whether this could be done via telehealth? Could this be done with just one lab visit a year? The more we can

tailor and individualize those plans of care into survivorship, the better outcomes we'll have."

Context Is Everything

Over the past 10 years, Professor Anne Sales has delivered many presentations on implementation science — the relatively new field that evolved out of the need to identify and address the barriers and facilitators to the adoption of evidence-based clinical innovations. But it wasn't until she was invited by the executive director of NextGen Precision Health, Richard Barohn, to speak at Mizzou in April 2021 that the University of Michigan professor ever talked about implementation science and precision health in the same breath.

"Discoveries
require a health care
provider to translate the
discovery into patient care or
behavioral interventions for
individuals, families, communities
and populations. That's where
nurses come in. We are at that
translation point from discovery
to implementation."

It wouldn't be the last time. Five months after Sales spoke of how both implementation science and precision health share the ultimate goal of improving the quality of health care through an interdisciplinary approach with an emphasis on changing current health care practices, Barohn and Thompson recruited her to Mizzou, where she is now a professor in the MU Sinclair School of Nursing and the School of Medicine.

Before coming to Columbia, Sales spent a decade at the University

of Michigan, where her work involved theory-based design of implementation interventions. For example, Sales studied how feedback reports affect provider behavior, thus impacting patient outcomes. She also looked at the role of social networks in the uptake of evidence-based practices and implementation interventions. Although Michigan has a precision health initiative, it is narrower in scope than Mizzou's, Sales says.

"The [Michigan] Precision Health initiative focuses very heavily on risk prediction — which involves artificial intelligence and machine learning about individuals and their health needs, but it doesn't run the gamut through to population health," she says. "It's a modeling approach. It hasn't, to date, gotten full scale into implementing those into practice, which, of course, is my area of interest. It's clear that NextGen at Mizzou is intended to be a complete bench-to-bedside-topopulation approach."

The Clinical Translational Science Unit, for example, which will allow patients to participate in trials for research, is located within NextGen's Innovation Tower. To have first-in-human clinical testing at the site of research, as opposed to units in other health care buildings, is a marked difference from other precision health initiatives. Another thing that impressed Sales is that the 265,000-squarefoot building also has space to produce pharmaceutical drugs. "It's a big undertaking but also a huge opportunity," she says. "There's an awareness that unless the translation to practice and the translation to community pieces are explicitly designed into precision health work and planned for, then they're not going to happen or they're not going to happen fast. This is where nursing comes in."

As an implementation scientist working within the NextGen Precision Health initiative, Sales will help interdisciplinary teams think about how to move evidence from clinical research into routine practice. When faculty are involved in clinical trials, for example, Sales will help them design the protocol to look like the real world as much as possible.

"Most clinical trials are highly structured," Sales says. "They limit the number of patients and the types of patients who are involved in testing effectiveness, and that poses a huge problem for implementing into routine practice because we don't really know how it works in patients who weren't part of that study sample. When you do full-scale realworld effectiveness testing, you don't restrict populations. You take all comers. Then, when you have your results or a better understanding of the effectiveness of this drug or this method or device or whatever, you've already actually thought about how to integrate it into practice."

Agents of Change

Although implementation science in health care is relatively new, nurse scientists have been addressing the application of evidence in practice to improve care delivery, patient outcomes and population health and setting directions in this field for decades.

Before Jane Armer developed comprehensive guidelines for the assessment, treatment and management of lymphedema, she had to prove that it was still a problem in practice. In the late 1990s, clinicians treating breast cancer thought lymphedema was a thing of the past. But Armer was still seeing cases among women in her research on breast cancer survivorship.

One of Armer's innovations at MU is measuring patients' arms with a perometer, a machine that has a large optoelectric frame that glides over the arm, scans its image and records an estimated limb-volume reading. Using a perometer, Armer launched a first-of-its-kind study to follow more than 300 women from breast cancer diagnosis through seven years' survivorship to learn



Dr. Jane Armer, Dr Kandis Smith and an honors research assistant work with the perometer in the research lab.

more about the condition and risk for lymphedema and how it can be reduced and treated. She found that an estimated 20-40% of breast cancer survivors develop lymphedema, which can be not only painful and debilitating, but also may have psychological effects. Although lymphedema cannot yet be cured, Armer reports it can be managed with exercise, skin care, manual lymphatic drainage and compression for swollen limbs. First implemented in a research setting at MU, the perometer is now used across the country.

"Once we were able to show that pre-op measures could be done and we began to report those findings, amazingly, across the country, cancer centers began to realize they could do that too," Armer says. "So now, many cancer centers and

many clinical trials, funded by the National Institutes of Health and the National Cancer Institute, have pre-op measures and symptom assessment as a part of the protocol. With that now in place, we're able to detect and treat lymphedema earlier, and we can reduce the risk of it becoming a chronic condition."

Today, the emerita professor at Sinclair School of Nursing is on the cusp of launching a study where she will follow up with the same breast cancer survivors 20 years later. Armer is also involved with NextGen, which focuses on cancer research as one of several key topics that impact the health of Missourians. She is on an interdisciplinary team that reviews breast cancer-related clinical research studies involving

"As a nurse, I'm able to respond to the feasibility of a study," she says. "Like is it really possible that this study could be carried out in this setting? As nurses, we can think about new approaches, for example, not always requiring our study participants to check into a hospital or a clinic. How can we make the engagement in the research process more feasible, more convenient for the patient? Input from the people caring for the patient is integral to the adoption of a protocol and for it to be successfully carried out."

Discovery Is Just the Start

human subjects.

Associate Professor Blaine Reeder is an informatics researcher who has been working with nurses for the past 15 years. At the MU Sinclair School of Nursing, the associate professor combines his background as a software engineer and entrepreneur with his doctorate in biomedical and health informatics to research how technology can help support healthy aging.

"I'd been citing Marilyn Rantz' and Marjorie Skubic's research from the Center for Eldertech and Rehabilitation Technology since my graduate school days," says Reeder, who came to Columbia in 2019.

