ASKING WHY: RESEARCHER’S LIFELONG CURIOSITY LEADS TO NEW DISCOVERIES ABOUT THE HEART .............................. 2
Plus: Addressing obesity through telemedicine empowers rural providers

INTERPROFESSIONAL EDUCATION TO IMPROVE PATIENT CARE ................................................................. 6
Plus: Being the change

NURSING EXCELLENCE AT A VERY PERSONAL LEVEL ................................................................. 10
Plus: Improving health care for LGBT patients

BUILDING BRIDGES TO BOOST QUALITY AND EXPERTISE IN COMMUNITY CANCER CENTERS ........ 14
Plus: Gifts of limitless possibilities for one, for many

NESBITT STEWARDS THE HEALTH SYSTEM DURING LEADERSHIP TRANSITION ............................... 18
Plus: Amid contrasts, new diversity officer looks for similarities
UC Davis is united in caring for human and animal health, addressing issues in the changing environment, cultivating and protecting food systems and enriching lives through art and intellectual exploration. At UC Davis Health System, 2013 was another year of accomplishment, recognition and innovation. Working together as a team ensured that our top-ranked institution continued to deliver high-quality care, world-class education and research results that improve health care and transform lives. New opportunities await in 2014 as health-care reform unfolds and we continue our commitment to the well-being of our patients, the community and each other.
The novel molecular understanding we have uncovered paves the way for new therapeutic strategies that protect the heart health of patients with diabetes.

— DON BERS  
Cardiovascular researcher and chair of the UC Davis Department of Pharmacology
As an inquisitive teen, Don Bers dismantled and reassembled the engine of his first car to learn how it worked. When he found high-school chemistry lectures a bit mundane, he ran his own experiments — with the teacher’s blessing, of course — in the school’s lab.

“Yes, I did disrupt class once,” said Bers, a UC Davis cardiovascular researcher. “There was a small explosion and lots of smoke.”

By college, Bers was learning how the body works, and seeking answers to questions such as why the heart beats when it does. When a professor lectured on cardiac physiology, he was fascinated—and hooked.

Today, Bers is a world-renowned expert on the cellular and molecular factors that regulate heart excitation and contraction. His body of research has essentially built the modern framework for understanding normal and abnormal heart function, and he is the author of a reference book widely considered the bible of cardiac function.

Bers uses this profound knowledge and curiosity to confront important challenges in the prevention and treatment of heart conditions. His research team recently identified, for the first time, a biological pathway that is activated when blood sugar levels are abnormally high and causes irregular heartbeats, or cardiac arrhythmia.

The discovery helps explain why diabetes is a significant independent risk factor for heart disease, and was one of the most significant findings at UC Davis Health System in 2013.

“The novel molecular understanding we have uncovered paves the way for new therapeutic strategies that protect the heart health of patients with diabetes,” said Bers, who also chairs the UC Davis Department of Pharmacology.

While heart disease is common in the general population, the risk is up to four times greater for diabetics, according to the National Institutes of Health. The American Heart Association estimates that at least 65 percent of diabetics die from heart disease or stroke, and has emphasized the need for research focused on understanding this relationship.

More than 8 percent of Americans are estimated to be diabetic, and approximately 80 million more thought to be prediabetic.

Through a series of experiments, Bers and his collaborators showed that the moderate-to-high blood glucose levels characteristic of diabetes caused a sugar molecule (O-linked N-acetyl-glucosamine, or O-GlcNAc) in heart muscle cells to fuse to a specific site on a protein known as calcium/calmodulin-dependent protein kinase II, or CaMKII.

CaMKII has important roles in regulating normal calcium levels, electrical activity and pumping action of the heart. Its fusion with O-GlcNAc, however, led to chronic overactivation of CaMKII and pathological changes in the finely tuned calcium signaling system that it controls — triggering full-blown arrhythmias in just a few minutes. The arrhythmias were prevented by inhibiting CaMKII or its union with O-GlcNAc.

Gerald Hart, Bers’ collaborator and chair of the Department of Biological Chemistry at Johns Hopkins, said this research “represents the most clear-cut mechanistic study to date of how high glucose can directly affect the function of a critical regulatory protein.”

“The Bers group’s findings undoubtedly will lead to development of treatments for diabetic cardiovascular disease and, potentially, therapeutics for glucose toxicity in other tissues that are affected by diabetes, such as the retina, the nervous system and the kidney,” Hart said.
Addressing obesity through telemedicine

“Obesity prevention and management can be particularly challenging in rural areas. Families don’t have as much access to walking paths, play facilities and places to buy healthy food. There may be only one grocery store in town.”

— ULFAT SHAIKH
UC Davis associate professor of pediatrics

Ulfa Shaikh once dreamed of being a physician, a public health professional, a writer, a graphic designer, a teacher and a scientist. Some would think she was a kid who couldn’t make up her mind!

“I just loved both the biological sciences and the social sciences,” she said.

