

### **NURSES:** UNIVERSITY OF UTAH College of Nursing CHANGING HEALTH CARE

### REACHING THE TOP

No. 2 among U.S. nursing schools for NIH research funding dollars in 2015

### CROWDSOURCING THE SCIENCE

Letting kids and parents gather the data

WHO'S CARING FOR NURSE EDUCATORS? Why Donors Give



"Discovery is seeing what everybody else has seen, and thinking what nobody else has thought."

ALBERT SZENT-GYÖRGYI

# WE'RE #2!

In 2015, more than \$7 million in grants from the National Institutes of Health earned us a ranking of No. 2 (out of 66) in the country for research funding.

With this funding, researchers at the College of Nursing are tackling some of the most difficult questions facing health care practice and science today – from how to manage changes to the Common Rule for biospecimens to the tangled web of factors causing childhood asthma. No one is closer to patients than those involved in their care. As a result, nurse scientists are uniquely positioned to understand what is working in health care and what needs to be fixed.

At the same time, we doubled the number of health care clinics we provide in state Juvenile Justice Services centers from five to 10. Faculty visited Tanzania to explore global health partnerships. One of our graduates is transforming psychiatric mental health care at the 4th Street Clinic, which serves the homeless population of Salt Lake City. And several of our nurse educators were recognized for their exceptional teaching.

### IT'S BEEN A BUSY YEAR FOR THE COLLEGE. HERE, WE HIGH-LIGHT WORK WE BELIEVE WILL CHANGE PATIENT CARE.

DEAN PATRICIA G. MORTON, PH.D., R.N., F.A.A.N.

Patricia G Monton







#### EDUCATING

In 1988, the future of the College of Nursing's informatics program was far from certain. Now, informatics is woven into every level of nursing education.

#### GIVING

Over the past decade, Father Rick Lawson has carried on his family's legacy of giving at higher education institutions – including the University of Utah College of Nursing.

#### CROWDSOURCING

College of Nursing Informatics Associate Professor Kathy Sward's \$5.5 million research project will involve kids and their parents in gathering asthma data.

### COMMUNICATING

In poisoning cases, doctors and nurses still scribble notes down on scraps of paper and try to translate. Associate Professor Mollie Cummins aims to end the game of telephone.

#### INFORMING

New parents face a battery of up to 50 genetic screening tests for their newborns. Associate Professor Erin Rothwell wants them to understand what they're signing.

#### TRAINING

Using a \$2.6 million federal grant, Associate Dean for Research Ginnette Pepper plans for the Utah Geriatric Education Center to improve preventive care at nursing homes across the state.

#### GLOBALIZING

Looking back on 30 years as a nurse and teacher, 2015 College of Nursing Distinguished Alumna Jan Thompson says her years in Utah shaped the rest of her career.

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#### INNOVATING

College of Nursing graduate Sam Vincent has turned his nursing knowledge to developing a wearable device to remind homeless clients of their medical appointments.

#### LEADING

College of Nursing faculty have been recognized as some of the best teachers on campus, leaders of professional organizations and scientific innovators.

### INFORMATICS TURN

In the late 1990s, Nancy Staggers still had to translate the word "informatics."

"It's computers and healthcare," the Nursing Informatics program director used to say. Shorthand in a time when email was a novelty and cell phones only flipped. Now, informatics is woven into every level of nursing education, from baccalaureate to Ph.D., and every clinical practice, from midwifery to gerontology. And this year, the University of Utah College of Nursing's informatics program marked 25 years of using technology and data to streamline and transform patient care.

"In the beginning, they thought of us as geeks, as one-offs, and that we weren't really nurses," said Staggers, program director for three years between 1998 and 2010. "They aren't thinking that now." Graduates and faculty from the informatics program gathered at the American Medical Informatics Association's annual symposium in San Francisco in November. Over 25 years, 82 nurse informaticists have graduated from the college's master's program.

In 1988, the future of nursing informatics was far from certain. But Utah was a fertile proving ground for the nascent specialty: At the time, the college was offering both master's and Ph.D. degrees. The then-23-year-old Biomedical Informatics program in the School of Medicine already offered a specialty graduate degree. LDS Hospital (now owned by Intermountain Healthcare) had been developing a patient data-based information system for 20 years. And then-Dean Linda Amos had just committed to putting a computer on every faculty member's desk.

And University of Utah Nursing Informatics founder Judy Graves, the first nurse to complete a National Library of Medicine postdoctoral fellowship in medical informatics, had taken a teaching job at the college.



A team of informaticists, including Graves, met at the University of Utah to discuss establishing a specialty within the College of Nursing. Within the year, the college was offering summer postdoctoral seminars. That fall, the University of Maryland admitted the first class of master's students in nursing informatics, focusing largely on nursing management and information systems and claiming a spot as the first nursing school with an informatics program.

Two years later, in the fall of 1990, the University of Utah admitted its initial informatics class using funding from the Health Resources and Services Administration. The Utah students and faculty would focus on designing and building clinical nursing information systems. In some ways, the new nursing program had better digs than the well-established medical school program, located in the windowless lower level next door. At the College of Nursing, students worked in a new computer lab funded by a donor. At one point, faculty rigged a "command center" that looked much like an early version of the "smart rooms" depicted on the TV show "CSI" —where computer screens were positioned under a glass tabletop for classroom discussions.

"We had pretty good support and resources," said Kathy Sward, current co-director of the program.

Sward received her master's degree in 1998 and her Ph.D. in 2007 in Nursing Informatics. Students and faculty from both schools worked collaboratively – studying and researching together.



University of Utah Nursing Informatics professors and Ph.D. graduates -- Mollie Cummins, Sarah Irribarren, Kathy Sward and Jacquee Blaz -- at the American Medical Informatics Association annual symposium in San Francisco.

University of Utah Nursing Informatics students analyzed the use of the BirthCare HealthCare program's midwifery clinic, developing an electronic record system still in use today. Others reviewed AirMed, change of shift handoffs and ICU intubation protocols. "These are things we're still looking at today," Sward said. Susan Matney, a master's graduate from the Class of '99 and now a medical informaticist with 3M Health Information Systems' healthcare dictionary team, created a database for labor and delivery departments that was tested at Ogden Regional Medical Center.

"It goes back to: If you can't name it, code it," she said. "The only way to understand our practice is from the bottom up, using data, information and knowledge."

Reed Gardner, chairman of the Department of Medical Informatics in the School of Medicine from 1998 to 2006, says the nursing perspective is critical to the study of health care data. "From the beginning, nurses were tracking the data," Gardner said. "Nurses are the primary data gatherers for clinical care in a hospital. They're the physicians' eyes and ears, especially for critical care. They provide very important observational data. They're a crucial part of it."

All of that observation forms the foundation of much of modern medicine's documentation. Sward notes that informaticists generate the biggest volume of health care data outside of imaging like x-rays and scans. "It's really important that the nursing perspective be represented by nurse informaticists who understand patient care," she said.