In his Precision START (Smart Technologies and Applications for Rapid Translation) Lab at the MU Sinclair School of Nursing, Reeder evaluates emerging technologies like smart homes, wearable devices and mobile apps — important tools for the future of precision health — for technical function and usability. Even though the market for these monitoring devices is booming, their effective incorporation into clinical care remains a challenge.

"You have this vast ecosystem of technologies and all of these devices that are measuring activity, heart rate, temperature, but we don't know how well they work, and we don't know whether people will use them," Reeder says. "Those technologies need to be tested to

understand how well they function and how people interact with them long before they can support an intervention that can get out in the community."

For example, Reeder, his fellow investigators and graduate students are evaluating a new consumergrade smart ring designed to give wearers insights about their sleep and activity levels. Through labbased tests with older adults, his team explores user experience and tests how the retail ring functions compared to a research-grade device. His team uses a stepwise methodology they developed for rapidly evaluating consumer-grade sensors so they can be used in larger implementation studies, thus more successfully incorporated into routine health care.

"We can build an app for medication management, but if it's really hard to use and the information is hard to interpret, then people aren't going to use it, and they're not going to improve how they manage their medications," Reeder says.

Reeder says nurses are critical to the translational research infrastructure of precision health.

"If an innovation comes out of the NextGen Precision Health building, unless it gets in the hands of people in ways they can use it, it'll never happen," he says. "Regardless of whatever you discover about a disease, that has to translate into someone's life and how they live. It just won't work if it's not contextualized to a person's daily life. People are different, and we have to understand that. Well, nurses practice everywhere. Nurses are the conduit for that sort of information and support. Nurses will help translate those things to the populations that need them."



Shanon Fucik, MBA, RN, CPN, NEA-BC

Shanon Fucik - MU Health Care New Chief Nursing Officer

Shanon comes to us from Children's Mercy Kansas City. She previously served as the Senior Nurse Director of Emergency Services, Trauma, Critical Care Transport and Patient Logistics. She is a nurse with 20 years of healthcare leadership experience leading progressively larger scale departments and programs with expertise in team leadership, staff development, hospital operations, data analysis and organizational program management.

With a passion for patient safety and performance improvement, she served as the hospital's National Program Manager for the Solutions for Patient Safety, which primarily focuses on using high reliability concepts and quality science methodologies to reduce hospital acquired patient harm. Shanon led work to standardize nurse to nurse bedside hand-off at Children's Mercy and published the work in the *Journal of Pediatric Nursing* called "Standardized Bedside Hand-off: One Organizations Journey."

Fucik has an Executive Master of Business Administration degree from the University of Missouri-Kansas City, a Bachelor of Science in Nursing degree from the University of Kansas, and certifications in pediatric nursing, lean six sigma, and nurse executive advanced practice. She served on the board of the Society of Pediatric Nurses as treasurer for 5 years, Missouri Organization of Nurse Leaders board for the last 6 years where she just rotated off as president of the board in 2020. She served on the American Organization for Nursing Leadership (AONL) Affiliate Planning Committee for 2 years and currently serves on the Missouri Organization of Nurse Leaders Nomination Committee and American Organization for Nursing Leadership Conference Planning Committee. In addition, she was just elected to the AONL board of directors representing region 6 where she began her term in January of 2022.

As Chief Nursing Officer she inspires, plans, organizes, directs and evaluates nursing care throughout the organization and provides strategic and operational leadership at the executive level.



The Spirit of Inquiry

MU Health Care's Professional Nursing Practice Journey to Excellence

Written by Joe Walljasper

University of Missouri Health Care's (MUHC's) Office of Professional Practice (OPP) was established in Spring 2018 to promote the art and science of professional nursing. Building, developing and sustaining a practice environment grounded in evidence-based practice (EBP) and nursing research is essential to professional nursing to ensure the organization's mission of saving and improving lives. The team motivates the spirit of inquiry among MUHC's almost 1300 professional registered nurses. Under the direction of the OPP's Director of Nursing Sean Pridgeon, DNP'21, the team consists of an EBP/research coordinator, policy coordinator, magnet coordinator, professional development/patient education coordinator and a nurse scientist.

The OPP's initial endeavor was the design of a graphic depiction of a professional practice model to guide MUHC's professional practice of nursing. The professional practice model describes how registered nurses practice, collaborate, communicate and develop professionally to offer the highest-quality care for those we serve. MUHC's professional practice model has three overarching themes: discovering, learning and improving, with the central underpinning of delivering patient-centered care with every encounter. The model includes seven basic tenants of professional nursing practice, including collaboration, compassion, caring, delivering, innovating, serving and life-long learning.

The nursing practice model is something MUHC nurses strive to practice each day with every patient encounter.

Nursing Professional Practice Model



The OPP also focused on revitalizing the clinical shared leadership (CSL) structure, also referred to as shared governance, to integrate MUHC's nursing core value system and beliefs into practice. The CSL concepts were restructured to incorporate partnership, accountability and ownership of the professional nursing practice by capitalizing on staff-driven, decision-making at MUHC. The council structure includes unit, division and system levels teams. Councils provide expert guidance and decision-making in practice and quality-related issues, education and development, professional recognition and advancement, evidence-based practice and research,

informatics and technology and nursing leadership. An executive council representing leaders from the various councils provides oversight. The CSL structure ensures those closest to each area of work are leading decision-making related to their work. Each council has a leadership advisor and mentor for assistance as needed. Capitalizing on the many assets of the CSL structure, nursing practice through evidence-based policy development has contributed to the development of 12 nurse-driven system-wide protocols. These standardized nurse protocols allow nurses to practice at their highest capacity while reducing variation in care, enhancing nurse workflow, improving and achieving desired patient outcomes and modifying nursing practice through evidence-based care. Every nurse protocol is reviewed periodically to ensure current literature and best practices are maintained through the efforts of OPP's policy, procedure and protocol coordinator, Ashley Borgmeyer, BSN'08. Nurses now provide ownership and lead quality initiatives related to nurse-sensitive care indicators.

