Fall 2022

Care of the Heart

Loma Linda University Health

VOL. 56, NO. 2/FALL 2022

scope

OFFICIAL MAGAZINE OF LOMA LINDA UNIVERSITY HEALTH

CARE OF THE HEART

with special annual report section

LOMA LINDA UNIVERSITY HEALTH

PATIENTS at Loma Linda University Children's Hospital got some fresh air and a freestyle motocross show on September 14 at the 13th annual Big Air Kids Fair. Seasoned riders Jimmy Fitzpatrick and Andy Bell and friends did a show full of flips and tricks off a giant ramp in hopes of putting a smile on the faces of the kids who are undergoing treatment for a variety of illnesses or injuries. The Big Air Kids Fair took a seven-year hiatus during the construction of the new hospital and the pandemic, but came back in full force this year for the patients.

PHOTO BY CHET WILLIAMS

CARE OF THE HEART

FEATURES

DEPARTMENTS

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SCOPE

is published by Loma Linda University Health, a Seventh-day Adventist organization.

VOL. 56, NO. 2 | FALL 2022

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LOMA LINDA UNIVERSITY HEALTH

From our President

Richard H. Hart, MD, DrPH
PRESIDENT,
LOMA LINDA UNIVERSITY HEALTH

CARE OF THE HEART

Though COVID-19 has dominated our health consciousness for the last several years, we are now getting back to the more common threats of cancer and cardiovascular disease. Loma Linda University Health is pushing the boundaries on both of these diseases in remarkable ways. This edition of Scope focuses on cardiovascular health and ways to maintain it. From preventing heart disease through a healthy lifestyle, predicting genetic risks, correcting developing problems, or recovering from a cardiovascular event, our team of experts is ready to tackle every situation.

To provide this broad spectrum of interventions, we have expanded our team of cardiologists to over 40 specialists, covering all aspects of infant, child, and adult heart and vascular disease. We have given them expansive space and the latest equipment in our new Dennis and Carol Troesh Medical Campus. In addition, we are greatly expanding their outpatient capacity by converting two entire floors of our vintage clover-leaf towers to cardiology clinics.

As you read through this issue, you will discover some amazing stories and techniques that provide care for even the most difficult clinical situations. One of our newer programs is caring for all those who have had heart transplants as children and are now maturing into adults with the need for continued monitoring. We are also replacing heart valves through a catheter without opening the chest. You will read about the unique backgrounds of some of our clinicians who have prepared their entire lives for this type of service at Loma Linda University Health.

With its reputation as a Blue Zone, Loma Linda is also ideally equipped to prevent heart disease through healthy lifestyles. This may start early in life through a plant-based diet and regular exercise or be adopted after a wake-up call from a heart attack or stroke. With its complete array of services, Loma Linda University Health is ready to help each patient and family member, at whatever point in life they are, to achieve their maximum health.

Through a combination of healthy living and hi-tech interventions, we can change the course of cardiovascular disease in this country. Join us as we move down this path together. ■

'TEACHING AND HEALING' IS REFERENCE POINT FOR NEW CEO

TREVOR WRIGHT ON HIS 'SUPPORTING ROLE' TO CAREGIVERS

Trevor Wright, FACHE, accepted the position of CEO of Loma Linda University Health Hospitals in December 2021, following a vote of the Board of Trustees. He assumed leadership of an organization challenged with battling the COVID-19 pandemic while simultaneously managing the changes presented by the opening and occupancy of the new Dennis and Carol Troesh Medical Campus. Of course, either of those major events would challenge any new CEO.

As CEO, he sees his primary role as providing the organization with a clear view of its goals and strategies. Wright believes a defined road map allows the entire team to make significant progress toward future improvements in key performance measures.

His role also includes building a team of talented people and placing them where they can be most successful.

Wright believes that, at its foundation, healthcare is about people taking care of people. He often talks about the two sets of people in healthcare — those who take care of patients, and those who take care of the people taking care of patients. And because of that people focus, one of Wright's goals is ensuring Loma Linda University Health is an excellent place to work.

"Work is the biggest component in most people's lives," he says. "It's critically important that you like the place you work and the people you work with. If you feel your workplace doesn't care about you and you don't like the work you do, it removes your ability to be the best version of yourself both professionally and personally."

Wright came to Loma Linda University Health in March 2015 as Senior Vice President for the adult hospital. Ten months later, he became Chief Operating Officer of Loma Linda University Health Hospitals. He also served as Senior Vice President/Chief Operating Officer for Shawnee Mission Health in Kansas, and as Associate Administrator of Little Company of Mary Hospital in Torrance, California.

Wright is not the first in his family to serve the Adventist community. Wright's grandfather, John H. Leland, graduated from LLU School of Medicine with the class of 1953-B, and practiced for many years in La Mesa, California. "I am proud to return to LLU, my grandather's alma mater, and walk the same grounds that he did."

Wright's father, Harold Leland Wright, joined the faculty of Southwestern Adventist University in 1978. He served for over eight years as dean of men, assistant professor of physics and academic vice president. In 1995, he joined the Adventist Health team as Director of Research and Analysis until 2002.

During his time at Southwestern, Harold started a bluegrass music group that involved the president and several students. Influenced by his father's musical talents, Wright learned to play the guitar at an early age. He toured with several bands and at one point in his musical career his band was the opening act for Willie Nelson.

Wright and his wife Sami enjoy vacationing with their family, and he is passionate in various recreational pursuits, including snowboarding, mountain bike riding, and golf. He is also an avid motorcycle rider and enjoys getting out on a motocross track with his son Preston and daughter Siana. "Time spent together with family, especially outdoors, is one of the greatest gifts — and I treasure every minute of it," Wright says.

As Wright finishes his first year on the job, he points to Loma Linda University Health's talented, dedicated employee team as the key to how the organization has successfully dealt with the pandemic and campus transformation.

Reflecting on the past two years, Wright notes that the COVID-19 pandemic reset people's work-life

situations, and there is an issue with employee burnout throughout the healthcare industry. While not possessing any magic answers, Wright wants each Loma Linda University Health team member to know that they are valued for the person they are, not just for the position they hold.

One way Wright and other senior administrators spread that message through the organization is with the new "Walk a Mile" program. Every quarter administrators work with the employees in various hospital departments, meeting the staff and learning their daily challenges.

"We aren't tourists when we visit," he says. "We're there to do whatever the department feels is most helpful." Along with enlightening the administrative team, the Walk a Mile program helps employees understand that leadership is connected to what they do.

"Our staff has a chance to see us as people, not a suit occupying an office or a name on an email," Wright says. "We all better understand how things are working, and the feedback we get from employees results in better-informed decision-making for the organization."

As CEO, Wright also reinstated the You Talked, We Listened program. Employees are encouraged to submit feedback and suggestions weekly. "My office shares this feedback with the appropriate departments for review and discussion and more importantly, we respond to the employees by email or with an update in our weekly newsletter. Their feedback has helped implement numerous improvements including menu options in the cafeteria, more outdoor seating for breaks, increased blood drive locations and more. It is important to me that our staff know we are listening."

Wright also points to the efforts performed by each Loma Linda University Health team member to support quality improvement, which plays an essential role in the growing number of national recognitions received in recent years. These include being recognized by U.S. News and World Report as the #1 Hospital in the Riverside-San Bernardino metro area and #12 in the state of California, as well as multiple national distinction patient safety ratings from The LeapFrog Group.

"These recognitions help people understand how remarkable Loma Linda is, and that this is a place you go to find great healthcare," he says. "We don't seek these recognitions for self-promotion. Instead, these honors allow us to be a place that causes people to associate excellence with Seventh-day Adventist healthcare. That's an important part of our witness."

Wright says Loma Linda University Health's mission is key to how the organization develops its strategies and operational decisions.

"It is certainly God's place; there is no question about that," Wright says. "Continuing the teaching and healing ministry of Jesus Christ is not just something on our website or the back of our ID badge. It's a constant reference point as we face decisions; something at the core of our organization."

Looking to the future, Wright sees opportunities to expand Loma Linda University Health's impact on the region.

"Loma Linda is the epicenter of healthcare for the Inland Empire," he says. "There are facilities in our region that don't have necessary access to specialty care, and they're searching for answers." Loma Linda University Health has all of the clinical and educational components needed to assist in providing solutions. I am grateful to work with our faculty medical group leadership, the School of Medicine and our business development team on an integrated approach that strengthens LLUH and elevates care in our region.

As Wright begins his second year as CEO, he is encouraged about the direction of Loma Linda University Health Hospitals.

"After going through the pandemic's most difficult days and completing our campus transformation, we are entering a new chapter in many ways, "Wright says. "I feel good about our future, even though there are abundant challenges for healthcare and in our world today. I believe God has given each one of us at Loma Linda our own unique talents, and we strive every day to use them in service to His work and the furtherance of our mission."

PHOTO BY CHET WILLIAMS

U.S. NEWS & WORLD REPORT HONORS LLUH FOR OUTSTANDING PATIENT CARE

Loma Linda University Medical Center has been recognized as the 2022-2023 No. 1 hospital in the Riverside and San Bernardino metro area and No. 12 in California by U.S. News & World Report. The Medical Center earned "High Performing" marks in 22 types of care including a national ranking in pulmonology & lung surgery.

U.S. News also announced that Loma Linda University Medical Center – Murrieta has been named a 2022-2023 High Performing hospital for five procedures and conditions. LLUMC – Murrieta earned High Performing ratings for treating chronic obstructive pulmonary disease (COPD), heart failure, kidney failure, pneumonia, and stroke in recognition of care that was significantly better than the national average, as measured by factors such as patient outcomes.

Trevor Wright, CEO of Loma Linda University Health Hospitals, says this is a remarkable achievement made possible by every member of our healthcare team and their extraordinary efforts to provide compassionate, quality care to each patient.

"These rankings offer evidence to our patients that Loma Linda University Medical Center is a place where they and their families will receive excellent healthcare when their need is the greatest," Wright says. "Though we've faced persistent challenges during the past two years, our employees have substantially contributed to our significant achievements in quality. Their efforts were key to this national recognition."