By the year 2000, teams from the two colleges were determined to bridge the physical gap between nursing and biomedical informatics. When the Health Sciences Education Building (HSEB) opened in 2005, both programs moved in, occupying shared space. Eventually, the groups of faculty and students outgrew even that space and both nursing and biomedical informatics moved to the university' Research Park. Meanwhile, the program continues to push the boundaries of informatics research. Sward was recently named co-principal investigator for a \$5.5 million PRISMS grant from the National Institutes of Health. She and the rest of a university team will help design a computer interface for logging data collected by personal environmental sensors that eventually could help pinpoint the factors that cause and aggravate pediatric asthma.

And Mollie Cummins, co-Nursing Informatics specialty director, received a \$1.25 million grant from the U.S. Agency for Healthcare Research & Quality and another \$294,000 from the Office of the National Coordinator for Health Information Technology/Utah Health Information Network to develop and study a new health information exchange process to improve collaboration between poison control centers and emergency departments.

"It's all about making information move and matter," said Cummins. "How many times a day do we type our information into fields in a database? How many times do we offer up personal information about our medical history and allergies? And then we go to the next doctor's office and do it all over again.



"Our data should work for us as patients," she added. "It should move where we move. The burden placed on patients for collecting data should be minimized. The burden placed on health care providers for collecting and managing it should be minimized. And it should be used in a way that supports good decision-making and better outcomes in health care. "Informatics is what drives that."

While some nursing schools are closing their informatics programs and merging them with those at neighboring medical schools, Utah of Utah nursing informatics veterans believe that would be a mistake.

"There's a core of shared knowledge and skills among clinical informatics folks," said Staggers. "The piece that makes nursing informatics special is the body of knowledge that is part of nursing." Cummins agrees.

"We have a pressing need for nursing informaticists,"

she said. "Nurses have a unique understanding of the clinical processes and the information technology. And they are in a unique position to build bridges with providers.

"Most people think of nurses as the person who hold their hand at the bedside. But I think some of the most powerful nurses in healthcare are the ones with a pocket protector."

# DATA DRIVES NURSING OPERATIONS

At University of Utah Health Care, nursing informatics plays a key role in both the Nursing Department and the Information Technology Services department, providing a crucial bridge between patients and technology. Fortunately, nursing experience and expertise are also invaluable in making sense of complex operational data, which is just what Chief Nursing Officer Margaret Pearce, Ph.D., and her leadership team did this past year to support surging patient volumes.

For over a year, the acute care units at the University Hospital were operating at 89% capacity, which may seem like they have a little more wiggle room to get to 100%. However, census is calculated at midnight when patient volume is at its lowest and there is little if any movement of patients in or out of the unit. During daytime hours, with patients being discharged and rooms being meticulously cleaned for the next patient, units can realistically operate at 80-85% capacity before causing flow problems from feeder units like the ED, surgery, and critical care. "When patients aren't able to move to the appropriate floor unit, we have to start looking carefully at how many patients we can bring in to the system through the Emergency Department and Transfer Center," explains Tracey Nixon, Nursing Director for Capacity Management, "or how many surgery cases we can support."

The hospital's capacity challenges were first noticed in early 2014 in the already busy Emergency Department. "We typically saw blips of high census over a period of three to four weeks each spring," says Margaret Pearce. "Our dashboard showed that overall patient volumes were flat, indicating this was a temporary problem." But the team soon began to realize the increased volume blip was not resolving. It was escalating, a conclusion contrary to the organization's predicted flat growth pattern. In an effort to understand why the actual patient volume was not in sync with the organization's data dashboard, Eric Allen and Andrew Wood, Finance Directors for the Nursing department, took a deep dive into the census data, and what they discovered set a series of events into action.

"The census data was comprised of all patients, including our long length of stay rehab and psych patients," explains Allen. "Once these populations were removed, the acute care and critical care census both increased by 4.6%." Wood adds, "Despite the general idea that healthcare reform would have a negative impact on volumes, we were significantly over-capacity in two of our largest areas of the hospital."

In order to paint a comprehensive and dynamic picture of the capacity issues, Allen and Wood created detailed charts showing each unit's bed capacity, census, and occupancy rate for the current and previous year. Then they projected volumes for each unit for the next 10 years using the lowest growth rate from the previous years. Finally, current numbers of potential beds, including new construction and remodel opportunities, were added to the mix. The result? A "bed deficit" number to inform both short-term operational tactics as well as long-term strategic planning conversations. "The bed deficit chart helped to clearly illustrate the problem as well as the impact of potential solutions," said Pearce, "and we knew it would be a perfect tool to inform the senior leaders and physicians."



With census trends and capacity statistics in hand, the nursing leaders hosted a half-day retreat for key physician department chairs and hospital leaders with two primary goals: establish a common understanding of the inpatient capacity issues, and come away with a list of viable short- and long-term solutions. The morning was packed with education, data, floor plans, spreadsheets, questions, discussions, and concluded with consensus for quick action, specifically to begin immediate construction of all available space for acute care and critical care beds. Several other short-term solutions were implemented to mitigate wait times, while ensuring high quality and keeping patients safe. The Emergency Department opened and staffed additional holding beds for boarders, and created a rigorous hallway protocol for the boarded patients. The post anesthesia care unit created new processes so they could board admitted patients overnight. Twelve beds were opened at the adjacent oncology specialty hospital for medicine patients, and several refurbished semi-private rooms were opened as temporary boarding space. Just nine short months after the inpatient space retreat, a new 38bed acute care unit opened, and the plans for continued growth haven't stopped. A new ambulatory care center and a rehabilitation hospital are in the queue, and the Nursing Department's growth and capacity information has been invaluable to the organization's strategic planning efforts.



(Left image) University of Utah Health Sciences Chief Nursing Officer Margaret Pearce (Right image) A new acute care room at University Hospital.

# Providing a lifeline **TO NURSES**

In another life, Rick Lawson might have been a school teacher. Instead, the unassuming representative of one of Utah's most prominent families is shoring up education at the University of Utah with scholarships, funding for buildings and endowed faculty chairs — from the College of Nursing to the law school. The 70-year-old great-grandson of David Eccles is steward of a family legacy that continues to resonate across campus.

### "I have been blessed with having been given much," Lawson says. "It is always a pleasure to be able to reach out and help support institutions that train students to offer the best they can."

Lawson acquired his love for education watching the teachers in his family. His great "Aunt Em" (Emma Eccles Jones) founded the first kindergarten in Logan. And spending summers in the family cabin at Bear Lake, he was inspired by her mentor, Edith Bowen, namesake of the College of Education at Utah State University. Born and raised in Salt Lake City, the oldest of three children, Lawson graduated from St. Mark's School (now Rowland Hall) before pursuing a bachelor's degree in theology at Hobart College in up-state New York. In 1965, he studied at Leicester University in England, graduating with a degree in English. A few years later, at Oxford, he studied theology and was ordained a priest in the Church of England.