Clinical Shared Leadership Model



One of the OPP mentored system-wide CSL Councils, the Evidence-Based Council, consists of experienced EBP mentors representing individuals throughout MUHC enterprise with Sinclair School of Nursing representation. Committee chair Jessica Hoehne, BSN'11, MSN'17, DNP student, coordinates the group's efforts to identify ways of supporting and advancing the EBP culture throughout MUHC. One concern identified as a knowledge gap was access to 'just in time' resource information regarding EBP/research techniques. Numerous resources were identified, developed and tested within the nurse residency program and are in final preparation for posting to the nursing intranet site. Initially, a supportive presence by CSL EBP/research members is critical to provide ready access to resources and ongoing support for the conduct of formal projects and to help ensure their success. MUHC has several nursing leaders who

are actively pursuing doctoral degrees and can support a research program that addresses the identified programmatic objectives. Working together with frontline CSL nurse representation, individuals currently seeking advanced nursing degrees from SSON form the necessary support structure to support the advancement of nursing research within our culture.

Especially in the era of COVID-19 and associated staffing implications, the importance of evidence-based projects to expand current nursing care practices is more essential now than ever. Participation in EBP activities benefits nursing and other health care professionals at MUHC and beyond, such as improved patient outcomes, enhanced job satisfaction and nurse workforce retention. The foundations of MUHC's EBP program must be robust and widely available for all interested staff to ensure safe, timely, effective, efficient and patient-centered care and serve as a 'feeder' source to foster a productive nurse-driven research program.

The groundwork for a maturing EBP nursing program has been established through these various efforts. The EBP program is a vital element to inspire future nursing research. EBP projects serve as a primary 'feeder' source for knowledge gap identification and the potential for further exploration. Further enhancements of the foundation for EBP practice are essential to ensure the success of progressively increasing volumes of nursing EBP and research activities. Promoting and conducting nursing research is necessary to build and sustain the spirit of inquiry and advance the science of nursing practice at MUHC. Since the OPP's inception, several nurse-led research projects have been completed at MUHC. MUHC's nurse scientist, Susan Scott, BSN'88, MSN'94, PhD'14, meets with teams where ideas are generated, ideas prioritized via the CSL EBP Council and research design planned with appropriate research methods to ensure studies have a scientifically sound design and methods utilized for the outcome/ information desired, and assists individuals in externally disseminating their improvement initiatives. The role also cultivates relationships between MUHC and the Sinclair School of Nursing faculty/staff/students to promote research and evidence-based practice collaboration.

Nursing is such an integral part of that mission. MU Health Care's Office of Professional Practice ensures that our professional practice model based on evidence-based practices with oversights from our CSL councils helps every professional nurse practice at their fullest potential to provide state of the art, patient-centered care each day.

Anne Sales The Implementer

Anne Sales is building capacity in an emerging field that has tremendous potential to improve patient care and public health.

Written by Kelsey Allen

Ask Anne Sales about the state of science in implementation science, and she'll give a powerful answer: "I don't know."

It seems counterintuitive. Shouldn't the co-editor-inchief and one of the founders of the emerging field's top journals have all the answers?

But her willingness to admit that she doesn't know isn't a weakness — it's a leadership skill. One that separates strong leaders from insecure ones and shows both humility and confidence. And her ability to say those three words could be the best thing for Mizzou.

A researcher with joint appointments in the Sinclair School of Nursing and the Department of Family and Community Medicine in the School of Medicine, Sales was recruited to Mizzou to build capacity in the science and practice of implementing evidence-based health interventions into routine care. In an industry with a 17-year research-to-practice gap and in a time when the university is heavily investing in translational science, Sales is saying, "Let's figure this out together."

The Missing Link

Nurses are key drivers to delivering safe, quality care. At the bedside day in and day out, they are often the best people to assess health care services and work toward improving them. They not only identify and bridge gaps in care but also understand how a person's environment impacts their wellness.

Sales has always had an interest in quality improvement. Her first published papers were on the topic, and after becoming a nurse practitioner and earning a PhD in health service research, she started working in the Veteran Affairs' Quality Enhancement Research Initiative (QUERI). Within QUERI, Sales and her colleagues worked to not only improve quality of care but also harness their health service research expertise to study gaps in the use of evidence-based practices and address them at the system level.

One early example: In 2001, they conducted a qualitative study, interviewing over 60 physicians, nurses, pharmacists, dieticians, quality managers and other clinical and nonclinical staff across six VA medical centers, to identify barriers and facilitators to the implementation of pilot interventions designed to improve the measurement and management of low-density lipoprotein cholesterol levels in coronary heart disease patients. The results, published in a 2004 paper in *Worldviews on Evidence-Based Nursing*, showed that developing how-to guides that teach intervention teams how to anticipate barriers and make plans to address them should be a top priority.

"Quality improvement in health care has a lot of really good features, but one of the things that it really doesn't have is solid systematic research," says Sales, an expert in organizational and system behavior change. "Project after project after project gets done, and we learn something that works at that time for that particular environment, but it doesn't get captured and it doesn't spread. Instead of really learning from it systematically, individuals learn from it momentarily and learn how to do things better the next time they do it."

Sales and her fellow VA researchers didn't know it, but by developing generalizable knowledge that could be widely applied beyond the VA, they were laying the foundation for implementation science as a field. "I feel like I grew up with the field in a lot of ways," Sales says.

At the time, the term "implementation science" hadn't even been coined yet. The flagship journal in the field wasn't established until 2006. These days, *Implementation Science* receives over 800 submissions annually, 85% of which gets rejected. Its sister journal, *Implementation Science Communications*, which Sales co-founded in 2019, received over 100 submissions its first year.

Still, there is a lack of agreement on what implementation science really means. "When someone says, 'I'm doing implementation science,' often what they're doing is implementing things. They're not studying implementation," she said during a recent presentation

to Duke's Department of Population Health Sciences. "It worries me if we keep saying it's all science. It isn't. That's part of the problem."

With a nod to her undergraduate degrees in sociology and anthropology, Sales defines implementation science as "the study of planned human behavior change under organizational constraints."