Released in July, the annual U.S. News rankings assist patients and their doctors in making informed decisions about where to seek care for challenging health conditions or common elective procedures. The "High Performing" rating recognizes care as significantly better than the national average, measured by factors such as patient outcomes.

Six of the Medical Center's adult specialties were recognized as "High Performing," including cancer, diabetes and endocrinology, gastroenterology and GI surgery, geriatrics, orthopaedics, and urology.

Fifteen procedures and conditions treated were also ranked "High Performing," including aortic valve surgery, back surgery, chronic obstructive pulmonary disease (COPD), colon cancer surgery, diabetes, heart attack, heart bypass surgery, heart failure, hip fracture, kidney failure, lung cancer surgery, pneumonia, prostate cancer surgery, stroke, and transcatheter aortic valve replacement (TAVR).

LLUMC – Murrieta earned High Performing ratings for treating chronic obstructive pulmonary disease, heart failure, kidney failure, pneumonia, and stroke in recognition of care that was significantly better than the national average, as measured by factors such as patient outcomes.

In June, Loma Linda University Children's Hospital received U.S. News recognition as a 2022-23 Best Children's Hospital for cardiology & heart surgery, neonatology, and nephrology.

"We are so proud of our hospital's continued innovative and dedicated strides in pediatric cardiology and heart surgery, neonatology, and nephrology," said Peter Baker, senior vice president and administrator of Children's Hospital. "This recognition belongs to our incredible pediatric healthcare teams, and we celebrate their unwavering commitment to quality healthcare of children in our community and beyond."

MEDIA OUTLETS HONOR LLUH FOR OUTSTANDING PERFORMANCE

Forbes magazine listed Loma Linda University Health as one of America's Best-in-State Employers 2022.

This recognition was created through a survey of 70,000 U.S. employees across 25 industry sectors. Of the thousands of companies eligible for this recognition, only a select few are awarded in each state. In California, Loma Linda University Health was #59 on the list out of 101 employers ranked.

"We are so grateful that our employees have reinforced that Loma Linda University Health is a rewarding place to work," said Richard Hart, MD, DrPH, president of Loma Linda University Health. "We indeed want each of our employees to feel valued and take pride in serving as a team to care for our patients and teach our students."

Newsweek magazine placed Loma Linda University Health on their 2022 list of America's Best Physical Rehabilitation Centers. This is the second consecutive Newsweek award received by the rehabilitation services.

"This recognition is a true testament to each of our employees' commitment to providing exceptional care to patients throughout the region," said Darryl VandenBosch, CPA, senior vice president of Loma Linda University Medical Center East Campus and Surgical Hospital."

Most rehab services are offered at Loma Linda University Medical Center East Campus, providing one-stop access to the most comprehensive outpatient and inpatient rehabilitation services in the region. Services include physical therapy, occupational therapy, speech pathology, robotic rehabilitation, orthopaedic and sports therapy, pediatric rehabilitation, and orthotics and prosthetics.

Newsweek also named both Loma Linda University Children's Hospital and Loma Linda University Medical Center – Murrieta to their 2022 list of America's Best Maternity Hospitals.

Of the thousands of hospitals Newsweek comprehensively evaluated, Murrieta hospital and Children's Hospital ranked in the top 5.8% — two of only 350 recognized. Additionally, both hospitals were ranked alongside 161 "five ribbon performance" hospitals, meaning the cumulative total of their key performance indicators, reputation scores, and patient scores were higher.

Murrieta hospital's birthing center is a state-of-the-art facility, with hands-on physicians and nurses providing support for all medical needs before, during, and after a baby's arrival. Children's Hospital provides quality and compassionate maternity care in the San Manuel Maternity Pavilion, which opened in August 2021. Delivering more than 3,000 babies each year, Children's Hospital handles both low-risk and high-risk births in redesigned operating rooms, including special C-section rooms and a Level IV NICU. This is Children's Hospital's second time receiving this recognition.

SCHOOL OF PHARMACY WILL ESTABLISH PROFESSION'S FIRST HISPANIC CENTER OF EXCELLENCE

Loma Linda University School of Pharmacy will establish the nation's first Hispanic Center of Excellence in Pharmacy after receiving a federal grant of $3.4 million in June.

As a Center of Excellence, the school will provide educational and training opportunities for the Latinx community, increase Hispanic representation among pharmacists, and address minority health issues throughout the Inland Empire.

"This grant will support our commitment to diversity in the profession of pharmacy," said Michael Hogue, PharmD, FAPhA, FNAP, dean of Loma Linda University School of Pharmacy. Hogue added LLU will be the first school or college of pharmacy in the nation to house an HRSA Hispanic Center of Excellence (HCEP). The center will be achieved through a unique collaboration with the LLU School of Behavioral Health.

According to Hogue, the new Center will strengthen San Bernardino County and the surrounding area's capacity to produce a pharmacy workforce with racial and ethnic diversity, improving the quality and delivery of healthcare through collaborations and strategic partnerships.

STAND UP TO STIGMA 5K DRAWS STRONG COMMUNITY SUPPORT

Loma Linda University Behavioral Health hosted its fourth annual Stand Up to Stigma 5K in May. This first post-pandemic run drew 631 registrants following a two-year hiatus. The 5K aim to overcome the stigma, bring awareness to, and treat mental health issues like any other health problem in the community.

"At Loma Linda University Behavioral Health, we strive each day to 'Heal People, Restore Hope,'" said Edward Field, MBA, vice president and administrator of the Behavioral Medicine Center. "It was wonderful and encouraging to see almost 700 community members support behavioral health treatment."

UNIVERSITY HONORED FOR COMMITMENT TO HIGH RESEARCH ACTIVITY

Loma Linda University (LLU) recently earned an R2 designation from the Carnegie Classification of Institutions of Higher Education, achieving one of the most coveted national recognitions for its commitment to "high research activity."

Achieving R2 classification signals abundant hands-on opportunities for LLU students to learn from and partake in professors' current research investigations — which may, in turn, impact clinical care directly, says Michael Samardzija, PhD, vice president of Research Affairs at LLU.

"With this classification, Loma Linda University is recognized as a leading research institution, not just an academic institution that happens to do research," Samardzija said. "This increased recognition will allow us to do a better job teaching new advances in healthcare and using these advances to care for our patients."

To reach R2 designation, institutions must have awarded at least 20 research or scholarship doctoral degrees and spent at least $5 million in research expenditures last year. Far exceeding this threshold, LLU awarded 369 doctoral degrees and spent over $25 million in research expenditures, Samardzija reports.

To learn more about research happening at Loma Linda University, visit researchaffairs.llu.edu.

Care of the heart

PHOTO BY CHET WILLIAMS

From Anthony Hilliard, MD, FACC

Head of Division of Cardiology

Every one of us has been touched by heart disease, and most of us have someone in our immediate family, if not ourselves, who's developed heart disease. A person can be feeling well one moment, yet just a moment later feel terrible or suffer from sudden cardiac death. This is one of the great frustrations with heart disease.

For patients who can make it to the hospital, medicine today has developed numerous techniques, procedures, and medications that help a patient survive, recover, and have a meaningful life. The Loma Linda University International Heart Institute is a place where each one of our programs is designed to have the most expert care available. We often take a collaborative, team-based approach, so patients may see several different physicians or other care providers to ensure the best outcomes possible.

Loma Linda University Health's rich history of a strong pediatric cardiology program continues to this day. Because of the great care they received, many children are now living into adulthood. The transitional program we have built is only the third such endeavor in the state to receive accreditation in adult congenital heart disease. This program helps children with congenital heart disease transition into adulthood and do so very successfully.

Cardio-genetics helps identify patients at risk for developing problems before those problems manifest themselves. This can allow tailored therapy to prevent the progression of illness. Skilled specialists at the International Heart Institute also offer targeted disease management to ensure patients achieve the highest quality of life possible. However, when efforts fail to prevent disease progression, a highly trained, advanced team of heart failure specialists and heart surgeons can place devices to allow the individual to live while waiting for a heart transplant.

The Dennis and Carol Troesh Medical Campus houses the International Heart Institute's new, state-of-the-art cardio-diagnostic interventional facilities and operatories. There, specialists conduct the latest imaging techniques, and electrophysiologists, interventional cardiologists, and heart surgeons perform a range of procedures — from the most common to the novel — that set us apart in our community. Dedicated cardiac floors in the new hospital ensure that we have a team of highly skilled nurses and other support staff to ensure you receive world-class care during your hospitalization.

Our physicians are actively enrolled in clinical trials looking at gender-based differences in cardiovascular disease and participate in several pharmacologic and device-specific therapies to treat complex arrhythmias, heart failure, and coronary artery disease.

We are also excited to soon quadruple the size of our outpatient clinics — remodeling the cloverleaf vintage hospital towers on the same floors where we cared for our heart patients over the last 50 years. We also are working to strategically grow in the community with satellite clinics in Banning-Beaumont, Rancho Cucamonga, and SACH San Bernardino campus.

International Heart Institute's future is bright, and with so much care and research being done to tailor our treatments to each patient's condition, cardiac care at Loma Linda University continues to play a key role in our mission to make to man whole.

A CAMPUS OF INNOVATIVE

CARDIAC CARE

THE NEW DENNIS AND CAROL TROESH MEDICAL CAMPUS OFFERS EXPANSIVE AND MODERN HEART TREATMENTS

BY LISA AUBRY

Loma Linda University Health's International Heart Institute relocated into the Dennis and Carol Troesh Medical Campus last year, launching a new era of enhanced cardiac patient experience. The new facility has enabled expansion of cardiac diagnostic services, offering private patient rooms with installation of state-of-the-art equipment for diagnostics and procedures. "Our move into the new hospital enables a significant increase in capacity," says cardiologist Nirav Mamdani, MD, "We continue to be committed to providing timely, high-quality care to each cardiac patient we serve."