In 1990, he returned to Salt Lake City and served first as canon and then dean of St. Mark's Cathedral. It was there that Lawson first "pinned" graduates of the affiliated St. Mark's School of Nursing before it was absorbed into Westminster College. He developed a longtime love of nursing as he watched the treatment his sick parishioners received. Now retired from the Episcopal Diocese and the lead representative of several family foundations — his grandparents', the S.J. and Jessie Quinney; his mother's, the Janet Q. Lawson; and his own, the Frederick Q. Lawson — "Father Rick" has directed critical funds from each to support University of Utah students and teachers from health sciences to law. In many ways, he is a caretaker of his family's history and philanthropy. His Salt Lake County home is filled with large oil portraits of the family members who came before him — his great-grandfather, great-aunt and mother. Maquettes of the life-size family statues that grace campuses from Logan to Salt Lake City rest on antique Asian tables. In 2001, the Emma Eccles Jones Foundation, where he is a member, provided \$1 million to renovate the fifth floor of the College of Nursing for research. In 2006, the foundation provided another \$1 million as part of a larger building project. A few years later, Lawson offered a \$1 million individual donation for a student education center on the second floor.



And in 2010, he provided a \$500,000 matching grant in his mother's name for the college's administrative suite. Lawson also has taken a personal stake in nursing students' education for more than a decade, providing more than \$100,000 annually in scholarships for Lawson "fellows." His giving, he says, is inspired by one "late vocation" nurse who told him she dreamed of providing a scholarship to another student nurse someday. The scholarships are his way of "paying it forward."

### "Hopefully each of us will also make an effort to give so others too can fulfill their dreams," Lawson says.

Meanwhile, the university's law school is named for his grandfather, S.J. Quinney, after the family provided a \$25 million endowment in 1997. In 2015, the S.J. Quinney School of Law moved into a new \$62.5 million home. At the same time, Lawson and the foundations he serves on announced three new endowed funds for the College of Nursing: A \$1 million infusion to establish the Emma Eccles Jones Endowed Faculty Fund. Another \$1 million will create the Janet Quinney Lawson Foundation Endowed Chair in nursing practice. And \$1 million from



Rick Lawson scuba diving

Lawson's own foundation will establish the Frederick Q. Lawson Excellence in Teaching Endowed Chair.

"The University is grateful for the legacy of generosity from Rick Lawson and the Lawson and Quinney families," said Development Vice President Fred Esplin. "The gift to the College of Nursing is the most recent in a history of decades of support from the family for areas across campus that have enriched the student experience, advanced research and improved the quality of life for the people of Utah." Lawson's gifts have been strategic — tailored to the needs of the particular college and defined in a way that makes dispersing the funds most effective. For example, his nursing scholarships are annual expendable funds that do not have to wait for interest to accrue before being given to students. College Development Director Dinny Trabert says Lawson's targeted gifts will help build momentum to combat a looming nursing faculty shortage in Utah.

" Endowed chairs give us an opportunity to retain and recruit," she says. " He is so familiar with the nursing profession. He understands our challenges. We don't have to start from square one talking about the nursing faculty shortage. He gets it."

And for Lawson's 50 fellows, the scholarships they receive can be a lifeline."Maintaining a life with relationships and obligations while completing a graduate nursing program is so hard," says ElLois Bailey, a Lawson scholarship recipient. "I was living this challenge when I received the Lawson Fellowship which helped me reduce my outside employment and choose to spend what little time was available on my most important relationships - the ones I hoped would be intact when I finished the degree." Bailey now is a faculty member at the College of Nursing, working as a specialty director over the psychiatric-mental health nurse practitioner program. College of Nursing Dean Trish Morton says Lawson's dedication to nursing is evident. "He is passionate about education for nurses and has helped many students achieve their dream of either becoming a nurse or advancing their education."

Every year, Lawson hosts a lunch for his scholars. And at convocation, he still helps with the traditional pinning ceremony — one of his greatest joys. "Meeting with various scholarship recipients and hearing of the difference the scholarship has made in their lives is a wonderful experience," he says. "They make me so proud as they reach their goals and in turn offer support and outreach to others." Trabert says Lawson's generosity has been transformative for the college. "We're in a different place because of his support."

### CROWDSOURCING THE SCIENCE



Academic research can be a solitary pursuit, cloistered in clinics and labs physically — and intellectually — distant from patients.

### BUT WHAT IF THE PATIENTS THEMSELVES WORKED THE SCIENCE? HELPED TEST THE EQUIPMENT AND TROUBLE-SHOOT THE COMPUTER INTERFACE? WHAT IF THEY "BROKE" THINGS AND HELPED WITH THE "FIX"?

That's the methodology behind new "patient-powered" research led by College of Nursing Associate Professor Kathy Sward, co-director of the college's Nursing Informatics Specialty. In essence, she is crowdsourcing — letting a "crowd" collect the data. "We see parents and kids and researchers as a really core group of our team," said Sward.

The project pairs faculty from four schools at the University of Utah — Nursing, Medicine, Engineering, and Mines and Earth Sciences — with Utah families whose kids have asthma. Using a \$5.5 million grant from the National Institutes of Health, university scientists will collaborate with families to develop a biomedical informatics platform that will make it possible to crowdsource and link air quality data with personal health monitoring — and, eventually, pinpoint the cause of a child's wheezing.

"Pediatric asthma is complicated and we don't fully understand how to control it," says co-principal investigator Julio Facelli, professor of biomedical informatics and an associate director at the Utah Center for Clinical and Translational Science (CCTS). "Our system will allow researchers worldwide to get answers to questions that they didn't even know they could ask."

### For nurse and many doctors, figuring out what caused a child's asthma attack means opening up regional air quality databases and applying a lot of guesswork.

The health effects of air pollution are well documented. Smog has been linked to increased asthma attacks, heart attacks, strokes, hospitalizations and premature deaths. But despite all the data produced through regional air monitoring by the U.S. Environmental Protection Agency (EPA), there are large gaps. Few of us know how much pollution, or which types, we're exposed to on a daily basis. Localized pollution spikes near busy highways, industrial centers and factories don't necessarily register on larger air quality monitoring networks. And while pollution from cars and other sources is known to trigger asthma in some children, there are a number of lesser-understood factors that also increase their risk — everything from viral infections to stress to playing soccer all day. In recent years, the EPA has started encouraging average citizens to do their own monitoring using "small sensor" technology — hand-held devices that are affordable, easy to use and often sold as part of crowdsourced "air mapping" projects.