"Organizations are really understanding the need for systematic approaches to how they manage the care they deliver," she says. "And that's one of the things that excites me about Missouri — I think there is significant organizational willingness to take this on."

A Roadmap for Change

Before Richard Barohn was MU's top health administrator, he saw Sales give a presentation on implementation science. It was 2019, and he was still the vice chancellor for research at the University of Kansas Medical Center and she a professor at the University of Michigan. When Barohn was tapped to become the executive vice chancellor for health affairs for MU in 2020, it became one of his goals to get her to Columbia.

"Results from conducting translational science and precision health research cannot make a difference in the lives of patients if they are not implemented," says Barohn, who is also the executive director of the NextGen Precision Health initiative, which is dedicated to accelerating critical health care discoveries and shortening the time it takes for lab research findings to reach clinical practice.

The dean of the Sinclair School of Nursing, Sarah Thompson agrees: "Nurses can play a crucial role in making precision health solutions work in the context of patient care environments and health care delivery systems."

Sales' joint appointment with the nursing school and the medical school is important. Implementation research requires cross-disciplinary research involving not only your traditional health care, social work, psychology and engineering teams but also people who are not routinely part of most clinical trials such as economists, sociologists, anthropologists, administrators and patients.

"This is very much collaborative work," Sales says.

That might look like working with the Clinical Family and Community Medicine's Associate Professor, Robert Pierce on how to systematically implement a tool he's developed that uses machine learning to create a risk prediction score for the probability that someone who is admitted to a hospital is likely to die within the next 30 days, which would allow the palliative care services team

to start providing services sooner.

Or it might look like collaborating with Richelle Koopman, the director of Family Medicine Research, to better staff primary care clinics to affect the quality and efficiency of care and improve access for patients. "We don't have nurse researchers on our faculty in family medicine, so being able to easily incorporate that perspective is an advantage," says Koopman, the Jack M. and Winifred S. Colwill Endowed Professor in Family & Community Medicine. "For example, the demand for primary care far exceeds the amount of capacity that we have. Figuring out ways that we can stretch physicians by having more of a team approach and then showing that actually leads to improved care and is a better value for the health system and payers — that is where we need rigorous evaluation, and Dr. Sales can really help us."

It also looks like sitting in monthly Percolating Proposals meetings with the School of Nursing's interim assistant dean of research, Deidre Wipke-Tevis, BSN'85, and helping postdoctoral fellows and early career faculty learn how to look beyond the individual and implement best practices into the clinical setting across health systems. "She is a very gracious scholar," says Wipke-Tevis, who directs the PhD Program. "She's very giving of her time. It's not just about what she can do to make her own program of research move forward. She really is invested in developing those behind her — not only budding nurse scientists but young physician researchers and other interdisciplinary scientists — to improve health care."

The Next Generation

One of the reasons why there is such an implementation gap is that there simply aren't enough implementation scientists. So, when Sales says, "I have no idea," what she's really doing is inviting others in the room to become part of the problem-solving process.

A mentor to numerous National Institutes of Health Career Development (K) Award recipients, she launched *Implementation Science Communications* so junior faculty would have a place to submit their work. Her primary focus, both at Mizzou and the University of Michigan, is helping people learn how to move things from demonstration to widespread acceptance and use.

"The thing that matters the most to me is the success of the people I worked with," Sales says.

One of those people is Ted Skolarus, associate professor of Urology at the University of Michigan and the VA Ann Arbor Healthcare System who is trying to eliminate low-value practices in prostate cancer care. His mentor from 2011 to 2018, Sales met with Skolarus almost weekly and played a pivotal role in his career progression.

(Continued on page 18)



NURSING ALUMNI ORGANIZATION

2022 AWARD RECIPIENTS



Brittany Kwamin, BSN'17 ALUMNI ACHIEVEMENT AWARD

Even before graduating and becoming a licensed nurse, Brittany Kwamin, BSN'17, had a passion to prepare fellow students for the rigors of their coursework and future professions while also focusing on inclusivity and diversity. She founded Finding Your

Identity in Nursing, a professional development nurse mentor program for pre-nursing and pre-health professions students, to fill the need for a safe space to share their stories, develop relationships and support each other through their journeys at the university. "I wanted to give them a place to use their experiences, thoughts and ideas to do something new," she said. "It helped make Mizzou a little bit smaller."

Due to a chronic health condition diagnosed at a young age, Kwamin spent a lot of time in hospitals. "I had a really, really impressive nurse," Kwamin said. "She took the reins. She made sure I was comfortable, that my family was comfortable. The nurses were the ones who really stood out." After starting college as a psychology major, Kwamin felt something else might be a better fit for her. Her first foray into the SSON connected her with the late Thom Bowling, executive assistant for student services, and often one of the first people students would interact with during his 13 years at the school. "He could tell I was freaked out when I walked into the room," Kwamin said. "He made it seem like it was okay. Nursing is probably the best decision I've ever made."

Kwamin says a highlight of her career so far has been interacting with and teaching students when she worked as a rehabilitation nurse at Rusk Rehabilitation Hospital. "I think I was more excited than them sometimes to teach something or to solidify for them that nursing was the thing to do," she said. "When you're a student, there's a little bit of doubt – does anybody want me here, am I a burden?" She would take the time to show students different ways to communicate with patients and family members, how to use kindness to solve conflicts and offer a listening ear to patients and families. Kwamin also loves seeing nursing students she has worked with graduate and become colleagues.

Kwamin plans to launch The Breakroom, a website-based nurse hub for students and current nurses. Kwamin says the pandemic helped show her how much people rely on the Internet and remote information options. The site will feature courses on resume building, interviewing, opportunities for mock interviews and more.

Kwamin has taken her passion for allowing everyone the space to share their experiences to her current position as a telehealth coronavirus testing nurse supervisor. She has found it helpful to give patients the time to share their stories, fears and concerns. "Your care always has to be one-to-one," she said, no matter the format. In 2021, Kwamin spent a few months as a COVID-19 vaccine administration travel nurse. During that time, she saw more hope in patients' eyes. "Being part of something that gets us out of the pandemic was really cool," she said. "My journey at the Sinclair School of Nursing was a full journey," Kwamin said. "It was a very full experience. I learned so much and I met so many incredible people. I hope that they know I am still here even when I'm old and grey. They're still family. Whatever I gave them they gave me ten times over."