Timely access to care is essential for cardiac patients who often require procedures that will improve their quality of life and longevity, Mamdani says. Patients who wait too long for a procedure may need to undergo temporizing measures, experience multiple episodes of hospitalizations, or spend hours in the Emergency Department."We hope to make these procedures available in a much shorter timeframe than what has been possible in the past." Mamdani highlights how some of the newest additions and amenities honor patients' needs for on-demand access to safe, quality care.

EXPANDED DIAGNOSTICS DEPARTMENT

An increase in the number of diagnostic testing rooms allows care teams to swiftly and efficiently perform tests such as cardiac echocardiograms, stress tests, and others for more patients. Eight new echocardiography laboratories will permit care teams to complete more than 60 procedures daily, Mamdani says. Additionally, he says an extra area in the new hospital remains reserved for further expansion over time as demand for diagnostic testing continues to grow.

MORE CATHETERIZATION LABORATORIES

Beyond increasing diagnostic testing capacity, the hospital's new space also accommodates the construction of six catheterization laboratories (cath labs) that will provide life-changing cardiac procedures to more patients in less time. The new labs offer structural heart and electrophysiology procedures, including transcatheter aortic valve replacement (TAVR), transcatheter mitral valve repair (TMVR), Watchman procedure, and device placements to more patients.

HYBRID OPERATING ROOMS

Keeping pace with the cutting edge of cardiac procedures, the Medical Center has built a hybrid cardiothoracic (CT) surgery and cath lab room, allowing both kinds of strategies to co-occur in the same room. Specific cardiac procedures or complex anatomies require a mixture of both endovascular, or non-invasive, intervention and open-chest surgery. Hybrid operating rooms merge minimally invasive and traditional surgical science with advanced imaging technology in real time. The purpose of this type of operating room is improved outcomes with less trauma, less scarring, and shorter hospital stay with faster rehabilitation.

In these cases, the hybrid CT-cath lab room expedites the procedure without ever requiring the patient to move, Mamdani says. Hybrid rooms allow surgeons from different specialties to work together treating multiple medical issues in a single episode of care. This integrated approach addresses critical care situations, limiting additional procedures and reducing possible complications.

With this hybrid OR, Loma Linda University Health is well-positioned to keep up with the increasingly fast-growing hybrid approach to surgeries, he says.

Another hybrid OR combines a cardiology room with a peripheral vascular intervention room, where multi-purpose equipment serves both cardiac surgeries and vascular interventions to treat areas like the aorta or carotid arteries.

Biplane X-ray equipment in the hybrid rooms can capture images of the body from two different angles simultaneously and produce the resulting images in higher resolution. These factors decrease patients' exposure to radiation and reduce the need for contrast dye to decipher the images, thus posing less of a risk of kidney damage, Mamdani says.

PRE- AND POST-OPERATION UNITS

For patients awaiting or recovering directly after a procedure, the pre-and post-operation (op) units are a vital asset to timely care. These units function essentially as holding areas to accommodate patients swiftly and reduce any delay in care as much as possible, Mamdani says.

For instance, if a patient visits the Emergency Department and requires a procedure but a cardiac bed is not yet available, they will move immediately into a pre-op unit to undergo preparation for their

operation. After the procedure, patients will also recover in the post-op unit before moving into their designated room on the 10th floor for overnight observation.

"These pre-and post-op units enable our care teams to offer crucial cardiac procedures without delay so patients need not wait, spend additional time in the Emergency Department, or plan to come in one day before surgery just to secure a bed."

SAME-DAY CARE OBSERVATION UNITS

Recognizing that not all patients require overnight stays to have their care needs met, Mamdani says the space vacated on the eighth floor of the old hospital building has been transformed into a 33-bed observation unit — exclusively built to accommodate such patients.

This new unit will limit the time patients with certain cardiac conditions or events spend in emergency care and will direct them to the cardiac observation unit for same-day care. Patients who present with low chest pain or minor worsening of congestive heart failure symptoms, for example, may not require intensive testing. Instead, these cases may call for non-invasive testing or receiving dosages of IV diuretics for a few hours. Patients access these services quickly in the observation unit designed to accommodate these needs and, once stable, will be able to return home without spending a night at the hospital.

10TH-FLOOR HOSPITAL STAYS

For the cardiac patients who stay longer-term, single, spacious rooms with city views are available on the 10th floor. The rooms grant patients personal privacy, the liberty to receive visitors on their terms, and to recover peacefully in the comfort of their own space.

Each patient room is designed to be a private room, offering a quiet, insulated space for each patient's comfort as they journey back to health. These solo occupancy rooms also reduce the risk of transmission of infections and increase patient safety.

"Privacy is important for every human being, and especially when in a hospital during a more vulnerable time in their lives," Mamdani says. "These single rooms are key to patients' well-being and healing process."

Patients seeking care at the Dennis and Carol Troesh Medical Campus for any cardiac reasons will benefit from its resources and well-equipped, expert care teams for decades to come, Mamdani says. While the building is one of the most technologically sophisticated hospitals in the world, at its heart beats the commitment of the dedicated physicians, nurses, technicians, researchers, support staff, volunteers, and students who serve patients every day.

PHOTO BY JONATHAN DAVIDSON

ANEES J. RAZZOUK, MD

Chair, Cardiothoracic Surgery

The move to the Dennis and Carol Troesh Medical Campus has impacted the care of cardiothoracic surgery (CTS) patients in so many ways. The private rooms provide a tranquil environment for patients to heal and ample space for family members to visit. The ICU rooms are equipped with state-of-the-art technology for continuous hemodynamic monitoring of critically ill patients. If need be, those rooms can be "converted" to an operating room, as in the case of a young woman with COVID-19 who arrived at the CT ICU in circulatory collapse with a twin pregnancy at 25-weeks gestation. She was placed on extracorporeal life support and then underwent an urgent C-section to deliver the twins in her ICU room.

The timing of the new facility could not have been any better in that during the COVID-19 surge (2021) many patients with cardiopulmonary failure required ECMO. Such therapy often requires mechanical pumps, circuits, oxygenators, and kidney ultrafiltration machines and usually requires a large room, now made possible at the new medical campus to accommodate three to five professionals (RTs, RNs, NPs, coordinators, perfusionists, etc.) caring for the patient around the clock.

The new facility has provided the potential for more operating rooms to treat surgical patients. The special hybrid operating rooms make it possible for surgical specialists from different disciplines to collaborate and deliver innovative therapies to patients with cardiovascular disorders. With the improved availability of robotic technology at the new medical campus, more minimally invasive CTS procedures will be performed to repair mitral valves or other cardiac defects and to resect lung and esophageal cancers. Such robotically-assisted procedures offer patients the advantages of less pain and trauma and a quicker recovery.

QUEEN OF HEARTS

PURVI PARWANI IS AMONG A NEW GENERATION OF CARDIOLOGISTS TAKING A CLOSER LOOK AT HOW WOMEN ARE TREATED FOR HEART DISEASE

BY LISA AUBRY

Throughout her cardiology fellowship, Purvi Parwani, MD, MPH, looked on as female patients checked into the Emergency Department with heart attack symptoms, watching as medical teams ordered tests to investigate causes and evidence behind the women's heart attacks. She then watched women whose tests had turned up "normal" return home without confirmation of having had a heart attack, proper treatment, or further guidance.

"There was not much understanding of women's cardiovascular disease and these new disease phenotypes at the time," Parwani recalls. She now believes many of those women suffered from MINOCA (myocardial infarction with nonobstructive coronary arteries), a condition five times more likely to occur in women. MINOCA is characterized by heart attacks that aren't caused by blocked arteries. In other words, testing MINOCA through coronary angiogram doesn't often reveal traditional traces of a heart attack. Until recently, such results were grounds for patient dismissal.

As a young cardiology fellow reflecting on these patients sent home without due resolutions, Parwani developed a conviction: to be good at clinical cardiology, she'd need to know how to piece together the puzzle of these too-common diagnostic dilemmas; she'd need to know how to perform and interpret cardiac imaging to draw conclusions herself.

"I couldn't rely on anyone else," says Parwani, who proceeded to complete a fellowship in advanced cardiovascular imaging. "Rather than accept other cardiologists' or specialists' reports of a patient's tests at face value, I had to make sure I could put the entire picture together myself."

At the turn of the century, the medical community had barely begun unpacking fundamental differences in women's and men's cardiovascular physiologies. Efforts to better understand women's cardiovascular health have since expanded multi-fold, ushered forth by cardiologists like Parwani, who spearheads such initiatives as director of the Women's Heart Health Clinic at Loma Linda University International Heart Institute.

An earlier personal encounter with an abnormal electrocardiogram (EKG) during her second year of medical school in Ahmedabad, India, had drawn Parwani to cardiology in the first place. She lay still on the exam table, hyper-aware of her heart's rhythm as it beat against sticky chest patch monitors — suction cups on the ends of wiry tentacles tracing back to an EKG machine.

Test results granted Parwani far more than an assurance that her palpitations and so-called abnormal EKG weren't cause for concern — they placed her on a new path. That same week, she borrowed a 400-page textbook about cardiac physiology from the school library, conquering its contents in 48 hours.

"I was so immersed that I left everything else behind," she recalls, fascinated by the physiology of the heart. Though brimming with insights, the book made no mention of differences in men's and women's cardiovascular systems, diseases, presentations, or risk factors.

It wasn't until after Parwani earned her certification in cardiac imaging years later that whispers about women's cardiovascular disease at cardiology conferences steadily snowballed into a buzz.

"Many thought leaders in the field began talking more about women's cardiovascular disease, the diagnoses for which relied on the non-invasive imaging techniques I had just mastered," she says. "There was so much to be discovered in this new field that was just emerging, and I realized that if there has to be a clinical interest of mine, it ought to be that."

Recent, groundbreaking findings of fundamental differences in men's and women's physiology and hormones help explain gender differences in cardiovascular health risk factors and disease presentations, Parwani says. Besides universal risk factors for cardiovascular disease — including obesity, smoking, diabetes, high blood pressure, family history, and metabolic syndrome — some risk factors are particular to women.