But there remain a lot of unknowns about the quality and full potential of such "next generation" sensors, which is what the first phase of the University's multi-year project will help explore. Stage 1 will put individual environmental sensors in the hands of a few dozen children and their parents. More than "citizen science" or

- "DIY discovery," the project aims to involve patients in the design and construction of the infrastructure that makes that kind of research possible. "We want people who are really willing to think about this from a process standpoint, people who are willing to play with the 'toys' and beat the daylights out of this software," Sward said.
- "You want it in the hands of people who are going to do every crazy thing they can imagine with it...and push every button." The grant, a component of the Pediatric Research using Integrated Sensor Monitoring Systems (or PRISMS) program from the NIH's National Institute of Biomedical Imaging and Bioengineering, will run for four years. Over that time, the team and a core group of families will test a growing variety of personal environmental monitors — some wearable, some homebased — and create Web-based interfaces that could form the foundation of future pediatric asthma research.

The Internet-based "infrastructure" the Utah teams create will enable children, parents, doctors and researchers to feed real-time information into a comprehensive database. "It's not the information itself that's the point of it," Sward said. "It's how the information flows and is organized."



Nursing informatics Associate Professor Kathy Sward will create a web platform for crowdsourcing pediatric asthma data.

The first year, researchers will focus on finding families willing to try out a series of sensors and begin developing computer systems to process and integrate the new streams of data. The second and third years will be spent refining the computer infrastructure — sensor connections and a website design — and developing other modes for inputting the data, including ageappropriate mobile apps. In the final year, the researchers plan to run a pilot research project with Utah families. When the virtual pipeline is complete, a seventh-grader carrying an air quality sensor in his backpack and his health care provider could consider whether the aerosol cleaner the school janitor was spraying at class break might have sent the student to the emergency room a few hours later.

"Whatever happens indoors is going to contribute quite a bit to your exposure," said Neal Patwari, associate professor of electrical and computer engineering who is designing wireless sensor networks for the project. "The devices will monitor what's going on right around you and send the information so researchers can eventually analyze it. They also may give you immediate feedback so you can take action to limit your exposure."

The eventual database will incorporate information from health records, hospital emergency room visits, wearable Fitbit-like sensors, and regional air quality monitors, like those installed on Utah Transit Authority buses and TRAX trains. The idea is to measure as many clinically relevant environmental exposures as possible to store and standardize the data so that any scientist can investigate how each contributes on its own, and together with others, to pediatric asthma. The Utah team will work in tandem with another group of researchers creating similar systems in another state. The NIH anticipates using the new networks as the basis for a national data coordinating center for pediatric asthma which could eventually be made available online to the public.

The project, Sward says, will make the difference between pediatric nurse practitioners and pediatricians attempting to extrapolate from large-scale, imprecise data, when they really need personalized patient information. It's one more example of how the University of Utah is participating in the national precision medicine initiative.

"All of the sudden, you'll have this massive amount of data that wasn't available to researchers before," she said. "We will be able to see in near-real time what's happening to people." ☐

## CAN YOU HEAR Me Now?

Most areas of health care have moved beyond the scrawled note and phone call era. But not when treating a poisoning.

Right now, communication between America's poison control centers and hospital emergency rooms looks like something from the pre-computer age, with harried doctors and nurses scribbling notes on paper, and poison control pharmacists and nurses struggling to follow through on a patient's lab tests and status updates.

### IT CAN BE LIKE A GAME OF TELEPHONE.

"Most of the time, emergency department staff scribble information down on either a post-it note or a small paper form," said Mollie Cummins, Nursing Informatics professor at the University of Utah's College of Nursing. "That may or may not be matched with the patient who shows up. And even if it does, it could be lost. It's not always part of the permanent medical record."Whoever heard about it, knows about it — whatever they remember or scribbled down," she added. "It is not an ideal situation."

Cummins, a former emergency department nurse who has studied the vulnerabilities and inefficiencies of such telephone-based communication for more than 10 years, has received a \$1.25 million grant from the U.S. Agency for Healthcare Research & Quality and another \$294,000 from the Office of the National Coordinator for Health Information Technology/Utah Health Information Network to develop and study a new technology-enabled system for collaboration between poison control centers and emergency departments.

The patient load — and number of opportunities for miscommunication and missed communication — is vast. In 2010, there were at least 2.4 million human poison exposures in the U.S. Cummins and her team studied a random selection of emergency calls from 2011 and discovered weaknesses in the country's telephonebased method for communicating about poisonings. In collaboration with the Utah Poison Control Center, the University's College of Pharmacy and Intermountain Healthcare, among others, Cummins' team reviewed transcripts of 120 recorded phone calls from patients to poison control and then from poison control to emergency departments. The cases relied almost entirely on telephone communication.

"All the clinicians want to communicate," said Todd Allen, medical director of Intermountain Healthcare's emergency department development team, "but it's all unscheduled and relies on us hooking up in time and space. Consequently, it never really works effectively. It's always rushed in terms of time and content."

Cummins' team reported its findings in *Clinical Toxicology* in 2013. Researchers found many cases of ambiguous communication — in nearly one-fourth of cases. In 12 percent of cases, the poison control specialist was unable to get requested information from the emergency room. And more than half of poisoned patients, 55 percent, were discharged prior to a final synchronized signoff between the emergency room doctor and a poison control center specialist.

Part of the problem is that health care providers and poison control centers work with incompatible computer systems. The 50 poison control systems across the country use four record-keeping programs that do not "speak" with hospital electronic records, and vice versa. Some of the disconnect can be blamed on the way poison control centers have evolved as part of the U.S. health care system, says Utah Poison Control Center Director Barbara Crouch.



"Poison centers have been on the outskirts," said Crouch, a professor in the department of pharmacotherapy. "We're small, overall. Oftentimes, we're regional. We don't serve a particular hospital."

So Cummins and her partners plan to build a computer platform for electronically sending and receiving information during poisoning emergencies.

Cummins and her team have created a dashboard that poison control specialists can use to send and receive information about a patient. They are collaborating with Intermountain Healthcare and the Utah Health Information Network to build the technical structure for information sharing.

Under the new program, a poison control specialist will send information to an emergency department, immediately after referring a caller for medical evaluation. The emergency department staff will be notified that a patient is on the way to the hospital and will be able to view a detailed summary and treatment recommendations, even before the patient arrives at the hospital. Poison control can check on the patient's status and lab results once the person arrives and recommend treatments or changes in course based on the results.

Crouch welcomes the new system. "When resources are tight, it allows us to use our health experts and their time wisely," she said. "We're not bothering the nurse in the emergency department, and our specialists are not spending 20 minutes on hold."

The system does not cut out a phone call when case discussion is appropriate, Cummins said. It simply provides everyone involved with the information most important to decision making, preventing a waste of precious time calling back and forth.

"These cases are complex. When you get into multiple substances — patients who already are taking 10 medications, who have allergies and complicated medical histories — there are a lot of variables at play," she added. "In those cases, you really do need to discuss the case."