Kwamin was the professional nurse ambassador for the school from 2014-20, a student ambassador for the UM Chancellor's Diversity Initiative, Student Nurses Association diversity in nursing committee chair, and was inducted into the Mortar Board Society in her senior year. She was nominated for two DAISY awards in her first year of professional nursing.



Eric Slaughter BSN'03
ALUMNUS OF THE YEAR AWARD

A year before the COVID-19 pandemic began, Eric Slaughter, BSN'03, became the infection prevention nurse and safety and emergency preparedness director at Missouri Delta Medical Center (MDMC) in Sikeston, Mo. In the last two years of the pandemic, he has worked nearly

every day to ensure staff and patients are safe. His role includes monitoring patient COVID-19 infections, tracking hospital bed availability, reporting cases to the CDC and serving in leadership roles in the infection prevention and emergency preparedness aspects of the MDMC COVID-19 Task Force. "Eric not only kept our task force informed but was also proactive in providing recommendations on policy updates as the COVID-19 pandemic evolved," said Jason Schrumpf, MDMC chief executive officer. Slaughter has provided guidance at the local, regional and state level, become a source of information for media outlets, assisted with vaccination events and ensured Personal Protective Equipment (PPE) was available for staff. "The fact that Eric wears multiple hats within our organization and absolutely delivers in every aspect of his work, speaks to his character and time management skills," Schrumpf said. "Eric is an exemplary employee, a dedicated, hard-working leader and proved to be a huge asset not only to Missouri Delta but also to the entire region we serve during the pandemic."

It has been exhausting and challenging to respond to the

constantly changing landscape of the pandemic. "The hardest thing for me is not seeing an end in sight," Slaughter said. "It's been the continuous unknowns. Every time you think you're moving forward something new comes up. A new variant or a new wave, a new surge is on the horizon. You think you have this vaccine and we're on the right track and you get a variant where you maybe aren't as protected by the vaccine. I do shoulder a very large burden making sure I keep all my colleagues safe." Slaughter's co-workers, friends and twin sister, Erin Discher, BSN '03, report that he has responded to that burden with a consistent positive outlook. "Eric continues to be a voice for nurses and health care workers, encouraging them during such a trying and challenging year. He is a positive role model whose efforts have only brought a reassuring light to such a dark and trying time in health care," Discher said.

After starting college as a pre-med major, Slaughter found he was drawn to the many career options for nurses and the opportunity to engage with patients. "What drew me to nursing is the relationships with patients, medical staff and nursing staff," he said. "I love working alongside everyone. I don't do as much patient care anymore, but I do know that what I'm doing is making them safe." Over nearly 20 years as a nurse, Slaughter has consistently sought the positions and opportunities that would make him a better nurse and in turn, a better leader. "You're always learning," Slaughter said. "You learn something new every day. I love to be challenged. I feel like every new experience I've taken on makes me a stronger nurse." He even turned down a promotion in order to hone his skills and knowledge further before stepping into a more prominent leadership role. "I want to prove myself among my peers before I assume a leadership role over those peers," Slaughter said.

Slaughter encourages nursing students and new nurses to remember the value they provide. "Nursing is hard. Nursing school is hard. Your first few years out of school are hard," he said. "The positive impact that a nurse makes for a patient in some of the most trying times in their lives when they're really sick or in the grieving process, you are making a difference. It is a process that will reward you. You're doing God's work."



Rose Ward, BSN'69 HUMANITARIAN AWARD

Rose Ward, BSN'69, has used her compassion, determination and organizational skills for nearly 20 years to serve and clothe students in Columbia, Mo. Ward serves as the volunteer manager of Operation School

Bell, the largest philanthropic program of the Assistance League of Mid-Missouri (ALMM). The program provides a set of new winter clothing, a coat and a hygiene kit to preschool through fifth graders in need in the Columbia Public Schools. The sheer volume of the items needed to clothe up to 1,600 students each year means Ward must keep a detailed database in order to prepare and budget for the coming year. She also scours the stores for sales, purchasing stacks of clothes when she finds a good bargain. More than 12,000 clothing items must be purchased in sizes ranging from 4T to adult 4X. "It's just something I do," Ward said. "It's helping people. That's what nursing is all about." In addition to tracking supply needs, managing clothing inventory and a budget that can vary year by year, Ward also heads a team of volunteers in a nearly seamless, well-organized manner, said former advancement officer Ana Compain-Romero. Ward humbly sees her skills as part of what she does. "I always want [my team] to say, wow, that was well-run, that was organized," she said.

Before the pandemic, Ward and her team spent 6 to 8 weeks each fall welcoming groups of students to the ALMM's Upscale Resale storefront to try on and select their clothes. "That's part of what's so much fun about doing this," she said. "We'd have them come and look in the mirror and see how great they looked, and all the ladies would gush over them. It was a very good thing for the kids' self-esteem." Ward said she was most surprised to discover the impact of the hygiene kit. "The kids would say, 'you mean I get my own toothbrush?'That hits home at how sad the situations are for these kids," Ward said. Kate Harry, ALMM past president, praises the way Ward's work has touched the children of Columbia. "It is no exaggeration to say that Rose has had a positive impact on the lives of tens of thousands of Columbia school children through her leadership of Operation School Bell," she said.

After the pandemic began, Ward had to find a new way to get clothing to the students since they could no longer come to the store. For now, the program is using a pack and deliver system to bring clothing packages to students at their schools. "We miss seeing the kids," Ward said. "We've told ourselves it will be like Christmas for the kids now." The pandemic also meant reduced revenue at the store as well more difficulty obtaining supplies. However, the ALMM was still able to provide clothing and hygiene kits to 1,460 school children during the 2020-21 school year.