Yet today, as an associate professor of pediatrics at UC Davis, Shaikh is able to fulfill all of those roles. The modern-day Renaissance woman, who also authors a blog called Quality Pulse, finds herself drawing from each discipline while treating her own patients, and through her academic activities, she helps other providers improve care.

For instance, when there was a bottleneck in a very busy clinic early in her career, Shaikh sat in the

TREATING PREMATURE INFANTS WITH PROBIOTICS, dietary supplements containing live bacteria that maintain natural intestinal balance, may be effective for preventing a common and life-threatening bowel disease among premature infants, UC Davis researchers found.

Scientists at UC Davis discovered that HIGH LEVELS OF “GOOD” CHOLESTEROL AND LOW LEVELS OF “BAD” CHOLESTEROL are correlated with lower levels of the amyloid plaque in the brain that is a hallmark of ALZHEIMER’S DISEASE, in a pattern that mirrors the relationship between good and bad cholesterol in cardiovascular disease.

A new prediction rule, developed by UC Davis researchers, MAY HELP PHYSICIANS DETERMINE THE NEED FOR A COMPUTED TOMOGRAPHY (CT) SCAN following blunt trauma to a child’s abdomen, avoiding unnecessary exposure to CT radiation hazards.

UC Davis researchers found that VASCULAR BRAIN INJURIES FROM CONDITIONS SUCH AS HIGH BLOOD PRESSURE AND STROKE are greater risk factors for cognitive impairment among non-demented older people than is the deposition of the amyloid plaques in the brain that long have been implicated in conditions such as Alzheimer’s disease.
empowers rural providers

waiting room and front office during her downtime to unearth the delays. More recently, she developed videos and designed a smartphone application to help clinicians and medical students learn about quality improvement.

Shaikh is also putting her variety of skills to the test as a pediatrician concerned about childhood obesity, one of America’s top public health problems. More than a third of U.S. children and adolescents are overweight or obese, according to the Centers for Disease Control and Prevention.

“Obesity prevention and management can be particularly challenging in rural areas,” Shaikh said. “Families don’t have as much access to walking paths, play facilities and places to buy healthy food. There may be only one grocery store in town.”

To help, Shaikh and her collaborators developed a clinical research project called HEALTH-COP or Healthy Eating Active Living TeleHealth Community of Practice, a virtual-learning and quality-improvement network that reached out to seven clinics throughout rural California that serve diverse patient populations.

Using videoconferencing and other methods, HEALTH-COP taught rural clinicians how to better assess and discuss body weight, counsel about nutrition and physical activity, screen for risk factors and reorganize clinics to provide better care.

The combination of clinical materials, education and peer support had a major impact with physicians’ abilities to provide obesity-related prevention strategies that significantly improved results after program implementation.

“As an urban pediatrician, if I can’t figure out a problem, all I have to do is find a colleague in the building where I work and ask their impressions,” Shaikh said. “By setting up this network, we made it easier for rural clinicians to do the same. Regardless of where they are in California, they all face similar problems. Now, they can share solutions.”

CHILDHOOD GUNSHOT INJURIES, WHILE UNCOMMON, are more severe, require more major surgery, and have greater mortality and higher per-patient costs than any other mechanism for childhood injury — particularly among adolescent males, a UC Davis researcher found.

More telemedicine research findings

A UC Davis study found that telemedicine consultations from pediatric specialists REDUCED THE NUMBER OF DRUG ERRORS IN EIGHT RURAL EMERGENCY DEPARTMENTS.

The U.S. Department of Health and Human Services Office for the Advancement of Telehealth – Health Resources and Services Administration (OAT-HRSA) will provide clinicians at rural hospitals ROUND-THE-CLOCK ACCESS TO NEONATOLOGISTS and other subspecialists through the use of UC Davis’ award-winning secure videoconferencing capabilities.

Telemedicine consultations with pediatric critical-care medicine physicians SIGNIFICANTLY IMPROVE THE QUALITY OF CARE FOR SERIOUSLY ILL AND INJURED CHILDREN treated in remote rural emergency rooms, where pediatricians and pediatric specialists are scarce, UC Davis researchers found.

In fiscal year 2012–2013, TOTAL RESEARCH FUNDING at UC Davis Health System included nearly 1,000 research grants and contracts totaling $207.3 million, 56 percent of which come from the NIH, placing it 34th among 139 medical schools.

The international autism and science-advocacy organization Autism Speaks named a UC Davis MIND Institute study on TUMMY TROUBLES IN CHILDREN WITH AUTISM as one of the top 10 scientific advances of 2013.
Interprofessional education to improve patient care

As a young nurse caring for critically ill patients, Deb Bakerjian quickly recognized the profound difference that a well-trained health team can make in the quality of patients’ lives – especially when the team can focus on treating ailments before they become critical.

With that in mind, Bakerjian identified an opportunity where she could influence the health of older adults before they ended up in the hospital, gravely ill with conditions that were preventable. She created a special group of providers that met with nursing-home residents and worked with them to improve their health.