The team currently is testing the pathways for sending and receiving information in a highly secure, reliable process. Cummins' software will be completed this spring. By the end of the year, the program will be up and available for providers. In 2017, the system will be tested in two rural Intermountain Healthcare emergency departments before potential implementation in busier, urban hospitals.

And then it's up to stakeholders to use the tools that Cummins' team, and their collaborators at Intermountain Healthcare and the Utah Health Information Network, have created.

"It's really dependent on hospitals — whether they want to put resources into it," Cummins said.

Crouch figures they will. "It's this mountain that's insurmountable when you think about the logistics," she said.

### "But if it benefits everyone in the long run, I'm hopeful people will see the value in that."

Allen believes Intermountain's Emergency Department doctors and nurses already see the value in an asynchronous electronic communication system.

"I'm a skeptic about introducing new tools into an established workflow, unless they very clearly provide value. And the value construct in my head is often different than the value construct for clinicians," he said. But clinicians "almost immediately understand the value in it — number one, for the safety and treatment value to their patients."

### WILL MORE INFORMATION BE BETTER?

For most parents, the first hours after a baby is born are a haze of overwhelming exhaustion, joy — and stress. It's not the ideal time to review a legalistic informed consent document.

Newborn bloodspot screening is routinely done for babies shortly after delivery and involves a battery of tests for between 36 and 50 conditions, including Phenylketonuria or PKU. But many parents don't realize some states save the residual bloodspots after screening for use in scientific research.

Traditionally, parental permission has not been required for research using such biospecimens, but national standards are changing rapidly. The College of Nursing's Erin Rothwell, using a four-year, \$2 million federal grant from the National Institutes of Health's Eunice Kennedy Shriver National Institute of Child Health and Human Development, along with co-Principal Investigator Jeffrey Botkin, are developing a tool to educate parents about the leftover bloodspots and their potential use in future research.

Rothwell's Video Informed Consent Information (VICI) project comes at a time when researchers across the country are trying to prepare for changes in 2016 to the so-called "Common Rule" for the Protection of Human Subjects. Congress reauthorized the Newborn Screening Saves Lives Act in December 2014, requiring that newborn bloodspots collected in every state be treated as biospecimens, changing the landscape for a host of disciplines that use the dried blood for study.

Until the change, consent forms were not necessary for the storage and use of millions of newborn bloodspot tests collected every year. But soon every parent — hundreds of thousands of them — will have to sign an informed consent document after their child's heel is pricked. Mothers and fathers will have to decide to bar or allow future scientists to mine the anonymized flecks of blood to study everything from childhood leukemia to the impact of environmental toxins on a fetus.

At the same time, the rule could impact research using specimens ranging from blood left over from cholesterol tests to tissue from cancer biopsies to remnants of surgical procedures.

"This is going to change the whole paradigm of biospecimen research," said Rothwell, coprincipal investigator. "People don't understand paper-based consent. It's lengthy. They don't want to read it in the hospital. So how do you get consent? And how do you get consent that's meaningful?"



The battery of genetic tests new parents must approve after a child's birth is daunting. Associate Professor Erin Rothwell plans to walk couples through it using technology.

Rothwell and her partners want parental consent to be given much earlier in the process, at a prenatal visit, and using an easily accessible technology — a smartphone or tablet app. Both obstetrician/gynecologists and pediatricians note there's a mental gap for many parents between prenatal care and newborn screening. While many patients see pregnancy, birth and wellbaby visits as one streamlined process, the handoff from gynecologist to pediatrician can make explaining informed consent and following up with genetic screening difficult. The goal of the VICI project is to use an engaging platform at the hospital to improve the consent process in the first few hours and days after birth. Future steps will link parental decisions during prenatal care about the storage and use of leftover bloodspots to when newborn screening is conducted.

"There is somewhat of a disconnect for parents after giving birth," said Nancy Rose, professor of obstetrics and gynecology. "Parents are emotional and overwhelmed, making it a difficult time to broach the subject of genetic screening on their newborn."

The team of University of Utah scientists will develop a series of progressive questions that walk parents through the implications of the decision they're making. For example: How long will this blood be stored? Will my child's genetic information become public? Can I opt out at a future point? Along the way, researchers will be testing the video tool to determine its effectiveness in informing parents. Currently narrowing the list of educational questions through focus groups, the team hopes to have a video prototype ready by this summer.

Clinical trials would start in January 2017. Once informed consent becomes universal, there's a chance that more parents will choose to block off their baby's bloodspot from future research, but Botkin, a pediatrics professor and university associate vice president for research, is hopeful that won't be the end result.

"This has highlighted the need for being more transparent with folks about how the system works and offering efficient and effective opportunities for letting people know about their choices and how this material would be used," Botkin said.

"Everybody's hoping better information and getting parents' permission will put the system on a stronger ethical foundation without undermining the value of the resource itself."

### PREPARING FOR The gray wave



More than 1.4 million residents currently live in nursing homes and many baby boomers will spend some part of their lives in nursing homes.

There they will receive the health care that will determine not only the quantity of their years but, more importantly, the quality of those years. And yet, current advanced education does not prepare health professionals for nursing home practice. In an effort to help health care providers make the transition, University of Utah College of Nursing Associate Dean for Research and the Ph.D. Program Ginette Pepper is leading a team to develop aninterdisciplinary training and certification program to prepare nursing home staff – from social workers to administrators – in the increasingly complex field of geriatric care. "We need the whole team, including the patient, families and the community," Pepper says. "And the education that we have in most health professions is not sufficient."

Through a \$2.6 million cooperative agreement with the Health Resources and Services Administration, Pepper's team is launching the Utah Geriatric Education Center (UGEC) this year. Using distance learning and two-way contact with 19 urban and rural nursing care facilities, the certification program will start with its first class of nurse practitioner students in the fall of 2016. The "medical home" model uses a collaborative multidisciplinary team to catch and address medical issues before they develop into serious concerns that require emergency department visits or hospital admissions. The preventative care model is based on teamwork, communication and skill-building, says Pepper.

"Most people think of long-term nursing home care as sick care, but we're trying to shift that perspective to preventative care," she says.

"We want to make the nursing home the primary care medical home for these patients."

The need for such training is particularly acute in Utah, which ranks lowest in the country for long-term care support services, says UGEC Co-Director for Physician Programs Mark Supiano. "Improved education for geriatric care providers is a huge need," Supiano says. "Many of the physician medical directors in these facilities don't have training specifically in geriatrics. Most of them come from backgrounds in internal medicine or family medicine, though they may have been working in geriatrics for some time." Supiano plans to provide additional education for nursing home medical directors, leading to certification from the American Medical Director's Association. Eventually, the certification could be offered in disciplines from physical therapy to health care administration.