Risk factors unique to women encompass pregnancy-related factors such as developing diabetes, eclampsia or pre-eclampsia, premature birth, placenta, or vascular issues. Menopause is another risk factor for cardiovascular disease in women as levels of estrogen that once formed protective lining within blood vessels begin to dissipate. Women also are disproportionately affected by inflammatory and autoimmune disorders such as lupus, rheumatoid arthritis, and scleroderma, which are associated with an increased risk of heart inflammation, heart and valve disease, and heart attacks.

Physicians are also beginning to suspect that cardiovascular conditions commonly seen in women and rarely in men — vasospastic angina and broken heart syndrome — are tied to stress and depression amongst other differences between the genders.

Both men and women can present in emergency departments for ischemic heart disease with classic chest pain symptoms, Parwani says. Still, studies show these women are disregarded more often than men because their symptoms are judged to be psychosomatic. Women can also present with other symptoms less commonly experienced by men, including exclusive shortness of breath, right-sided chest pain, shoulder pain, or jaw pain.

"I tell my patients that when they feel things aren't right, even if they don't have classic chest pain, come to the emergency department and let us figure it out," Parwani says. "I also advise them to make sure they directly ask whoever is taking care of them before they leave, 'Are you sure I am not having a heart attack?'"

Part of what allows Parwani to do right by her patients is to forge strong bonds with each person, she says, to understand their backgrounds and meet them where they are. Parwani attributes part of her ability to connect with individual patients to her physician father's practice and humble roots.

Growing up in a small town in India, young Parwani tagged along on her father's rounds, soaking in the exchange of generous gestures between him and patients. One weekend of Diwali, a major festival of lights, an awe-struck six-year-old Parwani accompanied her father as he left Puja, a prayer time, to treat a beggar's child who had been burnt by firecrackers.

"We knew when the patient walked in they didn't have any money to pay for the service, but my father graciously obliged," Parwani said. "He explained to me that this was a big day for us, but also them. The way the patient gave blessings to our entire family still sticks with me. After that, I knew if I ever wanted to grow up and do something, I'd want to be the kind of doctor to take the pain away from my patients and be a true healer."

Parwani said her early encounters with healthcare also afforded her an appreciation for the social determinants of health and their impact on cardiovascular disease. She said she strives to first learn about each patient's background, stressors, income level, family situation, and profession before working with them to find realistic, attainable lifestyle modifications to improve their heart health.

"Just telling patients to eat healthily and exercise does not suffice," Parwani said. "Everyone has a complex story behind them. It is important to understand that story and make our patients feel we are amongst them, because we are."

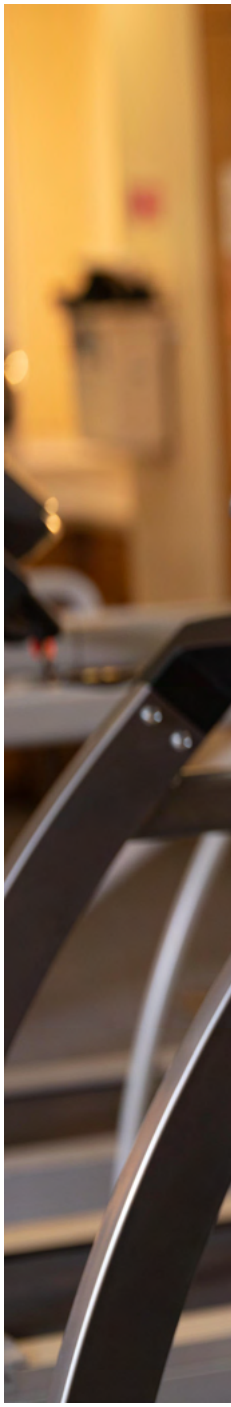
Working with the Inland Empire's diverse patient population, Parwani said she aims to continue the never-ending feat of further understanding women's cardiovascular disease. She also said she hopes to expand cardiology services multi-fold, providing a robust range of diagnostic and treatment options to women across the region. So far, fruitful and fulfilling patient interactions have fueled and re-fueled Parwani's passion for her specialty.

"It all traces back to what I stepped into this field for, after spending hours on rounds with my father," she says. "Being the recipient of patients' gratefulness, love, and blessings makes my job the most fulfilling task I can ever do in my life."

CARDIOPULMONARY REHABILITATION PROGRAM

AGAIN ACCEPTING PATIENTS AT FULL CAPACITY

BY LISA AUBRY



Patients who have suffered from a cardiac event, procedure, or disease may find themselves in need of guidance for leading a lifestyle that protects their health consistently and long-term. Many turn to Loma Linda University International Heart Institute's Cardiopulmonary Rehabilitation program, designed to motivate patients to shape and maintain healthy lives. The program has returned to operating at full capacity after having limited access due to COVID-19 precautions.

The program includes individualized, customized exercises and education plans for patients with heart disease such as congestive heart failure, or recovering from a heart attack or a heart procedure. Care teams including an exercise physiologist, registered nurse, dietitian, and respiratory therapist work with each patient to instill habits and skills they can apply long after they depart from the program.

Someone who can testify to this is 70-year-old Roman Finale, one of the many patients to complete the Cardiopulmonary Rehabilitation program. After having experienced a heart attack followed by the implantation of two stents in his arteries, the Yucaipa resident entered the program as part of his recovery — a life-changing decision, he said.

"It's one thing for a program to inform people why they need to make certain changes, but it's another thing to present in a manner that is so well supported that when patients come out, they're convinced that this is not only important but necessary," he said. "I came out of the program committed to a healthier lifestyle, and it's been an exciting new journey."

"For patients who have been hospitalized for a cardiac event like a heart attack or a stent procedure, or who have undergone major cardiac surgery, recovery does not end in the hospital," says Vinoy Prasad, MD, Cardiopulmonary Rehabilitation program medical director. "Our program equips patients with the tools to lead a heart healthy lifestyle, feel better and live longer, and reduce the risk of another cardiac event."

Prasad points to evidence that cardiac rehabilitation programs prolong patients' lives, improve their quality of life, and decrease future hospitalizations. During its 20 years of service, the Cardiopulmonary Rehabilitation program has honed its services to produce the best long-term results for patients. Patients work with the cardiac rehab care team to tailor heart-healthy exercise plans, understand their condition's risk factors and disease progression, build good habits around nutrition, and strengthen skills to manage everyday stress effectively.

Prasad says he aspires to eventually expand the program to accept more patients and become even more of an indispensable resource to the community.

"Future patients who come through our program will see not only the short-term impact of surviving a cardiac event or procedure, but also make lifelong commitments to improving their health," Prasad says.

PATIENTS NEEDING HEART VALVE REPAIR CAN BENEFIT FROM ROBOTIC SURGERY AT LLU

EVERETT ROBERTS IS ABLE TO EMBRACE AN ACTIVE LIFESTYLE ONCE AGAIN, THANKS TO THE PROCEDURE

BY LISA AUBRY

Everett Roberts was discouraged upon hearing from physicians at a medical institution that he had a 40% chance of surviving an open-heart surgery to repair his failing valve. Yet the 72-year-old veteran's spirits lifted when cardiothoracic surgeon Joshua Chung, MD, FACS, offered him a safer, less invasive option — repairing the mitral valve via robotic surgery.

"Dr. Chung told me the chances of things going wrong were around 1-2% — that's way better than 40%," Roberts said. "I shudder to think of what almost could've been had I not gone to LLU for my care."

Located on the left side of the heart, a mitral valve warrants repair when it is no longer able to properly function due to leakage causing blood to backflow from the heart into the lungs. Such was the case for Pomona resident Roberts, whose mitral valve was leaking half of his oxygenated blood back towards his lungs.

He soon struggled to run his routine five-mile course every other day, as he had done most of his life. Dissatisfied with the high risk of open-heart surgery, compounded by his chronic lymphocytic leukemia (CLL) diagnosis, Roberts said he sought care from physicians at LLU who could provide robotic mitral valve repair.

During a robotic mitral valve repair, a cardiac surgeon's hands control the movement of surgical instruments attached to a machine's thin, robotic arms. The procedure leaves small two-inch incisions on the right side of the chest, as opposed to six or eight-inch scars in the middle of the chest through the breastbone associated with traditional open-heart surgery. Aside from smaller incisions, Chung said mitral valve repairs conducted robotically hold other advantages to open-heart surgery for patients, including less invasion and risk, reduced bodily stress, faster recovery time, and excellent outcomes.

"If I hadn't gone to LLU, I wouldn't be doing the things I want to be doing," Roberts said. "That noninvasive procedure changed my life for the better — I know that for a fact. I'd advise anyone who has the option to do the procedure to definitely do it.

Whereas six months prior to surgery Roberts said he could barely walk a mile, he now reports having trekked hundreds of miles after surgery — not to mention indulging in some dirt biking and golfing as well. A "tinkerer" by nature, Roberts said he has since been able

to tackle home projects such as tuning up motorcycles and assembling a snowblower for use at his mountain cabin. Most of all, Roberts said he cherishes the time he's been able to spend with loved ones, including his wife, children, and grandbaby.

Roberts became the fourth patient to undergo the procedure at the hospital in October 2020. He said he appreciated the care team's skilled communication skills and compassion, which he felt most strongly when nurses prayed with him during his hospital stay. Raised a Seventh-day Adventist himself, Roberts said the touching gesture hit close to home.

"Thanks to Dr. Chung and the team who took care of me, I will have a long and heart-healthy future," Roberts said.

Since its first robotic mitral valve replacement in September 2020, LLU International Heart Institute has been the only center to offer the procedure in the Inland Empire — a service that Chung said is beneficial for residents of the region who need not travel to faraway counties to obtain the care they need.

"We are ready to take on more of these procedures and continue to help patients whose lives could be saved from this kind of intervention," said Chung, who serves as vice chair of the Department of Cardiothoracic Surgery and Director of Adult Cardiac Transplantation and Mechanical Circulatory Support at Loma Linda University International Heart Institute.