“I tracked patients who were discharged from a rural hospital where I worked to the nursing homes where they lived, and saw a breakdown in what we call ‘the continuum of care,’” said Bakerjian, a graduate of UC Davis’ nurse practitioner program. “They needed more and better-coordinated care from doctors and nurses, so I established a group practice of nurse practitioners to fill that need.”

The project gave Bakerjian firsthand experience about the value of innovative approaches to improving health. With the launch of the Betty Irene Moore School of Nursing at UC Davis in 2009, she saw another opportunity to extend that impact.

Now a faculty member of the school, Bakerjian educates and trains future nurse practitioners and physician assistants.

“At UC Davis, the chance to develop innovative solutions to improve health is always there.”

— DEB BAKERJIAN
Senior director for Nurse Practitioner and Physician Assistant masters’ programs
assistants, helping to meet a growing need for primary-care providers. She also works to find new ways to enhance the care they deliver.

In 2013, the Betty Irene Moore School of Nursing expanded its graduate programs to include master’s-degree offerings for aspiring nurse practitioners and physician assistants, with a focus on preparing primary-care providers for work in rural and underserved communities.

The UC Davis programs are unique because they are the only tandem nurse practitioner and physician assistant programs in the nation, and the physician assistant program is the only one offered in the University of California system.

While the master’s-level programs are new, UC Davis has graduated more than 1,800 nurse practitioners and physician assistants over the past 40 years in the certificate program. More than two-thirds of graduates work in underserved areas and nearly 70 percent work in primary care, compared with much lower national averages of between 30 and 40 percent.

Both the nurse practitioner and physician assistant programs were previously offered through the UC Davis School of Medicine, although as certificate programs. Under the School of Nursing the programs continue to focus on care for underserved communities, Bakerjian said, but they now emphasize leadership and interprofessional teamwork as well.

By learning together, physician assistant and nurse practitioner students are exposed to both medical and nursing perspectives prior to the clinical training for their profession.

“I am excited about the future of health care with opportunities like this,” Bakerjian said. “At UC Davis, the chance to develop innovative solutions to improve health is always there.”

OUTSTANDING FACULTY

FOUR BECOME AAAS FELLOWS

Four UC Davis Health System faculty members were elected in 2013 as fellows of the American Association for the Advancement of Science (AAAS). The new members are:

- **FREDERICK J. MEYERS**
  Vice dean for the UC Davis School of Medicine

- **DONALD M. BERS**
  Chair of the Department of Pharmacology at the UC Davis School of Medicine

- **FU-TONG LIU**
  Distinguished professor and chair emeritus of the Department of Dermatology at the UC Davis School of Medicine

- **KEVIN C. KENT LLOYD**
  Professor of surgery at the UC Davis School of Medicine and director of UC Davis’ Mouse Biology Program

NEW IOM MEMBER

**NANCY E. LANE**, an endowed professor of medicine and rheumatology and director of the Center for Musculoskeletal Health, was elected to the Institute of Medicine, one of the nation’s highest honors in health and medicine. Lane is an internationally recognized scientist in the fields of osteoporosis and osteoarthritis.

PRESIDENTIAL EARLY CAREER AWARD

**KATHERINE A. RAUEN**, professor in the Department of Pediatrics and a physician-scientist affiliated with the UC Davis MIND Institute and UC Davis Children’s Hospital, has received a 2013 Presidential Early Career Award for Scientists and Engineers, the highest honor bestowed by the United States government on science and engineering professionals in the early stages of their research careers.

NURSE PRACTITIONERS ASSOCIATION FELLOW

**DEBRA BAKERJIAN**, an assistant adjunct professor at the Betty Irene Moore School of Nursing, was one of 60 nurse practitioner leaders in the U.S. selected as a 2013 Fellow of the American Association of Nurse Practitioners. She oversees the nurse practitioner and physician assistant masters’ programs at the nursing school.
Being the change

“...We need to understand what affects an individual’s health. There are social factors to consider. What if they just lost their job? That can bring a lot of stress, cause poor eating and affect their children.”

— DIEGO VARGAS
Student in the Transforming Education and Community Health for Medical Students (TEACH-MS) Program at the UC Davis School of Medicine

Diego Vargas’ “aha moment” came as an undergraduate working in one of UC Davis’ student-run health clinics, which provide free health care to uninsured and other underserved populations. Originally from Peru, and an undocumented immigrant, Vargas witnessed firsthand how health-care disparities damage California’s low-income communities.

“I saw a lot of poverty in Peru but couldn’t even imagine there were similar situations in the U.S.,” Vargas said. “Seeing this for the first time shocked me and made me think about why I wanted to become a doctor. It really pushed me in my studies.”

Vargas is now a student in the Transforming Education and Community Health for Medical Students (TEACH-MS)

IN BRIEF

To attract and maintain a DIVERSE, QUALIFIED ACADEMIC WORKFORCE, institutions of higher education should have — and promote — policies to help balance career and family life, according to an article published by UC Davis researchers in the June 2013 issue of Academic Medicine.