During her nursing career, Ward worked in the cardiac cath labs at University Hospital and Boone Hospital. "I loved it," she said of her work as a nurse. Ward's husband, Jay, MD'69, PhD'15, and son, Brian Ward, BS'97, MD'02, both specialized in gastroenterology. Now, she is hoping at least one or two of her five grandchildren will attend Mizzou.

2022 AWARD RECIPIENTS



Tina Bloom

Intimate Partner Violence (IPV) remains largely unseen and unrecognized even among many nursing staff. Tina Bloom, PhD, became aware of this missing piece of her own nursing skill set once she began working on research with Mary Anne Curry, BSN'64, DNSc. "I was blown away," Bloom said about acknowledging

she had never asked pregnant women in her care about abuse. "I realized that my whole career I had been missing this huge factor for women's and children's health and I had been totally failing to help or support my patients that were in that circumstance. It just kind of seemed like we were all sort of pretending it didn't exist." That first job with Curry sparked a career path focused on IPV and finding ways to help women assess their situations and seek safety through the use of technology.

After earning her master's in public health, Bloom worked for Dr. Nancy Glass, a professor at the Johns Hopkins University School of Nursing, who had the idea to use technology to provide abused women with private access to safety planning. The ability to access a tool for planning and danger assessment helps overcome the stigma, fear and shame that women feel about being in an abusive relationship, Bloom said. The safety planning provided by domestic violence hotlines has been shown to be highly effective; unfortunately, very few women ever use that tool. The technology has evolved from its start as a program on a laptop taken to domestic violence shelters, to a web-based assessment tool and into a smart phone app. The program provides a risk assessment tool to identify the most dangerous abusive relationships and ways to weigh competing priorities such as feelings for their partners and the need for resources. "It's really important for women to understand how dangerous their situation is," Bloom said. The program has been tested in countries around the world.

Bloom was an associate professor at the SSON from 2014-20 before taking a position as associate professor and Frances Kay Pitts '96 Endowed Chair for Nursing Leadership in Women and Children's Health at Notre Dame of Maryland University School of Nursing in Baltimore. She continues as an SSON adjunct associate professor and Robert Wood Johnson Foundation Nurse Faculty Scholar.

In 2021, Bloom spent 6 months as a Fulbright U.S. Scholar to Thailand to adapt the danger assessment instrument to the Thai context, working alongside her former doctoral student, Tipparat Udmuangpia, PhD'19, who is now on faculty in Thailand.

Although working with abuse victims can be challenging and intense, Bloom said she has been more awed than depressed when she considers the women with whom she has worked. "What I heard a lot from survivors was just resourcefulness and determination. Women just keep going, sometimes in circumstances that are almost unimaginable," Bloom said. "I realized I admired a lot of the survivors that I talked to. People shouldn't feel sorry for abused women. We just need to do a better job supporting them with what they need to get safe."

Bloom pours her knowledge and passion into undergraduate and graduate students alike. She has served on committees for numerous doctoral students and while at the SSON led multiple student trips to Ghana. Ultimately, she wants to help students see the possibilities in nursing and better understand violence and trauma. "I want to save them from that horrifying feeling I had when I realized I had spent years working with vulnerable patients and just missed something so important."



Katherine Kelly, PhD'08 CITATION OF MERIT AWARD

Children with cancer face numerous treatment decisions, and Katherine Kelly, PhD'08, has focused her research on determining best practices in treatment communication and shared decision making for pediatric patients and their families using qualitative

methods. An early career decision to work in a pediatric oncology unit started Kelly on a trajectory to become a nurse scientist focused on that patient population. Now, she is a nurse scientist at Children's National Hospital in Washington, DC, and associate professor of pediatrics at the George Washington University of Medicine and Health Sciences.

Kelly's more recent research has looked at decision making among diverse parental units such as divorced parents and stepparents, as well as approaching children, parents and clinicians after they have been involved in a decision to find out the perspective from each and how they engaged in decision making. Kelly looks forward to seeing the translation of her research into nursing practice. "Dr. Kelly works tirelessly

32nd annual awards ceremony

to translate evidence into practice to improve health care for children with cancer," said Lori Popejoy, BSN'93, MS(N)'96, PhD'07, SSON associate dean for innovation and partnerships. Popejoy and Kelly were among the first students in the SSON's doctoral program.

In addition to her own research, Kelly enjoys engaging with her staff, serving as a leadership advisor and participating in creating nursing practice guidelines. "I enjoy the mentoring. I enjoy providing the support to the folks that I'm engaged with to really take their ideas and run with them," Kelly said. "It's challenging and stimulating."

In 2018, Kelly was recognized as a distinguished researcher by the Association of Pediatric Hematology/Oncology Nurses. Kelly says a highlight of her career has been her work with the organization, work that has led to research and career opportunities that directed improvements in care for pediatric oncology patients. "That's what it's all about," she said. "The outcome is improving the care we provide to children and families." Kelly encourages nursing students and practicing nurses to become involved in professional nursing organizations through attendance at state and national meetings. "That's where you get to be exposed to the greater knowledge, experience, understanding of your field, your patient population," she said. "That great knowledge is beyond your institution." Kelly's involvement in such meetings offered new collaboration options and made her a better nurse and nurse scientist. She also encourages participating through presenting and publishing. "Publishing in your field is another incredible learning opportunity that builds your personal skills but is also a contribution to the greater nursing knowledge. I see it as a professional responsibility."



Dick Otto, BSBA'71, MPA'88
DISTINGUISHED FRIEND
OF THE SCHOOL

Nearly any SSON, Student Nurses Association (SNA) or Nursing Alumni Organization event has one person in common – Dick Otto, BSBA'71, MPA'88. He may be front and center flipping pancakes at the SNA pancake

breakfast, driving the dean in the homecoming parade, dishing out trivia at an SNA trivia night or giving a 'Then and Now' presentation to nursing alumni. No matter the need, he has given his time, talent and treasure with a smile, a funny quip and his whole heart.