INTERVENTIONAL HEART PROCEDURE LEAVES HIGH-RISK PATIENT HEALTHIER, BUSIER THAN EVER

CARMELO LLAPITAN CAN BREATHE, DANCE, AND TRAVEL MORE SEAMLESSLY WITH CLEARED HEART BLOCKAGES

BY LISA AUBRY

Calcium blocked Carmelo Llapitan's main cardiovascular arteries almost entirely, threatening his life and warranting timely treatment to restore proper blood flow to his heart. But the 75-year-old veteran had already suffered from four heart attacks and undergone several procedures to implant five stents.

This time, undergoing yet another traditional stent procedure would prove too risky for Carmelo, says Aditya Bharadwaj, MD, the interventional cardiologist at Loma Linda University International Heart Institute who performed this patient's life-saving procedure.

"This procedure was a blessing," says Enriqueta Llapitan, Carmelo's wife of nearly 50 years. "It saved and extended my husband's life. We are so happy that we found Dr. Bharadwaj and the team at Loma Linda University Health that cared for us so well."

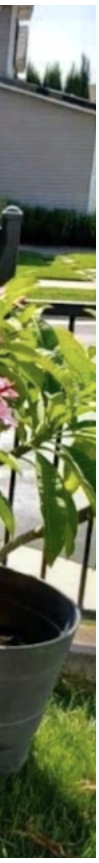
The couple resides in Fontana, where Enriqueta enjoys gardening succulents and other plants in the greenhouse Carmelo built for her. Before the pandemic struck, they enjoyed attending advanced classes for various dance styles — ballroom, swing, cha-cha. Now their days are filled in the company of loved ones like their two children and five grandchildren. There is so much to live for, says Enriqueta, and life would not be the same without Carmelo or "Papa" to his grandkids.

When an angiogram revealed his arteries to be up to 95% blocked with calcium, Liset Stoletniy, MD, Carmelo's primary cardiologist the International Heart Institute, called upon her colleagues' expertise to address the complex case.

Carmelo has congestive heart failure, which weakens the heart and reduces its ability to function to total capacity, and blockages in his arteries going down his legs from peripheral artery disease. These cardiovascular concerns and the existing stents in Carmelo's heart placed him at very high risk for traditional bypass surgery.

After some discussions amongst the heart care teams, Bharadwaj offered Carmelo the option to undergo a complex, high-risk, indicated procedure (CHIP), an alternative approach for high-risk patients who are ineligible to undergo open-heart bypass surgery.

"We knew his significant peripheral artery disease would pose a challenge," says Bharadwaj. "But here at Loma Linda



PHOTOS COURTESY OF ADVANCEMENT FILMS

University Health, we have the tools and expertise to find solutions for patients like Mr. Llapitan."

Executing Carmelo's CHIP required "out of the box," innovative thinking, Bharadwaj says. For example, Carmelo needed a heart assist device for the high-risk stent procedure but instead of inserting the device through a leg artery near the groin, as is typical, the care team inserted the device just under Carmelo's collarbone, going through the axillary artery instead.

Loma Linda University Health is one of the few medical facilities in southern California to offer the axillary artery approach to CHIPs for patients who cannot tolerate a catheter or device traveling through leg arteries.

"While everything we do in interventional cardiology is driven by science, the procedure itself is like intricate art where there is very little room for error," he says.

Bharadwaj utilized a heart support pump to sustain Carmelo's heart throughout the procedure. At the same time, he used a tool with a rapidly spinning, diamond-tipped burr to drill through the calcium clogging Carmelo's minuscule arteries of no more than three millimeters in diameter. After clearing the way in the arteries, Bharadwaj successfully implanted two new stents into Carmelo's heart in early October 2021.

"My hope for him was to restore him back to his life and to his family where he could make the most of his life and be there for his kids and grandkids," Bharadwaj recalls. "I was very confident that he was going to do very well."

Now a year later, Carmelo says he feels upbeat and energetic. "I've been feeling really good, and it's almost as if nothing happened."

He is once again able to safely travel for long durations of time, allowing him and Enriqueta to visit their niece and attend reunions in Las Vegas, Nevada.

"People always seem to worry that they will have nothing to do after retirement," says the former kitchen designer and manager of a lumber company, "But we are busier now in life than ever before. So I'm grateful to be healed and to be able to do such things."

ARNOLD FAMILY NOW CELEBRATES "ST. PAISLEY DAY"

EACH YEAR AFTER INFANT DAUGHTER RECEIVED NEW HEART

BY SHEANN BRANDON EDELBACH

The Arnold family waited anxiously at Loma Linda University Children's Hospital in February 2013 for news on their four-month-old daughter, Paisley.

"The doctor came out to get us and took us into one of those rooms you see on TV — we call it the 'bad-news room,'" Paisley's father, Rick Arnold recalls.

The news: the only thing that could help Paisley was a heart transplant. She had an anomalous left coronary artery, meaning this artery in her heart had never developed.

"We were devasted," Arnold says.

A healthy little girl

Paisley Mae Arnold was born in October 2012. To her parents' knowledge, she was a perfectly healthy little girl.

"It was my wife and I's first child," says Arnold. "We were really excited."

But by her two-month check-up, all did not seem well. Paisley was experiencing trouble eating and acid reflux. By her four-month check-up, she was having trouble breathing. After an unsuccessful breathing treatment, Paisley was admitted to their local hospital in Apple Valley. Her condition continued to worsen — her oxygen levels were low, she became very lethargic, and her cries became muffled.

"We just had no idea what was going on," Arnold says.

Tests and X-rays revealed Paisley had cardiomyopathy — a disease causing difficulty with the heart delivering blood to the body. The doctor told Paisley's parents that her heart was enlarged, and she needed immediate care at Loma Linda University Children's Hospital.

Arnold remembers a blur of the ambulance picking up Paisley, feeling panicked while following in their vehicle and frantically looking up information on the internet.

"Of course, everything you look up about cardiomyopathy isn't good," he says.

A ticking clock

Several days following the news of Paisley needing a transplant, she was successfully added to the donor list. The wait began. Although Paisley's family would get a call just three weeks later that a heart was available, Arnold says it felt like a lifetime, as those three weeks were not without incident.

Paisley's heart suddenly stopped beating, and she coded. Her parents had been away from the hospital at the time. "That scared us to death," Arnold says. "I remember running out of the room, jumping in the car, and driving back to the hospital as fast as we could. Paisley was surrounded by a lot of people, but she had a heartbeat again."

After that incident, Paisley needed to be put on ECMO, or extracorporeal membrane oxygenation. Crystal Akers, RN, ECMO coordinator at Children's Hospital, explains that the ECMO machine helps patients by taking over the function of their heart and lungs. ECMO is most often used when other medical options have been exhausted.

Working in the pediatric cardiac ICU at the time, Akers was one of the nurses who cared for Paisley. "She came to us really sick," Akers says. "We had to put her on ECMO quickly because her heart was not pumping strong enough."

When doctors explained what ECMO was used for, Arnold realized

it ultimately meant a two-week countdown for their daughter.

"A lot of times, we say that the day a patient is put on ECMO, the clock starts ticking," Akers says. The longer a patient stays on an ECMO machine, the more complications can occur, including blood clots or bleeding in the brain.

"Agreeing to put her on ECMO was this horrible realization that she could die within a couple of weeks," Arnold says.

Buying more time

After a few days on ECMO, Paisley was identified as a potential candidate for a special ventricular assist device (VAD) that functions for the heart and would allow Paisley to come off ECMO, buying her more time as they waited for a transplant.

But even this victory was hard-fought.

While in surgery to place the VAD, Paisley suffered a pulmonary hemorrhage — bleeding from her lungs.

"She was pouring out blood," Akers says. "I've never given so much blood to a patient before."

Akers remembers herself and the other team members on day shift leaving for the night and not knowing if they would see Paisley alive when they returned the next day.

To give her lungs time to heal, the VAD was placed and used in conjunction with ECMO.

Akers, who remains friends with the Arnold family to this day, says she was overjoyed by seeing Paisley make it through and has treasured seeing her happy and doing normal kid things. "I see her pictures, and seeing her grow has probably been one of the best rewards as a nurse," she says.

The ninth St. Paisley Day

Paisley received her new heart in the wee hours of St. Patrick's Day — a day now celebrated each year by the Arnold family as St. Paisley Day.

"It was amazing because the very first moment we saw Paisley after the transplant, her lips that were once pale and ashen were ruby red like she was wearing lipstick," Arnold says. "Her body had never had that circulation it was supposed to. She just looked so beautiful."

Paisley would leave the hospital nine days after her transplant and continue to thrive. "She's done absolutely amazing," Arnold says. "For nine years now, it's like you're almost waiting for the other shoe to drop, but we haven't had rejection. We praise the Lord every day for her health."

BOOSTING HEART AND IMMUNE HEALTH THROUGH NUTRITION

BY LINDSEY CRUMLEY

Flu season can present an obstacle for the immune system, made more complicated by cardiovascular issues and the risk of coronavirus infection. Sarah Sorensen, MS, RD, a registered dietitian at Loma Linda University International Heart Institute, offers nutritional ways to collaboratively enhance the immune system and the heart.

"Food is more than just energy and calories," Sorensen says. "It's information that's providing signals to our body to help it function optimally."

With a weakened immune system, the body is more prone to infection which may trigger the development or progression of cardiovascular disease. Meanwhile, an existing cardiovascular issue impairs the immune system and heightens inflammation.

Sorensen notes that underlying inflammation drives many harmful conditions, and while some inflammation cannot be avoided, most ongoing chronic inflammation can be prevented.

Sorensen recommends a plant-based, whole-food diet utilizing every color of the rainbow to give the immune system and the heart a two-in-one boost.

PHOTO BY DENNIS SHUA

PLANT POWER

Hippocrates once said, "Let food be thy medicine and medicine be thy food."

Those medicinal benefits come primarily from plant foods. These foods, including fruits, vegetables, whole grains, nuts, seeds, herbs, and spices pack a punch in fiber, vitamin, mineral, and antioxidant levels.