PULMONARY AND CRITICAL CARE PHYSICIAN NICHOLAS KENYON was recognized by the Association of American Medical Colleges for building a collaborative training program with the UC Davis College of Engineering known as Capstone Senior Design Course.

U.S. News & World Report has ranked UC DAVIS SCHOOL OF MEDICINE AMONG AMERICA’S BEST MEDICAL SCHOOLS for the quality of its educational programs in primary care and research.

BY THE NUMBERS
1,333 Faculty and other academic personnel, full- and part-time
969 Residents and fellows
795 Students (For schools of medicine and nursing fiscal year ending June 30, 2013)

APPROXIMATELY 60 PERCENT of the students constituting the 2013 graduating class of the School of Medicine are REMAINING IN CALIFORNIA for the next phase of their physician training, with 15 percent at UC Davis Medical Center.
the American Association of Family Physicians recognized the UC Davis School of Medicine in 2013 as one of the nation’s top 10 schools for graduating medical students who go on to family medicine residencies.

In the immediate future, the group's focus is Oak Park, a primarily Latino and African-American community in Sacramento. Students learn about local health issues, develop relationships with community leaders and create response plans. By gaining a thorough understanding of the community, they hope to have a greater positive impact on residents.

“We need to understand what affects an individual's health,” Vargas noted. “There are social factors to consider. What if they just lost their job? That can bring a lot of stress, cause poor eating and affect their children.”

Ultimately, the TEACH program trains physicians to take these and other factors into account, share critical health education information and provide the personalized care that is so important to good health.

“As an undergrad, I minored in sociology, and it really taught me how social aspects affect health,” Vargas said. “This program gives me the tools to treat the patient and address those larger issues. It’s how I want to practice medicine.”

SUCCESSFUL LCME SITE VISIT
The UC Davis School of Medicine hosted a successful reaccreditation site visit in January 2014 by the Liaison Committee on Medical Education (LCME). Accreditation is expected by June.

Reaccreditation is required of U.S. medical schools every eight years. LCME’s prior site visit to UC Davis was in 2006. In their preliminary report in January, surveyors highlighted several areas:

- Student participation in student-run clinics that serve underserved communities;
- Office of Medical Education support to instructors of record in test development and scoring, logistical coordination of courses, consultation in instructional development, and IT support;
- Use of the curriculum database by faculty, the Committee on Educational Policy (CEP) and the Block Council to support curriculum management, including horizontal and vertical integration, and to identify content gaps and redundancies; and
- Facilities, including the Education Building and the Center for Health and Technology, and the use of innovative technologies for teaching.

Working to Improve Cardiac Arrest Training — for what are called “Code Blue” events — a multidisciplinary UC Davis Health System team has created a novel Code Blue team training initiative that takes advantage of the university’s high-tech simulation facilities and equipment and its highly regarded emergency and trauma-care expertise.

The National Institutes of Health has awarded UC Davis one of 10 grants to support the Frontiers of University Training to Unlock the Research Enterprise (FUTURE) program — a campuswide effort that will expand academic offerings, internships and other experiential learning in the biomedical sciences for graduate students and postdoctoral scholars.

Two UC Davis researchers led a team of experts to develop expectations for consistent, comprehensive pain management education for new health professionals, including nurses, physicians, pharmacists and physical therapists, outlined in a report published in Pain Medicine, “Core Competencies for Pain Management: Results of an Interprofessional Consensus Summit.”
Because of UC Davis’ doctors, therapists and the best nurses you could ask for, Cadence and our family had the support we needed to stay strong and hopeful.

— Amy Stamper
During her summer break this past year, 8-year-old Cadence Stamper experienced something very few children ever do—a stroke. It left her paralyzed on her left side and unable to sit, stand or walk.

That was until she spent the rest of her summer at UC Davis Children’s Hospital. Over the course of six weeks, a team that included occupational, physical and speech therapists, physicians and nurses helped the gymnastics enthusiast to regain strength and mobility. When Cadence was discharged, she was able to walk out of the hospital on her own.

Her parents, Amy and Leroy Stamper, were ecstatic.

“Because of UC Davis’ doctors, therapists and the best nurses you could ask for, Cadence and our family had the support we needed to stay strong and hopeful,” Amy Stamper said. “Most importantly, they helped give Cadence the confidence she needed to walk again, and to know that one day with hard work she will fully recover.”

Cadence’s nurses were a key to her progress, her mother said. They encouraged her to work hard, praised her efforts, helped her maintain a positive attitude and lifted her spirits, often through high-fives in the hallways.

This therapeutic relationship between the nurses and their patients and families is instrumental in exceptional, compassionate health care, and is an important component in the professional practice of nursing. It is also one of the many reasons UC Davis Medical Center was recently honored with the nation’s ultimate credential for nursing excellence.

In January UC Davis Medical Center, which includes the children’s hospital, earned the much-coveted Magnet Recognition® from the American Nurses Credentialing Center. Only about 7 percent of U.S. health-care organizations gain Magnet status, recognized nationally as the “gold standard” of nursing excellence.