The UGEC brings community partners and multiple players from University Health Sciences under the same umbrella. Joining the effort are long-term care facilities administered by Avalon Health Care and Mission Health Services, along with Health Insight and the Alzheimer's Association. "The exciting aspect of UGEC is that although we have different health care discipline programs involved, common curricular strands are woven through all of them," said UGEC Co-Director for Nursing Programs Linda Edelman, an associate professor at the College of Nursing. "This allows for inter-professional team building and communications throughout the curriculum."

Edelman and her team will educate nursing staff and certified nursing assistants working in the skilled nursing facilities. In these types of facilities, the nurses and nursing assistants perform the majority of direct patient care, and so their ability to observe changes in the condition of a patient and report those changes to a physician is crucial to effective preventative care. Overlaying all of these efforts is an emphasis on training health professionals, patient families, and other caregivers to deal with the challenges of patients with Alzheimer's and associated dementias. That's where Co-Director for Interdisciplinary and Community Programs Kara Dassel comes in. Partnering with the Alzheimer's Association, Dassel plans to develop online training for direct care workers and to host five community-based education workshops across the state.

The ultimate goal for UGEC is to use such initiatives to create a new template for long-term care of older adults that can be reproduced throughout the state and beyond.

"We're integrating primary care into geriatrics and geriatrics into primary care," Pepper says. "People in nursing homes have traditionally gotten something sort of in between.

"The majority of older adults have short stays in nursing homes for recuperation or rehabilitation," she adds. "But many are not just passing through—this is now their place of residence and source of primary care. They are there long term."

### Jan Thompson was in the right place at the right time.



Her years at the University of Utah College of Nursing – and work with Hmong refugees in Salt Lake City – set her on a path that has guided three decades as a nurse and a teacher.

"It would not have been happening in my life if I had not attended the University of Utah," said Thompson, recipient of the college's 2015 Distinguished Alumni Award. "I would have been a completely different person."

Thompson arrived in Utah in 1978, soon after receiving her nursing degree from the University of lowa. One of the college's first Ph.D. students, she studied political science, sociology, anthropology and philosophy. At the same time, she was quickly drawn into then-transcultural nursing department chairman Peter Morley's work with a growing population of Southeast Asian refugees.

As a doctoral student, she conducted ethnographic interviews with displaced Hmong families, probing their initial trauma, flight and ultimate resettlement in the Salt Lake Valley to determine the impact on their health and medical care. In 1981, Thompson successfully applied for a grant to fund Utah's first mutual assistance association to help the Hmong find housing, education and jobs.

"It was the transformation of my conscience about globalization and what was happening around the world, including the recognition that in a post-colonial world, places that were carved up by European colonizing powers began to shift in independence struggles and war, displacing large populations," she said. "Those experiences were the subject of mylearning in the humanities and social sciences at the University of Utah," Thompson added.

The University of Utah's transcultural nursing program (and Salt Lake City's burgeoning Hmong population) provided a laboratory for 2015 Distinguished Alumna Jan Thompson. "There was a lot of discussion and thinking going on about de-colonization and the effects of decolonization on peoples around the world. It was mind-expanding."

Her years at the U., and a specialization in transcultural nursing, continued when she took a teaching post at the University of Southern Maine. She continued to work with refugees of the Southeast Asian conflict – this time Khmer refugees from Cambodia – and helped establish

a university-funded, nurse-managed clinic in a diverse, low-income Portland neighborhood.

In 2006, Thompson was named dean of the Faculty of Nursing at the University of New Brunswick, where she worked to boost indigenous or "first nation" student enrollment and retention and helped to establish another nurse-managed clinic for the underserved and homeless.

Along the way, Thompson has taught and researched critical social theory, health equity, feminist analysis and democratic professionalism in nursing.

"The relevance of that kind of education and that kind of engagement with populations really does speak to the connection between health equity and social justice in health," she said.



#### - JOANNE MCGILLIS -

University of Utah College of Nursing Development Board Member PLEASE CONSIDER MAKING A LEGACY GIFT TO PROVIDE CRITICAL SUPPORT TO THE UNIVERSITY OF UTAH COLLEGE OF NURSING'S STUDENTS AND FACULTY.

Dedicate future funding for first-time nursing student scholarships. Or help recruit and hire the next nurse scientist to push the bounds of medical research.

For more information, contact Senior Development Director Dinny Thayne Trabert at **801-587-9126** or email *dinny.trabert@nurs.utah.edu* 

As we face a looming shortage for nursing students and faculty due to lack of funding, it comforts me to know that my planned gift to the University of Utah College of Nursing for student scholarships and faculty will help to address these critical needs.

### **CARING FOR THE FORGOTTEN**

This morning at the Salt Lake Valley Detention Center, College of Nursing assistant professor Jennifer Clifton is studying a large mass on a young man's ear. He's worried it could be cancer.



How do you wash your hands properly? Assistant Professor Jennifer Clifton says besides providing medical care, University of Utah nurses often teach detained kids hygiene tips.

The prospect is scary for anyone, but particularly stressful for the boy, who is being held at the detention Center in West Valley City. It starts to bleed as Clifton prods. She concludes it's a raised scar, a keloid, not a cyst. You can get that removed, but it's going to require a plastic surgeon, the family nurse practitioner says. If I cut that off, you're going to have a scar. You don't want me to do it and you don't want just any doctor to do it. Clifton reassures the teenager. He smiles and goes back to class with a bandage on his ear.

Under a contract first negotiated in 1999, the college, in partnership with the Department of Pediatrics, provides primary medical care for teens at 10 Juvenile Justices Services (JJS) detention centers along the Wasatch Front. It's the only collaboration of its kind in the country. The contract with the state covers the costs of the program, including clinic nurses' salaries, and generates about 20 percent of the college's faculty practice revenue. The program started with just five centers and in 2014 expanded to twice that number of clinics from north to south. In all, about 5,500 incarcerated Utah teens are cared for by College of Nursing nurses.

While the state gets quality health care out of the deal, the detention centers have served as clinical education centers for dozens of University of Utah College of Nursing RN and Nurse Practitioner students, as well as School of Medicine pediatric residents. Clifton, who has been managing the program for seven years, says students learn invaluable lessons in nursing and medicine at the JJS clinics – about the socioeconomic forces and drug addiction and family dissolution that often lead at-risk youth to get in trouble. Some kids, those at short-term detention centers, the nurses will see for an average of eight days. Others sentenced to secure facilities can stay for months.

"We put a face on these kids who otherwise would just be seen as numbers, but they really are kids and they need our help," Clifton says. "You get experience talking to kids about sexual issues, drug abuse– really difficult topics. It's a wonderful teaching and learning opportunity." The students – some just a few years older than the kids they're taking care of – learn to be mentors and teachers for the detained youth with lessons as simple as how to properly wash their hands and the importance of drinking milk or as complex as how hepatitis and tuberculosis spread.