Otto has attended more state and national SNA conferences than he can count, supporting and encouraging students in their endeavors. Or you might have seen him as a tour guide for visiting faculty and students, peppering their visits with interesting tidbits about the university and school. Even during the early months of the pandemic, when events were cancelled, Otto made pancakes at his house, froze them and handed them out to grateful students as they drove by – ensuring they could have their own memories of SNA pancake breakfasts.

"It's always nice to assist and see these students grow into professionals," Otto said. "I always tell the graduating class, 'May I not see you in a professional capacity for many years; however, when I do need you, I want you to be there because I know you'll be great nurses.' They are Mizzou nurses and they'll be great nurses."

He has many reasons to love the profession of nursing, including his wife of 52 years, Donna, BSN'72, MS(N)'81, instructor emerita of nursing. "With a nurse wife, the profession of nursing has been very important to me in so many ways," Otto said. However, his admiration for nursing began at a young age. As a child, his sister was in the hospital for polio, and he went in for a hernia repair. "I remember the kindness and the professionalism of the nursing care we received then. My respect for the nursing profession goes back to being a kid and knowing the skills and abilities of the nursing profession at that time."

Otto retired from the university 10 years ago after 40 years in various administrative positions. He is the only non-nurse member of the NAO Board, serving for more than 10 years and has attended all 31 Nursing Alumni Spring Banquet & Awards ceremonies. Otto has spent many hours volunteering at TigerPlace where he has played many games of poker, headed the LIARS Club (likeable, informative, accurate, responsible stories), provided friendship to many and took residents on field trips, often taking Boone County natives down roads and past sites they had never seen before.

Otto's volunteer responsibilities outside of the school include serving on the Board of Directors for the Boone County Historical Society, as a museum docent for the society and as a speaker for its Traveling Trunk Program for elementary students. He also is very active in his church.

In 2020, the Ottos made a planned estate gift to the university that pushed the Mizzou: Our Time to Lead campaign over the \$1.4 billion mark. "The university has been good to us," Otto said. "There's no doubt about it. I hope we've been good to the university."



2022 STUDENT AWARDS

7th Semester Student Award for Excellence - Megan Gereau 8th Semester Student Award for Excellence - Kajol Patel Accelerated Student Award for Excellence - Sabrea Ewing RN-BSN Student Award for Excellence - Samuel Marchetti MS(N) Student Award for Excellence - John Barth DNP Student Award for Excellence - Jessica Garcia Oyervides PhD Student Award for Excellence - Malaika Gallimore

2022 FACULTY & STAFF AWARDS

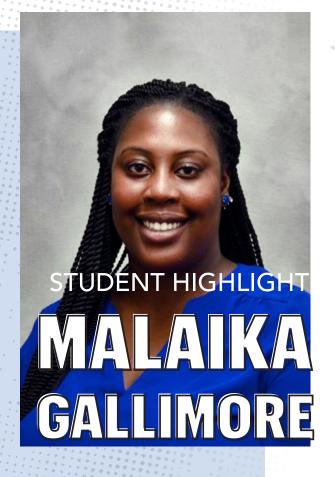
Staff Award for Excellence - Pete Ozias
Faculty Award for Excellence in Research - Jennifer Hulett
Faculty Award for Excellence in Teaching - Hillary Claunch
Betty Crim Faculty Enhancement Award - Sherri Ulbrich

(Continued from page 13)
Anne Sales - The Implementer

"She was very much committed to my success in an unselfish way," Skolarus says. "Her commitment to capacity building in the field of implementation research over the past decade has impacted the careers and lives of many people and, in turn, patients. Dr. Sales has had a broad impact here in terms of exposing students and faculty to implementation science and helping them realize that implementation is key to systematically promoting individual and organizational behavior change to improve health care delivery and value."

Sales is just getting started at Mizzou, but she says Mizzou is already further along than most universities.

"There are other precision health initiatives around the country, but none of them include implementation science as a core component at this point," Sales says. "At Mizzou, people are thinking ahead to what it's going to take to get this new discovery that has so much promise and so much opportunity for saving lives and improving quality of life into practice. This is where nursing as a whole comes in. Nurses are agents of making that kind of change happen."



Written by Elesha O'Neil

Like many of us, it took Malaika Gallimore some time to find her calling. She journeyed through biology then psychology while studying for a bachelor's degree at Truman State. She then found her passion for public health right here at Mizzou, where she received a Master's in Public Health.

But it wouldn't be until she began a job in HIV case management that she would consider a career in nursing. While working in this position, she made friends with a coworker, and nurse, who saw Gallimore's value as a clinician. "She kept telling me I should go to nursing school. I thought she was crazy," explains Gallimore, laughing.

However, after researching careers, she found that her passion for public health was a perfect complement to a career in nursing. She decided to follow her coworker's advice and take a chance on nursing school.

Upon graduating, Gallimore settled into a nursing position at the local county health department. She enjoyed her career but started wondering about the future. What else could she do as a public health

nurse? She contemplated going back to school for the fourth time and after a year of consideration, decided to pursue a PhD at the MU Sinclair School of Nursing.

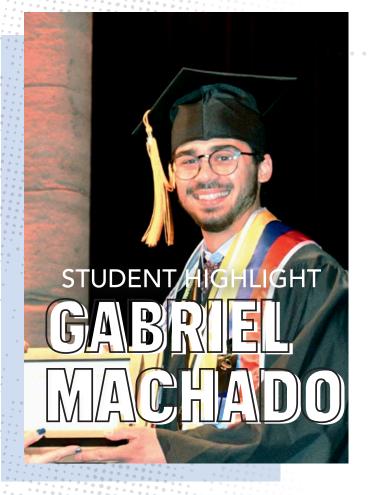
When it came time to pick her dissertation she explains, "I had experience at the health department talking to parents about what shots their kids needed. Some parents would say I want all of these, except for this one. It was interesting to me. What's going on? Why are you choosing not to get one?" This got Gallimore thinking and ultimately, she decided her PhD topic would be vaccine hesitancy with parents, out of concern for their children.