Magnet Recognition distinguishes organizations with quality care, nursing excellence and innovations in nursing practice. Organizations must demonstrate that they outperform national benchmarks for patient satisfaction, employee satisfaction and nurse-sensitive clinical indicators, among other requirements.

As part of the process, the Magnet team at UC Davis detailed several initiatives that use interdisciplinary collaboration to improve patient outcomes, such as an early mobility program for intensive-care patients and a formal collaborative effort to reduce sepsis.

The application highlighted initiatives and outcomes from throughout the health system, including ambulatory care areas, perioperative services and the emergency department.

During a November site visit, four Magnet appraisers validated, verified and amplified what was submitted in the Magnet application. Magnet appraisers heard upbeat, positive stories from many of the more than 1,300 individuals—including nurses, medical and ancillary staff members; patients and their family members, community members; and medical and nursing program leaders at the medical center with whom they met.

For Cadence and her parents, their experience with the care and support she received from the nurses and her entire health-care team is reward enough.

Six months after leaving the hospital, Cadence is back doing gymnastics, continuing her journey to full recovery.
Improving health care for LGBT patients

During an office visit nearly 20 years ago, Ed Callahan told his physician of more than a decade that he was gay. His doctor’s reaction stunned him.

“You’re the first gay person I’ve ever treated,” he recalls his doctor saying.

“I knew at that moment that I would make sure other LGBT people would not have to repeat my experience.”

Callahan, associate dean for academic personnel at the School of Medicine, has spent the past 20 years helping to end the disparities faced by lesbian, gay, bisexual and transgender (LGBT) people. At UC Davis Health System, he has been the champion behind the institution’s move to incorporate sexual orientation and gender identity as standard demographic elements within the electronic health records for its patients. The inclusion was the first in the country for academic health systems.

UC Davis physicians and patient advocates say the new measure is an important step toward improving health care for LGBT individuals who often have avoided medical clinics out of fear of being humiliating or rejected.

“We know that the routine collection of information on race and ethnicity has greatly expanded our understanding of the conditions that arise among certain groups and how they are affected differently,” said Callahan. “That same approach is crucial for sexual minority populations, too. Stigma, prejudice and fear have long kept LGBT patients away from exam rooms, and from speaking more comfortably about their health. This is about breaking down barriers and reducing health disparities.”

“In brief”

UC Davis Medical Center ranks among The Leapfrog Group’s list of TOP HOSPITALS FOR 2013, a distinction that places UC Davis among a handful of health systems and hospitals in California and among the TOP 10 PERCENT of hospitals participating in the national survey that met tough national standards for safety and quality.

For the 15th consecutive year, UC Davis Medical Center has been selected as a CONSUMER CHOICE AWARD WINNER by the National Research Corporation.

COVERED CALIFORNIA, a new health-insurance marketplace created through the federal Affordable Care Act, includes health plans, such as Western Health Advantage, that ALLOW CONSUMERS TO CHOOSE A UC DAVIS PHYSICIAN for their primary care.

UC Davis Medical Center received a MOTHER-BABY FRIENDLY WORKPLACE AWARD from the Breast-feeding Coalition of Greater Sacramento, an affiliate of the California Breastfeeding Coalition, for its “above and beyond” support of breastfeeding employees.
Hantavirus, a life-threatening and rare infection, took hold of 14-year-old Jordan Herbst last fall. The Bishop, Calif., native almost didn’t survive.

However, through the efforts of pediatric specialists at hospitals in Inyo County, Reno, Nev., and, ultimately, at UC Davis, the region’s only academic medical center, he recovered and returned to his normal life in his town of 3,800 people on the eastern slopes of the Sierra Nevada mountain range.

Hantavirus is exceptionally rare. Only 55 cases have been confirmed in California, according to the U.S. Centers for Disease Control and Prevention.

It took just four days for Jordan, a healthy, active and athletic teenager, to become pale, blue and sedated, unable to breathe on his own.

Jordan’s father, David Herbst, a research scientist with the University of California’s Sierra Nevada Aquatic Research Lab and a UC Davis alumnus, recounted a decision to transfer his son a second time.

“His only hope was to be airlifted again to UC Davis Children’s Hospital in Sacramento, where they had a device called ECMO (extra-corporeal membrane oxygenation),” he said.

Extra-corporeal life support, called ECLS or ECMO, is a technology reserved for patients whose lungs are so damaged that they cannot function properly. In Jordan’s case, blood from his veins was circulated through the machine, re-oxigenated and then returned to the right side of his heart, pumping blood to his lungs and the rest of his body.

At UC Davis Children’s Hospital, all patients on ECMO have a bedside nurse dedicated to the care of the patient and a second, specially trained nurse committed to the management of the ECMO machine. A physician trained in ECMO technology manages or co-manages each of the patients on ECMO, and a UC Davis Medical Center perfusionist is available 24 hours a day, seven days a week to assist with the equipment and patient management.