"You get the whole package in plant-based foods," Sorensen says. "The nutrient density in animal-based foods is not the same."

Specifically relating to anti-inflammation, Sorensen highlights the omega-3 fats. She says there's a reason for the popularity of the omega-3 fats: they help support the balance of inflammation in our body. This anti-inflammatory nutrient may help arteries ward off plaque buildup. Seeds such as chia, flax, and hemp all contain an abundant amount of omega-3 fats.

Furthermore, plant foods are filled with fiber, which, in addition to regulating weight and bowel health, may reduce cholesterol levels and lower the risk of heart disease.

"You'd be surprised how easy and delicious it can be to incorporate these plant foods into yummy dishes," Sorensen says. "From making chia seed jam to substituting eggs with 'flax eggs' in baked goods, it's reasonable to make it a priority."

PROCESSED POISON

While adding more plants to the diet presents a great starting place, ensuring whole plant foods over processed foods plays an important next step.

"Processed refers to any food that has been altered in some way during preparation," Sorensen says. "Not only does processing affect the quality of our nutrients, but it often removes or adds ingredients."

One of the commonly added ingredients is sodium. According to the Centers for Disease Control and Prevention, about 90% of Americans 2 years old and older consume too much sodium, with levels about 1,000 mg over the recommended daily consumption. With such a high sodium intake, the body struggles to regulate blood pressure, and the risk of cardiovascular disease significantly increases.

Processed food strips fiber and adds in refined sugar and fats, which inhibit heart and immune health.

"The lack of fiber particularly amongst carbohydrate rich foods is very concerning," Sorensen says. "Without adequate fiber, carbohydrates break down faster and absorb quicker into the blood, creating a spike in blood sugars."

This spike compromises the body's ability to fight infection and triggers vascular endothelial dysfunction, a risk for coronary artery disease.

VARIETY VIBRANCE

Not only do we need whole plant foods, but a colorful variety including herbs and spices. Eating plants from every hue of the rainbow ensures a wide range of valuable nutrients, including important antioxidants.

"I like to simply view antioxidants as working against, or anti, the damage, or oxidation, within our bodies," Sorensen says. "Many things in our environment, whether stress or the foods we're eating, are affecting the oxidation in our bodies and the resulting damage."

Excessive oxidation can cause "oxidative stress" that endangers the body to damage.

"Antioxidants are pivotal in negating chronic inflammation involved in the progression of cardiovascular disease and for the immune system to function effectively," Sorensen says.

Different antioxidants pair with different colors of food: green with chlorophyll, orange with beta carotene, red with lycopene, and red, purple, and blue with anthocyanins.

Sorensen encourages eating primarily plant foods in a meal, as minimally processed and varied in color as much as possible. "Any vegetables are better than none," Sorensen says. "It's important to get as many nutrients as we can into our diet."

5 QUESTIONS WITH CHEF CORY

BY LARRY BECKER

Cory Gheen can remember the specific moment in his life when food became one of his passions. Gourmet foods and five-star restaurants weren't involved. No, at age four, Cory first realized his love for food at Vacation Bible School in Northern California. His teacher brought in a big bowl of bread dough and taught Cory and the rest of the class how to form a dough rope into their initials. The teacher took the doughy initials home, baked them, and brought them back the next day so the kids could eat them. For Cory, it was an epiphany.

"Here's this thing I made, and now it's baked, and I can eat it?" Cory recalls. He nurtured his newfound passion for culinary by helping his mother cook, reading cookbooks, and subscribing to food magazines. Cory then started considering potential careers and began looking for cooking programs. He ended up attending the prestigious Culinary Institute of America campus outside New York City.

"CIA was the most amazing experience in my life," Cory says. "It was a total immersion in all things food." After earning his bachelor's degree, Cory returned to California and began working in restaurants in the Napa Valley. Eventually, he concluded that there were significant challenges working in the restaurant industry — high levels of alcohol consumption, challenging work schedules, and lack of social life.

Seeking a new long-term career path, Cory sought a food service position within the Seventh-day Adventist system. After sending his resume to multiple locations, he began receiving phone calls, including one from Burt Connell. The then chair of the Nutrition and Dietetics Department in the School of Allied Health Professions, Connell wanted to bring Cory to Loma Linda University to teach culinary courses. He also recently fulfilled a career and personal goal to become a Certified Executive Chef (CEC) and Certified Culinary Educator (CCE) with the American Culinary Federation, one of only a small handful of vegetarian chefs who have achieved this prestigious distinction.

HOW DOES YOUR EDUCATION AT A WORLD-CLASS CULINARY INSTITUTE INFLUENCE YOUR WORK AT LOMA LINDA UNIVERSITY TODAY?

When I was looking to leave the Napa Valley restaurant industry, I planned to take on a food service operation. The reality is that there aren't enough Adventists to take on the leadership of the number of food service operations we have. Many facilities have to depend on contract companies to operate their food service. After Burt Connell called me about coming to Loma Linda, the pieces fell into place. If my skills are desirable, could I train others rather than just taking on one operation?

HOW DO YOU SPREAD YOUR FOOD AND NUTRITION EXPERTISE ACROSS THE LOMA LINDA UNIVERSITY HEALTH ORGANIZATION?

I love teaching! I teach classes covering food selection, cooking skills, and food systems management. My students work in a kitchen, prepare quantity meals, and learn the practical and management aspects of food preparation.

I also wear the hat of Executive Chef of Loma Linda University. I consult with the various dining services and help design and open new university food service facilities. I show up in every kitchen as often as possible, offering advice on recipe and menu development. I also help our food service directors see a bigger picture of the food service industry and how to bring those trends onto our campus.

I also work with the Live it in the Kitchen video series, a passion project of Craig Jackson, our School of Allied Health Professions dean. The videos can be seen on YouTube. They're just two to five minutes long, and they're tied into the University marketing program. I was surprised by how popular they've become.

THERE IS AN EXPLOSION OF INTEREST IN "PLANT-BASED MEATS," NEW VERSIONS OF MEAT SUBSTITUTES. WHAT'S YOUR ANALYSIS OF THESE PRODUCTS' PAST, PRESENT, AND FUTURE IMPACT ON VEGETARIANISM IN THE ADVENTIST CHURCH AND SOCIETY?

These new meat analogs grow out of companies' efforts to develop products that share meat qualities but made from plants. Adventists were one of the originators of meat analogs. Loma Linda Foods was one of the first. But we sat back on our laurels and stopped innovating. Our products were good. Church people were buying lots of them.

These new products are intended to be eaten more often than those original Adventist products. There's also an environmental component to how these products are presented, an appropriate consideration for our sustainable future but was not part of why Adventist companies first developed analogs.

We can be very proud of the part we played, and continue to play, in the plant-based foods segment while looking forward to the next iteration of healthy foods manufacturing. As a global community we have a rich history of creating culturally significant food products in a vegetarian form. How can we tap into that resource and expand the global palate with recipes that are proven and well loved? We eat a great diversity of vegetarian foods and should leverage that as we promote our health message. We need to be looking for the next innovation. How will food look in 20 years and jump on to that bandwagon.

WHAT IS YOUR FAVORITE THING TO COOK FOR A SMALL GROUP OF FRIENDS?

I always get asked that question, and I don't have an answer to it. I don't have a favorite dish. I'm a student of food with wide ranging interests. I'll cook whatever I'm interested in at that time. Right now, I am interested in Thai foods. If you'd asked me three months ago it would have been Japanese.

WHAT WOULD YOU SAY TO A FOOD SERVICE OPERATION LOOKING TO ENHANCE ITS VEGETARIAN OFFERINGS?

I would suggest they discover the entire world of legumes. Most grocery stores stock a very limited selection, but purchasing online opens up a world of possibilities. There's a company in Napa that offers wide variety of heirloom beans. We've barely scratched the surface of how to use beans. They can be in chilis and soups. Puree them, and they can be used in dips, sandwich spread, or fillings for wraps. Adding more legumes, nuts, and seeds can reduce the need to rely on the quick-cooking meat analogs.

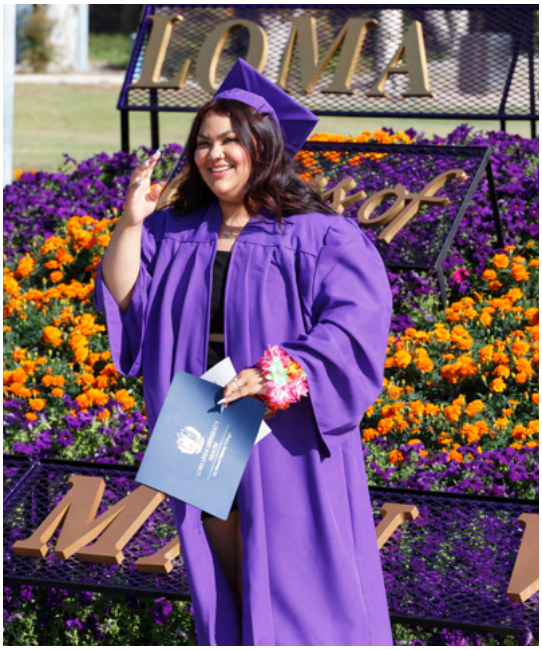
As I'm thinking about it, I would also say that the reimagining of classic recipes into a vegetarian format is a great way to create recognizable and immediately desirable menu offerings. Many recipes, like enchiladas, pasta, and sandwiches, can be easily modified to vegetarian. However, there is also a place for innovation and creativity. God put so many edible plants on this earth for us to enjoy; reach outside of the traditional comfort zones (and typical grocery store offerings) to find variety in ingredients. When you find something very fresh and interesting, research a way to cook and use it. God used creativity and variety when he designed the plants for our food, and when we expand the list of ingredients we are willing to use we can tap into His original plan and the results are amazing!

Recipes featured in the "Live it in the Kitchen" videos are collected in a cookbook published by Pacific Press Publishing Association.

PHOTO BY CHET WILLIAMS

Gallery

COMMENCEMENT 2022



Commencement events were held in May and June for all eight schools, as well as the San Manuel Gateway College.