Fast forward to 2022, Gallimore is making strides toward educating parents and nurses on the significance of vaccines. She is now working with Sinclair School of Nursing faculty on a campaign funded by the American Association of Colleges of Nursing (AACN) to address COVID-19 vaccine hesitancy and, most recently, has received a notice of award from the National Institute of Nursing Research for her grant application entitled, "Information needs of vaccine-hesitant parents for user-centered design of a consumer vaccine management application."

When asked about her experience at SSON she states, "The Sinclair School of Nursing is awesome. Without the help of my advisor and the PhD program director, I would not have been able to finish this grant. It was a long process, and they really provided a lot of encouragement. So, I always just feel like the school of nursing is always behind their students and always trying to give us the best opportunities. It's still hard to get a PhD and go to nursing school, but in the end, it seems like it's worth it."

Not only does Gallimore believe in the work she's doing and has the experience to guide her in the right direction, she also is looking forward to what that means for the future. She emphasizes that, as a woman of color, she has never had a black, woman professor in her nursing education, "It's important for me to be involved in teaching in some kind of way, just so that I can be an example. There are plenty of black undergraduate nurses, but not a lot in the PhD field, so I want to help others come to the research side."

Elaborating further, she says, "With the current nursing shortage, it's important to have more diversity at the (Continued on page 21)



Written by Elesha O'Neil

When speaking to Sinclair School of Nursing graduate Gabriel Machado about why he chose to be a nurse, at first, he seems a little let down that he doesn't have a great story that led him down this path. Then, as he begins talking about his time in nursing school with fellow students, professors and even patients, you quickly realize that he does not need a great story on how he got here; Gabriel Machado is simply meant to be a nurse.

Finding a Support System

Compared to the average Sinclair School of Nursing (SSON) Student, Gabriel, and many of his classmates, had quite the unique experience beginning the program in Feb. 2020. They entered nursing school when the previous building was being torn down to make way for a new building, and shortly after, the pandemic drastically changed what used to be considered the traditional college experience. While none of this was ideal, he stressed that finding a good support system among students and faculty, early on, was his key to success.

"I was lucky that within a couple of days of starting nursing school, I was already making friends," Machado says. So when the pandemic hit and everything moved to virtual learning, the group still managed to find non-traditional ways to get together and continually grew closer. By graduation, he felt his class, as a whole, was very close. As things returned to normal, they even attended each other's weddings, military graduation ceremonies and stepped in to help when classmates were struggling personally.

As for the professors, Machado says they absorbed them into the group and became close as well, with many encouraging students to come back for graduate school. He also touches on how amazing his professors were in adapting to the pandemic considering you can't do most nursing education virtually.

He explains, "Sue Yun Fowler and Hillary Claunch were exceptional. They would update us constantly, and Hillary was able to gather a group of nurses to talk about COVID-19 and what they knew. They would also have themed Zooms. So, we had crazy hat and hair days to try to add a social element even though we were all on a Zoom call. I really appreciated that."

Machado encourages future nursing students to find their own support system. He says, "Nursing school is quite stressful, so it's good to have a support group and outlet. Sometimes you just need to hang out with people that you enjoy,



Machado with his classmates at graduation.

to destress. That ties well into nursing in general. It's one of the most stressful jobs and Mizzou nursing made us find the value in having a good support group that we will definitely need to have when we go into the nursing profession."

Finding His Why

During Machado's December 2021 graduation ceremony, he received the Janet Joy Thompson Award, presented annually to an outstanding student who demonstrates compassion and "personal attributes of tenderness and the natural ability to bring comfort to those in his/her care." Machado explains proudly, "It's a nursing award. For a nurse, it's not always

about the science aspect of it. The cool thing about nursing is it has to be a mix between the medical-side of things and the patient-side, human-side of things."

While professors at SSON can all confirm that Machado will be an excellent nurse, it's the human side that seems to truly ignite his passion. He describes how his parents moved with him and his siblings to the United States from Venezuela, with one suitcase each, so that they could have a better future. For his parents, a big part of that future would be education.

Even though he's recently graduated from nursing school, he explains why his current study abroad semester in Spain is important to his family's story and his education. He says when he first got to the U.S. at age three, he only spoke Spanish, but as he learned English and started school, he eventually lost it. Machado understands Spanish fluently but wants to speak it fluently again. "I didn't realize how that would disconnect me from my heritage. It's not only the way you communicate with the people there, but also the culture."

During his time at SSON, he learned that around 90% of the time when there's a language barrier with a patient, it's because they speak Spanish. He describes a time when he was able to break that barrier, "I remember one family in particular, their nurse was explaining slowly in English. I looked at the board and saw their name was Latino, so I said, 'Hablas español?' And it was so cool because instantly, the father's face relaxed a bit. He was there because his baby has CFS, which is a very tough disease to treat. I can only imagine how lost he was, but we ended up talking. I explained what was going on, what the nurse was doing."

It's experiences like this that Gabriel is referring to when he says, "In the most dire circumstances, as a nurse, you are in the position to affect the unbelievably tough situation your patients are in, into something at least a little less tough. A little less painful. A little less bad, catastrophic. And in those moments, any small, seemingly ordinary positive change can be unbelievably extraordinary."

(Continued from page 19) Malaika Gallimore

PhD level, not only in terms of who we are, but what our interests are. Then, maybe we can all bring different creative ideas and ways to think about solving some of these problems that we see in the nursing field."

When asked if she wants to educate students directly or work with nurses in the field, Gallimore enthusiastically responds, "I want to do it all!" She explains how after working through the 2016 mumps outbreak at the health department, and now in a world with COVID-19, things have really come full circle for her. "It's important to continue this work about how vaccines are safe and effective. We all know someone who is not vaccinated, so we all need to be able to have these conversations."



OUR BUILDING PROGRESS

We are preparing for our move-in date in late July! nursing.missouri.edu/building-progress/



University of Missouri Columbia, MO 65211

This is how we do it













* JOIN a legacy of excellence HIRING NURSING FACULTY in the following fields:

- Mental Health Nursing
- Psychiatric Mental Health Nurse Practitioner
- Tenure-Track/Tenured Faculty Research
- Inaugual Verna Rhodes Endowed Chair in Nursing