“It was really impressive to see it firsthand,” Herbst said. “It wasn’t just the technology; it was the knowledgeable and truly caring people who impressed me — from the doctors who were doing the work to support him, to the nurses and respiratory technicians.”

The teen remained on ECMO for about 60 hours and was discharged home after about two weeks at UC Davis.

“The care that Jordan received at UC Davis went above and beyond all expectations,” said his mother, Katharine Allen. “We knew he was dying and that his only chance was getting him to the trauma team and sophisticated technology available at UC Davis … Thanks to them, Jordan is home and solidly on the path back to a healthy, normal, teenage life.”

Jordan had one simple message for all of the doctors, nurses and others who cared for him, from Bishop to Reno to UC Davis.

“I’m very thankful I’m alive,” he said. “Thanks for saving my life.”
Building bridges to boost quality and expertise in community cancer centers

UC Davis oncology nurse Terri Wolf began her multi-faceted career writing magazine features on food, nutrition and health because she loved to listen to people tell their stories.

Wolf is still listening – this time to nurses in rural communities who want to deliver high-quality cancer care.

“We’re helping nurses identify where they want to grow and what they want to learn,” said Wolf, the nursing and quality coordinator for UC Davis’ Cancer Care Network.

The unique partnership of cancer centers marries community-based treatment with the academic expertise and innovation of a major research university. Network members include the Gene Upshaw Memorial Tahoe Forest Cancer Center in Truckee, Rideout Cancer Center in Marysville, Mercy Cancer Center in Merced and San Joaquin Community Hospital AIS Cancer Center in Bakersfield.

Last year, Wolf invited network nurses to spend time at UC Davis’ state-of-the-art Center for Virtual Care, where they trained with UC Davis Comprehensive Cancer Center infusion nurses on patient simulators and reviewed protocols for chemotherapy-induced emergencies.

Wolf also organized the first all-network virtual educational event, which brought together 25 clinical specialists, infusion nurses and pharmacists to discuss chemotherapy case studies submitted by each site.

“These events advance the mission of the Cancer Care Network and UC Davis to share resources and improve the quality of cancer care in the community,” Wolf said.

Most recently, the network hosted a symposium to learn and share best practices. More than 75 physicians, nurses, administrators, pharmacy specialists, clinical research staff, radiation therapists and oncology support staff attended the event, which has already sparked important improvements such as daily infusion and clinic huddles.

For Wolf, an inaugural graduate of the Betty Irene Moore School of Nursing, working with network nurses and staff to improve processes and share skills is an evolution of her career in health – and it still creates the stories she loves to hear.

“‘We’re helping nurses identify where they want to grow and what they want to learn.’”

— TERRI WOLF
Nursing and quality coordinator for the UC Davis Health System’s Cancer Care Network
UC Davis Health System launched **A WEEKLY FARMERS MARKET** in 2013, reflecting a national trend that expands access to fresh, locally grown produce sold directly to consumers. The market drew hundreds of employees and neighbors surrounding the Sacramento campus.

During the 2013 fiscal year, UC Davis Medical Center provided **$44 MILLION IN FREE MEDICAL SERVICES** to patients who had no source of payment for urgently needed care.

UC Davis Health System made available a small parcel of land to the city of Sacramento to develop **A COMMUNITY GARDEN** for residents in the neighborhoods that surround the Sacramento campus and for UC Davis students, staff, and faculty.

“It is an honor to be where I am today, and I have overcome many obstacles to get here. Through their support, these donors are giving those of us who would otherwise not have the means and/or the opportunity to pursue our dreams.”

—LUIS GODOY
Fourth-year student at the UC Davis School of Medicine
Gifts of limitless possibilities for one, for many

Luis Godoy faced big challenges in high school. At one point, he dropped out to avoid gang activity that would have set his young life off on the wrong foot. He also became a father during his senior year.

After graduation he married and worked as an X-ray technician. Then, Godoy, the son of a California farmworker, decided to pursue his dream of becoming a doctor.

After attending community college, he transferred to UC Davis and earned a biology degree. With the help of scholarship support from SAFE Credit Union, he is now a fourth-year student at the UC Davis School of Medicine.

In 2013, UC Davis successfully reached its goal to raise $1 billion from more than 100,000 donors through The Campaign for UC Davis, the university’s first comprehensive fundraising campaign. While the funds benefit the entire university, they especially aid UC Davis undergraduate, graduate and medical students by providing access to a top-quality education.

“It is an honor to be where I am today, and I have overcome many obstacles to get here,” Godoy said. “Through their support, these donors are giving those of us who would otherwise not have the means and/or the opportunity to pursue our dreams.”

The accomplishment of raising $1 billion came more than a year ahead of the original December 2014 end date for The Campaign for UC Davis, which is now scheduled to conclude on May 31.

UC Davis Health System raised about $300 million of the $1 billion. The single largest commitment during the campaign was a $100 million grant from the Gordon and Betty Moore Foundation to establish the Betty Irene Moore School of Nursing at UC Davis.