### "It gives the student a chance to be the expert in the room, to be a leader," she adds.

At the same time, a 2012 study conducted by college faculty showed that the detained youth are gaining more knowledge about their own health than many unincarcerated teens get – a concept known as "health literacy."

Besides the practical education and medical care the contract provides, university nurses are contributing to a growing information database about the health care needs of an at-risk youth population in Utah.

Last year, the Utah Legislature set aside \$80,000 for college nurses to pilot a one-year program to screen and treat Sexually Transmitted Infections (STI). The funding was spurred by a goal of meeting national standards of care for JJS youth. A demonstration project with the Utah Department of Health and the Centers for Disease Control and Prevention documented the need: From July 1, 2012 to December 31, 2013, college staff tested 3,267 out of 3,369 teens at five JJS sites and diagnosed 182 new chlamydia or gonorrhea cases – an overall infection rate of 5.6 percent, or twice the state average.

Screeners found nearly three out of four incarcerated youth were sexually active and two-thirds did not use condoms. Just over half had never been screened for sexually transmitted diseases including chlamydia and gonorrhea.

Over the first quarter of the new STI program, 12.4 percent of kids tested positive for an STI in 2015. The national average is 13 percent.

At a February 2015 legislative meeting, state JJS Director Susan Burke said the college nurses' STI intervention has been "very useful and valuable for the population that we're dealing with, because obviously a high-risk population engages in high-risk behavior." And West Jordan Republican Rep. Eric Hutchings added, "The earlier we get in to help these kids, the better off they're going to be."

In 2016, lawmakers and Juvenile Justice Services managers renewed the college's contract. Without treatment, chlamydia and gonorrhea could lead to infertility and sterility and increase the risk of contracting more serious infections, including HIV.

"Our data supports that we are asking the right questions and screening appropriately. There is an absolute need here," she says.

For many university nurses and even alumni, their work at juvenile justice clinics is a calling. Sam Vincent, a U. nursing school graduate who now manages the 4th Street Clinic's psychiatric programs, still works about 30 hours a month at JJS facilities. He says the kids at juvenile detention centers are very different from the adults he treated at the Utah State Prison.

"They were pretty hard," Vincent says. "It was pretty unrewarding work. But the kids are open. You can still have some kind of impact."

LouAnn Hill, a licensed practical nurse who helps run both programs for screening and treating Sexually Transmitted Infections and providing immunizations, has worked at juvenile justice clinics for 16 years.

"We do a ton of teaching. A lot of these kids don't have involved parents. They don't know to put their foot up with a sprain, to brush their teeth twice every day. They have such strange ideas about puberty and how you can get pregnant," she says.

Still, the health care work is uniquely stimulating. "I would have never thought of this kind of work [at the beginning of my career], but I've never looked back," Hill says.

That doesn't mean there isn't heartbreak for the nurses who become invested in their patients' lives only to watch them get in trouble again, often for more serious offenses, with some eventually ending up in adult prison.

"We've all had our hearts broken," Clifton says, "our hopes dashed over and over again. But we still hope."

### LIVING THROUGH GRIEF Sean Covey Knows Loss

In the span of two months in 2012, he lost both his father, self-help author Stephen Covey, and his daughter Rachel.

The elder Covey, author of "The 7 Habits of Highly Effective People," died at 79 years old after a bicycle accident in Idaho Falls. A 21-year-old studying to become a veterinary tech, Covey's daughter took her own life after a bad reaction to depression medication.

"It was back to back," Covey says. "My father's death was easy, relatively speaking. The grief of losing my daughter was on a whole different level."Covey, himself an author, spoke at the University of Utah College of Nursing's Caring Connections "Grief and the Holidays: Finding Warmth in Winter" program in November.

"The holidays are really terrifically challenging for people," says Katherine Supiano, Caring Connections director and an associate professor at the college.

"There's such high social expectations about being happy and pressure for families to do the traditional things when their world is turned upside down. It's really hard to do anything ordinary or traditional." Caring Connections' winter speaker is part of a larger program to help Utahns work through their feelings of loss, including evening group sessions at the College of Nursing for those who have lost spouses or children and those trying to emerge from debilitating complicated grief. Covey says there are no shortcuts with grief.

### "You can't shortchange the grieving process. There's no quick fix. And if you skip the pieces they come back later."

The Covey family established a foundation – Bridle Up Hope -- in Rachel Covey's honor. The nonprofit is dedicated to helping young women build confidence through equestrian training. That legacy, Covey says, has helped the family move on and grow stronger.



*There's no shortcut through grief, author Sean Covey says.* (Here with Caring Connections Director Katherine Supiano.)

### GLOBAL OUTREACH









Along with University of Utah Global Health and state leaders, Associate Dean Leissa Roberts traveled to Tanzania in October 2015, visiting a medical college, oncology wards and a maternity center. What she found convinced her the College of Nursing could do more to help provide Tanzanian nurses with better training and equipment.

### GLOBAL HEALTH THROUGH THE EYES OF A NURSE

The health care to-do list in East Africa can be overwhelming. Everywhere Associate Dean of Faculty Practice, Leissa Roberts looked in Tanzania last fall, there was another opportunity or need – everything from administering vaccinations to replacing rubber mattresses in patient wards to providing up-to-date training for doctors and nurses.

"This trip was humbling, amazing and overwhelming all at the same time," Roberts said. "All one has to do is turn five degrees and another need is apparent."

The October trip – with Republican State Sen. Stephen Urquhart, University of Utah Global Health leaders and Division of Public Health and School of Dentistry faculty – provided an opportunity to follow up with 10 Tanzanian nurses who were picked to come to Utah last summer for intensive midwifery training. Along with Pronto International, the College of Nursing provided a weeklong session covering obstetrical emergencies using low-tech, high-fidelity simulations. Funded through a donation from the Robert S. and Beth M. Carter Foundation, the exploratory trip gave Roberts and the others a chance to meet current and potential partners as they seek to develop interdisciplinary academic interventions, research prospects or health services in a global setting. After visiting Kilimanjaro Christian Medical College, Ocean Road Cancer Hospital and Aga Kahn University, the Utah team plans to formalize a relationship and a University of Utah presence at the Tanzanian university.

"There are substantial, unmet needs for health care services in Tanzania and ample room for partnering and improvements," Roberts says.

### Bridging the Homeless Healthcare Gap

Sam Vincent walks out the door of the 4th Street Clinic and immediately meets a patient. They talk about the man's upcoming appointment. "I don't have a phone anymore," he says, shrugging, golden retriever on a leash.

#### VINCENT NODS. HE KNOWS.

It's a constant struggle for homeless clients to stay on top of their appointments and keep up with their meds. As many as half of homeless patients are no-shows for medical appointments and that number climbs for behavioral health visits. As psychiatric director of Behavioral Health Services for Wasatch Homeless Healthcare, Vincent is at the forefront of trying to care for homeless and low-income Utahns with mental illnesses. Ten feet around the corner, he meets another patient in a torn flannel shirt. "Do you need meds? We've got to do that by 3 p.m.," Vincent says. "Your appointment's at 5, but the pharmacy will be closed."