In Memoriam:

Dr. Brian Bull, legendary hematologist and inventor, was former Dean of School of Medicine

BY ANSEL OLIVER

Brian Bull, MD, an inventor and one of the world's leading experts on hematology, who served as dean of Loma Linda University School of Medicine for a decade starting in the 1990s, died February 22. He was 84 and had been diagnosed with cancer.

Highly analytical and experimental, Bull was a prolific inventor, creating numerous methods and instruments to better understand blood platelets and their function, including clotting. Graduating in 1961 at the top of his class from Loma Linda University School of Medicine helped him land residencies at Yale University and the National Institutes of Health, where he collaborated on numerous groundbreaking research projects. He returned to Loma Linda University as a professor in 1968, where he remained the rest of his career.

Colleagues estimate he was granted 17 patents as well as authored 230 papers. At the NIH, he helped invent the Coulter Counter analysis — essentially an electrochemical cell with a small hole in it to count blood platelets as they pass, similar to what had already been invented for blood cells. He also

created "Bull's algorithm" in the 1970s, an equation for blood lab technicians to quickly determine if equipment is working correctly that is still widely used in most lab equipment today. He published the algorithm instead of thinking to patent it, which he later laughed and shrugged about.

Bull is also credited for increased monitoring of how cardiopulmonary bypass patients metabolize heparin to reduce post-operative bleeding, enabling the medical community to significantly reduce mortalities in the early days of open-heart surgery. His lab served as the nation's reference laboratory for blood counting and measuring equipment for many years. He also served on an FDA committee that evaluated devices for blood coagulation.

As medical school dean, a post he held from 1994 to 2003, he used data to discover ways to empower students and increase graduation rates. His approaches included creating systems for more students to perform well on national exams and to better pinpoint key attributes of successful medical students, which colleagues then used to more effectively interview applicants. Bull chaired the Department of Pathology and Human Anatomy for more than 40 years, starting in 1973. He also served for 10 years as editor of the international hematology journal, Blood Cells.

Bull was known for being incredibly knowledgeable about nearly any subject, was widely read, extremely curious, and enjoyed surrounding himself with other experts whom he could learn from, said Paul Herrmann, MD, current chair of the Department of Pathology and Human Anatomy. Bull was thoughtful, formal, and cared about helping others. He was known to offer tutoring to any medical student, even meeting with someone at 5 a.m. if needed.

Richard Hart, MD, DrPH, president of Loma Linda University Health, said he remembered Bull as a loyal supporter of Loma Linda University Health, someone who was always approachable, maintained a satirical wit under "British reserve," and had a strong institutional memory, which helped leaders make decisions about the future.

"Brian Bull was the classic senior statesman on campus, and the stability he brought to the faculty medical groups and particularly the department of pathology in both his teachings and clinical function was immense," said Hart, who studied under Bull as a medical student.

Tamara Thomas, MD, dean of Loma Linda University School of Medicine, said the school has "lost a friend, leader, researcher and professor."

"He had a tremendous impact on the School of Medicine and will be remembered for his leadership and commitment to our institution, faculty, and ultimately to our students' successful medical school journey," Thomas said.

Brian Stanley Bull was born in Watford, a suburb of London, England, on September 14, 1937. He attended high school in Jamaica where his father served as a school administrator. He attended Pacific Union College in Northern California and later transferred to what is now Walla Walla University in Washington state, earning a bachelor's degree in 1957. He had to wait a year to attend what is now Loma Linda University School of Medicine to meet the age requirement. He graduated in 1961.

Residencies at Yale and the NIH were followed by fellowships at the NIH and at the Royal Post Graduate Medical School in London. Bull joined Loma Linda University in 1968 as an assistant professor of pathology, became associate professor in 1971, and served as department chair beginning in 1973.

He was a diplomat of the Board of Medical Examiners, as well as the American Board of Pathology with distinctions in anatomical, clinical, and hematology. He also held editorial board memberships, including Clinical Laboratory Haematology, Clinical Laboratory Automation, Blood, and Blood Cells.

His numerous awards over the years included Alumnus of the Year for Walla Walla University in 1984, Basic Science Investigator of the Year by the Walter E. Macpherson Society in the School of Medicine in 1987, Honored Alumnus of the Year by the School of Medicine Alumni Association in 1991, the Community Commendation and the Humanitarian Award from the School of Medicine in 1991, and the William L. Cover, MD, Outstanding Contribution to Medicine Award from the San Bernardino County Medical Society in 1994.

Bull wrote widely on the interplay between science and religion, and he was bestowed an award in 2017 from the Weniger Society, a lay Seventh-day Adventist group. In his address at the ceremony, held at Loma Linda University Church, he expressed his appreciation to the society and honored his late parents, whom he said had mentored and inspired him and many other successful people.

"Thank you, Mom and Dad. You would have been pleased today to see just how far your influence has extended," he said.

Bull enjoyed playing tennis, studying geology, discussing theology, and had a broad spectrum of interests. He particularly enjoyed visiting mineral and rock shows in Arizona, where he was known as a strong negotiator with sellers, using skills he had learned as a teenager in bustling Jamaican markets.

Bull had remained active in his work through December, including a series of journal articles highlighting new research on the pathology of COVID-19 infection.

He is survived by his wife Maureen and daughters Beverly and Beryl.

A NURSE'S ONGOING BATTLE

ALUMNA FAYETTE NGUYEN TRUAX IS REDUCING HEALTH DISPARITIES EXPERIENCED BY VULNERABLE IMMIGRANT POPULATIONS

BY LISA AUBRY

PHOTO BY CHET WILLIAMS

WITH AN 'ARCHAIC' INFECTION

What does it take to squash a centuries-old infection driven by health disparities among a growing community of millions? Fayette Nguyen Truax, PhD, RN, CPNP-PC is reaching for the answer through her research and interventions designed to educate, test, and treat those most at risk of developing tuberculosis among Orange County communities: immigrants from Southeast Asian countries.

A respiratory disease, tuberculosis (TB) usually affects the lungs but can also affect the brain, the kidneys, or the spine. Left untreated, TB can be deadly. People who inhale air containing TB germs can become infected with a latent TB infection (LTBI), a dormant state of TB that places them at higher risk of developing active TB in the future.

Efficient screening, testing, and treatment of LTBI via oral medications coupled with culturally-sensitive TB education can stop the spread of TB, according to research by Nguyen Truax. However, to reduce TB cases in Orange County, treatment of LTBI in high-risk Orange County residents with chronic diseases is the first step, since this population has a greater chance of LTBI reactivation. Nguyen Truax frequently encounters misinformation or lack of education about TB and LTBI in the community that filters into medication non-compliance among the highest risk groups.

The groups that are most at risk for LTBI reactivation are immigrants from Asian countries who have been living in the United States for five years, are over 50 years old, and have comorbidities. Often, unsuspecting immigrants with LTBI with no symptoms move to the U.S. and don't seek treatment, "spreading the infection to others when their LTBI awakens," says Nguyen Truax. Last year, two-thirds of all active TB cases in Orange County occurred among Asians, according to county health reports.

"I want these people to live happy, healthy lives with their families in the community," Nguyen Truax says. "If they don't accept treatment for latent tuberculosis and the disease becomes active, not only does it jeopardize longevity by increasing the risk of death in elderly people, it also affects their children, their family, and the whole community they love so much as the disease spreads to other vulnerable people."

Among the highest risk tuberculosis populations of immigrants from Asian countries, the top countries of origin include the Philippines, India, and Vietnam. The latter of the list, in particular, piqued Nguyen Truax's curiosity. "Vietnam is a small country, and there are many other Asian countries in close proximity to it. So why Vietnamese people?" she questioned.

She began to dig into the research of tuberculosis in this particular migrant population— but studies proved sparse and dated.

"I thought, 'why hasn't anyone looked into this particular Asian Vietnamese group?' I want to be the researcher for this group," she says. "I want to help these immigrants as someone who speaks the language, shares a similar background, and grew up in the same community."

At age three, Nguyen Truax became one of roughly 700,000 "boat people," refugees who fled Vietnam by boat following the collapse of the South Vietnamese government. She settled with her parents and six siblings in Orange County. Upon arrival, the family underwent testing and treatment for LTBI at the same county health department that Nguyen Truax has been working with for the past decade.

But her family's completion of LTBI treatment was an exceptional one. The majority of Vietnamese immigrants do not get tested for LTBI, Nguyen Truax says. Even if

immigrants do get tested, Nguyen Truax says they likely won't accept, initiate, or complete treatment due to the stigma surrounding medications used to treat LTBI.

For instance, Vietnamese culture categorizes medicines into "cold" and "hot," Nguyen Truax explains; herbal medications are considered "cold," while other medicines such as painkillers or antibiotics are "hot," inflammatory, and harmful to the body. In addition, the standard regimen for treating LTBI consists of a daily dose of antibiotics for six to nine months — an extra-long time for someone to commit to taking medications they don't trust, Nguyen Truax points out.

"These elderly immigrants are often misguided with information from Vietnam and how they grew up there," she says. "It's not that they are stubborn. It's that they don't have the right education or avenues to access the right information."

Now, Nguyen Truax works with both Orange County TB services and community clinics in the region to raise awareness in the Vietnamese community about TB and LTBI. She has created a video starring Vietnamese actors speaking Vietnamese to directly address culture-specific myths about LTBI and medications. She designed the script to convince Vietnamese viewers who are skeptical about LTBI treatment to accept and engage in the treatment process. The video myth-busts commonly held, misguided beliefs about medications from Vietnamese culture, offers facts about health consequences, and stresses the importance of accepting treatment.

"There were no tuberculosis-focused educational videos specific to Vietnamese people, or even Asians," Nguyen Truax says. "I wanted Vietnamese immigrants to know that we healthcare providers understand how they feel."