“The creation of this school has brought tremendous value to the community and the state by preparing the next generation of health-care leaders,” said Heather M. Young, associate vice chancellor for Nursing and founding dean of the Betty Irene Moore School of Nursing. “It is just one of the hundreds of achievements our university has realized during the past seven years that would not have happened without philanthropy and visionary partners.”

UC DAVIS HEALTH SYSTEM
PHILANTHROPIC SUPPORT BY PURPOSE
2006–2013

- Student support/Project You Can .................................................. $48,057,997
- Endowed chairs and professorships ............................................. $21,148,549
- Student and faculty scholarship, research and instruction ............. $116,169,976
- World-class programs and unparalleled patient care .................... $103,271,069
- The university environment, to benefit students, faculty, staff and community ... $15,986,906

PATHWAYS TO ALLIED HEALTH CAREERS PROGRAM
is one of several UC Davis Health System programs that encourage high school students to seek careers in health. Ten senior high school students from Health Professions High School in Sacramento were part of the yearlong Pathways program in 2013.

AN ANNUAL FREE CONCERT
was again held to thank neighbors and the larger Sacramento community for their support and engagement.

THE ANNUAL MINI MEDICAL SCHOOL
offered insights into aging to more than 300 residents in the Sacramento region.

More than 200 employees volunteer in the community through the STAFF OFFERING SERVICE PROGRAM.
Nesbitt stewards the health system

“One of the health system’s greatest assets is the ability to come together as a team to both lead and adapt to change.”

—THOMAS S. NESBITT
Interim vice chancellor for Human Health Sciences and dean of the School of Medicine

For Tom Nesbitt, a graduate of the UC Davis School of Medicine, long-time family physician, educator, innovator and leader at UC Davis Health System, the people here are family.

“Over the past 25 years, I have witnessed tremendous change,” he said, “and always it is the talent and dedication of our faculty, staff and students that make this institution successful.”

Nesbitt, associate vice chancellor for Strategic Technologies and Alliances, was named interim vice chancellor for Human Health Sciences and dean of the School of Medicine in 2013 as a search for a new vice chancellor and dean was launched. New leadership would draw on everyone’s ability to handle change — and Nesbitt knew they were ready.

“One of the health system’s greatest assets is the ability to come together as a team to both lead and adapt to change,” he said. “Now, we are evolving again to lead in developing new models of care that meet the changing needs of our community and world,” Nesbitt said.

“Our talented team is helping to shape the future of health and health care.”

The vice chancellor/dean search committee, headed by UC Davis
during leadership transition

“I was so impressed with the people at UC Davis — clinicians, researchers, teachers, administrators, trainees and students — the energy was amazing, and I am excited to be able to become part of it.”

— JULIE FREISCHLAG
Incoming vice chancellor for Human Health Sciences and dean of the School of Medicine

Chancellor Linda P.B. Katehi and Department of Surgery Chair Diana Farmer, reviewed hundreds of applications and interviewed candidates from throughout the nation. Four finalists made presentations at open forums on the Sacramento campus.

By September, the committee selected a new leader for the health system — Julie Freischlag, the William Stewart Halsted professor and department director and surgeon-in-chief at Johns Hopkins Medical Institutions. Freischlag was the first woman to hold the surgery-in-chief position at Johns Hopkins.

“Throughout her career, she has served as a role model for her students, a respected colleague within the medical community, and a proven leader in advancing excellence and promoting health and wellness,” Katehi said. “As we grow our mission of national recognition in areas like food and health, she was our unquestioned vision of someone who would take us to new heights.”

Freischlag came to Johns Hopkins in 2003, after serving as the chief of the vascular surgery division and director of the Gonda (Goldschmied) Vascular Center at the David Geffen Medical School at the University of California, Los Angeles, where she also completed her surgical residency and post-residency vascular fellowship.

“It is truly an honor and privilege to accept the position of vice chancellor for Human Health Sciences and dean of the School of Medicine at the UC Davis Health System,” Freischlag said upon her selection. “I was so impressed with the people at UC Davis — clinicians, researchers, teachers, administrators, trainees and students — the energy was amazing, and I am excited to be able to become part of it.”

Nesbitt returned to his role of associate vice chancellor for Strategic Technologies and Alliances upon Freischlag’s arrival in mid-February.
David A. Acosta spent many years working in a community health center in Susanville, Calif., that provided health care and education to rural, underserved and migrant farmworker populations. The experience was in sharp contrast to his urban upbringing by immigrant parents in the densely populated area of Santa Ana, Calif.

Yet the diversity of these experiences also highlighted their similarities — the barriers that underrepresented patients, students, staff and faculty have to overcome to achieve success.

“I know the benefits minority role models and mentors bring in helping a health-care workforce to flourish. From them I learned how to ease the burden of the inequities and disparities that my patients from racial/ethnic population groups suffer unjustifiably,” Acosta said.