The man shakes his head. "I'll be right back," he says and walks down the street. After 12 years of working as a nurse – first in the ICU and emergency room and later at the state prison – Vincent, an Advanced Practice Registered Nurse, nurse practitioner, and instructor at the College of Nursing, has found his avocation. Every day, the 4th Street Clinic's waiting room fills with homeless and low-income patients suffering with flu and abscesses and addiction and schizophrenia.

"This clinic is kind of a safety net below all other safety nets for health care in Salt Lake City," Vincent says. He is the oldest of five children of a school teacher mother and an optometrist father. Vincent received his bachelor's degree from the College of Nursing in 2003 and started working as a registered nurse. In 2008, he earned his master's degree. In the process, he started to focus on psychiatric nursing and took a part-time job at 4th Street. A year later, he was working full-time at the clinic.

"This is like doing that every day," he says. "It's both wearisome and nourishing at the same time. You have bad days, but you're filled up at other times."



How does a person living on the streets remember when to take their medicine or go to the doctor? College of Nursing 2016 graduate and nurse practitioner Sam Vincent has an idea.

Vincent and his wife Heidi live with their two children in Sandy, Utah. An avid runner, he balances the toll of his job with daily hour-long runs and trips to the Oregon coast and a family cabin in Idaho.

A year ago, Vincent's presentation about missed clinic appointments caught the attention of School of Architecture Professor Stephen Goldsmith at a retreat for the university's Entrepreneurial Faculty Scholars. Together with students from the Capstone Initiative Goldsmith manages, a new innovation research center at Marriott Library and a \$14,000 grant from University of Utah Vice President for Research Thomas Parks, Vincent is developing a wearable electronic buzzer that will remind homeless patients of their appointments with doctors and nurses. A prototype created on 3D printers could be tested by this spring. A preliminary patent is in the works.

Goldsmith said Vincent has a unique sensitivity to the needs of the population that would use the devices – for example, making sure they know they aren't being tracked by the wristbands.

"He is a wonderful collaborator with the undergraduate students. They are all equal players," Goldsmith says.

"This is a beautiful example of inter-disciplinarity, transdisciplinarity and working across generations."

Last year, Vincent co-wrote a grant proposal and received a three-year, \$250,000 award that increased the clinic's mental health staffing from one to six, including two therapists and two peer specialists. Vincent keeps them all grounded, social worker Annie Aquila says.

### "In tough situations, I turn to Sam and try to [follow] him, since his style is unflappable and understanding, firm and steady," Aquila says.

Despite the grueling pace and weighty circumstances of the population he serves, Vincent says he has no regrets for pursuing a career less traveled.

"Working in a place like this puts a period on all your complaining about what you don't have," he says.

"Homeless people are really open. You can develop really close relationships with them that are incredibly rewarding. This job brings out the best in me."

### AWARDS



#### ASSISTANT PROFESSOR SUE CHASE-CANTARINI

Routinely picked as a favorite of her students, Assistant Professor Sue Chase-Cantarini received the University of Utah's Mortar Board Senior Honors Society and Order of Omega Greek Honors Society's Professor Recognition Award – an acknowledgement of her excellence in and commitment to teaching and mentoring.



#### PROFESSORS LAUREN CLARK AND ANA SANCHEZ-BIRKHEAD

Focused on health disparities among minority women, Professors Lauren Clark and Ana Sanchez-Birkhead will use an award from the Eunice Kennedy Shriver National Institute of Child Health and Human Development for a research project meant to bridge the physical and cultural factors that cause postpartum difficulties.



### PH.D. PROGRAM DIRECTOR MARGARET CLAYTON

Using scenarios played out in the college's simulation center, Ph.D. Program Director Margaret Clayton developed a course to guide responsible nursing research. Clayton's innovative course led to her recognition as one of nine University of Utah faculty to receive the Daniels Fund Ethics Initiative Leadership in Ethics Education Award for 2014-15. The simulation lab provided a safe, controlled environment, the Daniels Fund said.



#### CARE MANAGEMENT SPECIALTY DIRECTOR BRENDA LUTHER

Spurred by the Affordable Care Act's push for valuedriven outcomes, Care Management Specialty Director Brenda Luther is developing a certificate program that prepares students to organize interdisciplinary teams that think more strategically about patient care and disease progression. Recognized by the governor's office, Department of Workforce Services and Utah System of Higher Education, her work garnered a \$195,400 grant from the Utah Cluster Acceleration Partnership (UCAP). This is how the rubber meets the road, she says.



### ASSOCIATE DEAN FOR FACULTY PRACTICE LEISSA ROBERTS

After more than 20 years as a faculty member at the College of Nursing and overseeing 12 faculty practices, Associate Dean for Faculty Practice Leissa Roberts, a certified nurse midwife, has been inducted as a fellow in the American College of Nurse Midwives. Fellowship recognizes contributions to the care of women and the nursing profession.



### ASSOCIATE DEAN FOR ACADEMIC PROGRAMS AND STUDENT SERVICES BARBARA WILSON

Taking on leadership of one of the state's most influential nurse advocacy groups, Associate Dean for Academic Programs and Student Services Barbara Wilson is chairwoman of the Utah Organization of Nurse Leaders (UONL) Academic Leadership Council. #2

in National Institutes of Health (NIH) Research Funding

\$7m in NIH grant funding in 2015

Seven endowed chairs

# Five

FELLOWS of the Americar College of Nurse Midwives Nine

**FELLOWS** of the American Academy of Nursing



Four

FELLOWS of the Gerontological Society of America



### Healing the Nursing Faculty Shortage



Nurses are the heart of an increasingly complex health care system – the first person to prepare a patient for surgery and the last to check them out of the hospital.

And in Utah, we face a uniquely challenging health care equation: Our elderly population is the fastest-growing in the country. At the same time, we have the youngest population and the lowest death rate. That formula adds up to even greater demand for well-educated nurses. Last year, the University of Utah College of Nursing had to turn away more than 200 qualified applicants due to a shortage of faculty. Many are retiring. But a good number have been lured to teach out-of-state or work at higher-paying clinical jobs. As the flagship nursing education program in the state, the University of Utah's College of Nursing is educating both the state's future nurses and the teachers who will prepare them. Our Ph.D. and Doctor of Nursing Practice students eventually may teach at all nursing programs throughout the state, including Brigham Young University, Utah Valley University and Weber State University. That makes our effort to hire more faculty to teach more students all the more critical to the future of healthcare in Utah.

### YOU CAN HELP!

For more information about ways you can help Heal the Nursing Faculty Shortage, visit http://nursing.utah.edu/ development/index.php or call **Advancement Program Manager Janzell Tutor** at **801-581-5109**.



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