His passion, understanding and drive to create a more equitable and inclusive learning and working environment led him to focus on academic and organizational diversity over the past decade. Since last summer, he has focused his efforts here at UC Davis Health System.

After a nationwide search, Acosta was selected as associate vice chancellor for diversity and inclusion at the health system. He was previously chief diversity officer at the University of Washington School of Medicine.

He leads diversity activities across all health-system operations, including the UC Davis School of Medicine, the Betty Irene Moore School of Nursing, UC Davis Medical Center and the physician practice group.

Acosta is a recognized leader in managing and directing diversity and inclusion programs. As the inaugural chief diversity officer at UW’s School of Medicine, Acosta co-authored the diversity strategic plan and founded the Center for Equity, Diversity and Inclusion. He serves as faculty for the Association of American Medical Colleges Healthcare Executive Diversity and Inclusion Certificate Program and teaches diversity strategic planning development and implementation.

“Diversity and inclusion should be the foundations for our interactions with each other, our patients and our communities, as well as for our research and education programs,” said Acosta.

“I know the benefits minority role models and mentors bring in helping a health-care workforce to flourish. From them I learned how to ease the burden of the inequities and disparities that my patients from racial/ethnic population groups suffer unjustifiably,” Acosta said.

— DAVID A. ACOSTA
Associate vice chancellor for Diversity and Inclusion at UC Davis Health System
UC DAVIS EARNRS PRESTIGIOUS TECHNOLOGY AWARD

HIMSS, a global, not-for-profit organization focused on better health through information technology, selected UC Davis Medical Center for its 2013 Enterprise HIMSS Davies Award of Excellence. The highly prestigious award recognizes excellence in the use of health information technology throughout an organization.

UC Davis earned the award in part for implementing a sophisticated, accredited electronic health record (EHR) system to improve quality of care and patient safety that extends well beyond the medical center. HIMSS noted that UC Davis has exchanged 3.7 million patient records of different types with non-affiliated health providers in the community and region since 2008.

“We’ve shown that once the core elements of an EHR system are deployed to support clinical care, an organization starts to think very differently about clinical content and processes,” said MICHAEL MINEAR, chief information officer for the health system, who also helped the health system achieve Stage 7 of the HIMSS Analytics EMR Adoption Model in 2012. “Our work and achievements, however, represent more than just technological successes. We embraced health information technologies because they truly complemented our long-standing commitment to quality care and patient safety.”

As part of the award process, UC Davis highlighted its fully integrated health information technologies, including:

- HEALTH INFORMATION EXCHANGE:
  UC Davis exchanges with non-affiliated care providers averages more than 64,000 records per month. Record sharing extends far beyond the Sacramento area to include distant parts of California and a number of other states.

- CLINICAL VALUE: The EHR system has enabled the medical center to establish real-time 24/7 surveillance to help recognize and measure trends and events quickly. For example, life-threatening complications from infections such as sepsis and ventilator-associated pneumonia were significantly reduced with the help of the EHR and other clinical software applications.

- TELEHEALTH: For the past 20 years, the UC Davis Center for Health and Technology has provided health-care services to rural underserved communities throughout the state using telecommunications technologies. Its telehealth program, one of the largest in the country, provides telemedicine consultations through highly secure, medical-grade connections, in more than 50 different clinical specialties. The center also helped create the California Telehealth Network, advanced crucial telehealth policies at state and federal levels, and was a catalyst for a number of significant eHealth initiatives.

- PRIVACY AND SECURITY: UC Davis created a number of innovative processes and software tools to manage access and protect clinical content, including encrypting client computers and securing thumb drives, relevant emails and computer backup media.

- RETURN ON INVESTMENT: The EHR and associated technologies enabled UC Davis to realize significant returns on the clinical technology investment through enhanced revenues and reduced costs.

BIOMEDICAL INFORMATICS DIRECTOR RECRUITED

Biomedical informatics expert NICHOLAS R. ANDERSON joined UC Davis Health System last fall as director of informatics research. He also holds the Robert D. Cardif Professorship in Informatics and is an assistant professor in the Department of Pathology and Laboratory Medicine. Anderson is developing his own program of research into the effective uses of biomedical data, information and knowledge for scientific inquiry, problem solving and decision making.

EQUITY AWARD

For a third consecutive year, UC Davis Medical Center has been recognized as a “LEADER IN LGBT HEALTHCARE EQUALITY” in the Health-care Equality Index, an annual survey conducted by the Human Rights Campaign (HRC) Foundation, the educational arm of the country’s largest lesbian, gay, bisexual and transgender (LGBT) organization.

ENDOWED CHAIR HOLDER NAMED

KAREN KELLY, associate director for clinical research at the UC Davis Comprehensive Cancer Center, was named the recipient of the university’s first endowed chair in Cancer Clinical Research. The Tegley & Harmon Endowed Chair is named in honor of Elizabeth Erica Harmon, who passed away at age 30, and her cousin, Jennifer Rene Harmon Tegley, who died at age 18, just one year after being diagnosed with a very aggressive throat cancer.