Beyond directly addressing patients' concerns, Nguyen Truax meets with healthcare providers in community clinics that serve mainly Vietnamese immigrants to address biases and streamline up-to-date testing and treatment methods. She has recently worked with the Vietnamese Physician Association of Southern California for community outreach. The organization invited her team to attend their annual health fair to provide TB education and perform LTBI screening.

Nguyen Truax also helped arranged for a county physician to provide a short segment of TB education during primetime news at a local Vietnamese news station in Orange County, California. She has connected with county nurses to outline patients' decision-making processes regarding LTBI treatment and tactics to meet patients at each point of hesitation — such as discussing the safety of the medications and addressing potential side effects. Nguyen Truax says health providers can be proactive about addressing patients' concerns if they know the common roadblocks to completing treatment.

"As a nurse, I want to continue the ministry of healing," she says. "As nurses, we don't want to see people sick, we want to prevent illnesses. "So I'm going to be persistent. I'm not going to give up. And that's who we are as nurses."

These principles guide Nguyen Truax's teachings to current healthcare providers in the community and the next generation of nurses she mentors at Loma Linda University School of Nursing. Nguyen Truax's own journey at Loma Linda University started in the 1990s with her volunteer position to snuggle babies whose parents couldn't be present at the hospital's pediatric floors. During her time as a "snuggler," Nguyen Truax says she interacted with wise, compassionate LLU nurses who inspired her to apply to the School of Nursing, where she graduated with a bachelor's degree in 1999 and a master's degree in 2005.

Post-graduation, Nguyen Truax cared for many immigrant children as a pediatric school nurse in Rialto Unified School District and grew familiar with the health disparities and conditions affecting immigrants. She obtained her PhD from the University of California, Los Angeles, in 2016 and chose to focus on TB testing and treatment in immigrants; it was then that Nguyen Truax endeavored to unveil the reasons behind medication non-compliance. To understand these factors, Nguyen Truax needed to shift her LTBI research focus from the beloved pediatric population to the decision-making process related to LTBI treatment in the adult immigrant population.

2020 signaled the lowest number of reported cases of TB in the past 35 years. County health reports link the TB trends to pandemic safety measures, leading to decreases in TB detection, transmission, and immigration or travel. Though the lowering numbers mark a milestone to celebrate, Nguyen Truax says she is bracing to battle a new surge in TB cases as measures relax.

Nguyen Truax says she plans to continue traveling to community clinics to meet with providers and improve LTBI testing and treatment approaches. She says she is also eager to pilot the Vietnamese video in clinics to test whether it is effective in opening patients' minds to the prospect of accepting and completing LTBI treatment.

"I don't want to see my people, these generations of Vietnamese people, get infected and then end up in the ICU when there is a way to treat LTBI and prevent TB infection," she says. "It just takes some education and some convincing for them to understand the medications are there to treat that bacteria. I am just barely getting started."

Life of mission

WARREN CREED HAS SERVED IN JAPAN, GUYANA, AND THE PACIFIC ISLANDS OF GUAM AND SAIPAN

BY SHEANN BRANDON EDELBACH

When travelling to the Seventh-day Adventist dental clinic on the island of Saipan, you may meet clinic director and orthodontist Warren Creed, DDS. Known for his hands-on services to the community, many may not know of the calling behind that service.

Creed began his journey into the church after hearing about Pacific Union College from his Adventist biology teacher — attending PUC for undergrad and eventually Loma Linda University, where he gave his life to Christ.

Creed was drawn to the dexterous and tactile nature of dentistry. "I like to work with my hands," he says. "I felt dentistry might be a good way that I could use the things I liked to help people."

He graduated from the School of Dentistry in 1986 and later the orthodontia program in 1994.

Immediately after graduation, Creed felt called to become a missionary. When asked why he would take such a daunting step so soon, Creed says without a doubt that he knew it was the right path.

Creed and his wife Eileen's journey overseas began with a six-year commitment: three months of relief work in Guam while he worked on his Japanese dental license, followed by time in Okinawa, Japan.

Those six years were only the beginning. Creed and his family spent 22 years total in Okinawa, building a life and a home, serving and ministering. Then, another tug led Creed to work at a hospital in Georgetown, Guyana, South America — from there, Saipan, where Creed and his wife have been working for the past eight years.

Creed explains that, like anything in life, there have been moments of triumph and challenge. "We've faced all kinds of challenges," he says. "Like here in Saipan, we've had two super typhoons three years apart. We were without any power for at least six weeks. You're trying to keep the clinic running on one generator for eight hours a day, and sometimes it was hard just to get fuel."

He describes one of his greatest successes as assisting in the Georgetown dental clinic building planning and approval process, which had been unsuccessful for almost a decade before his arrival. That success quickly turned into another challenge: trying to improve perceptions of the clinic and raise awareness of its existence.

But he emphasizes that every challenge was a learning experience.

It's been 36 years since Creed felt God's pull on his heart to leave the mainland United States and use his skills for dentistry and his passion for service across the globe.

"It's been a long journey," he says.

What comes next? Creed feels God is calling him and Eileen in a new direction at the end of this year, back to the U.S. to spend time with his parents and his grown children. And while retirement may be another adventure entirely than missionary work, there is no question that Creed will continue finding day-to-day opportunities to serve.

DAMAZO'S LEGACY OF SERVICE AND GIVING

BY LARRY BECKER

Frank Damazo's commitment to service began in his childhood, growing up in a family of 10 children raised by parents who had immigrated to the United States from the Azore Islands of Portugal. Part of that commitment to help others grew from his parents' commitment that each child would receive a Seventh-day Adventist education. That passion for service also set the foundation for Dr. Damazo's commitment to giving back through philanthropy.

"As we grew, my parents told each one of us children their dream for our future careers," Frank recalls. "They told me that I would become a doctor. Those words set my course for life."

After completing his undergraduate studies, Frank arrived at Loma Linda University in March of 1944 to begin medical school. He realized that finances would be challenging for him, so he contacted his parents to discuss the issue. Following that conversation, Frank received an encouraging telegram from home.

"Dear Frankie, we do not want you to worry. Leave it to God. We love you and are praying for you," the telegram read. That message from his parents continues to influence Frank today. Throughout his time at Loma Linda University, Frank worked to pay his expenses while continuing his studies. He also received assistance from his parents and others, which has been an important motivation to helping future generations receive a quality education.

"We are trying to pass the principles of giving, education, and faith on to our children, grandchildren, and great-grandchildren," he says. Several of Frank's children and grandchildren have attended Loma Linda University, and several great-grandchildren have the same determination Frank had 90 years ago to graduate from Loma Linda University School of Medicine.

Frank remembers his time at Loma Linda University as "a bit of heaven." After graduation, he did his internship in Toledo, Ohio. Three months after starting there, he met a student nurse named Anna. Their relationship grew over time, ultimately leading to happy marriage.

Frank served as a military physician in South Korea and Japan, where he began developing his surgical skills. Following his discharge from the service, Frank completed a surgical residency at Henry Ford Hospital in Detroit. While initially interested in foreign mission service, Frank and Ann ultimately felt God's leading to settle in Frederick, Maryland. Frank performed more than 44,000 operations during his 48 years of practice in Frederick, retiring at age 80.

He and Ann also contributed to their community in a variety of ways, including helping several churches, church schools, a local Adventist camp, and nature center. They were passionate about Project Whitecoat, which placed a large number of Adventist conscientious objectors in Frederick. Frank and Ann opened their home each Sabbath to these young men, and Frank became the medical liaison and historian of the group. Frank attributes the opportunity to serve in this meaningful way to the quality medical education he received at Loma Linda University.

Over the years, Frank and Ann began providing philanthropic support to a number of Adventist churches and schools. Frank also remembered how his parents encouraged each of their children to support the places that provided their education, which led to the couple's significant support for Loma Linda University Health.

"It's a privilege to partner with an institution that is trusted, forward-focused, proven, and fully represents God's mission as well as our values," Frank said. "I consider myself to be one of the luckiest men in this world. I dedicated my life to God's service, and God has blessed me, my family, and many institutions."

When the School of Medicine was developing a high-tech simulation lab, the couple provided a significant gift to provide the computer control system. Now located on the fourth floor of the Centennial Complex, the Simulation Lab allows students to virtually experience the realities of situations they will later encounter in their careers. The Damazos also generously supported the construction of one of two amphitheaters in the new Centennial Complex. The Damazo

Amphitheater seats 350 and supports a wide range of educational and community events.

Their latest commitment to Loma Linda University Health is designated for the conference center on the 16th floor of the new Dennis and Carol Troesh Medical Campus.

"The Frank and Anna Damazo Conference Center is an integral part of Loma Linda University Health's continuing mission," said Trevor Wright, MHA, FACHE, chief executive officer of Loma Linda University Medical Center. "It will offer immeasurable support to our education work and will be a place where we will be better able to strategize how to continually service the healthcare needs of this community."

Wright also expressed his appreciation for the Damazo family's long-time partnership with Loma Linda University Health, noting that the Damazo Amphitheater is one of the most recognized places on campus.

Ann Damazo passed away in March of 2021. To honor her many avenues of service and their more than 72 years of marriage, Frank and his children decided to make an additional gift to name the 16th floor terrace adjacent to the conference center in her honor. When people step from the conference center onto the Anna May Damazo Memorial Terrace, Frank hopes they will remember her as a loving, tactful, problem solver — a woman who rapidly recognized issues and was able to develop partnerships and relationships with others to solve those problems.

Frank and Ann Damazo's impact on Loma Linda University Health will continue for generations to come. But Frank says any glory goes to God, whose blessings made their philanthropic work possible. He hopes others will consider their responsibility to uphold God's work and be inspired by his example to also serve.

"Any graduate of an institution should willingly offer funds as thanks for how that school impacted their lives," Frank says. "It doesn't require millions of dollars. God will bless any gift and any person who willingly offers this important support."

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BY THE NUMBERS

Outpatient visits
July 2021 – June 2022:

1,903,702

Students
in Fall 2022:

4,325

LOMA LINDA UNIVERSITY HEALTH FINANCIAL SUMMARY JULY 2020 – JUNE 2021

We earned:	
Clinical activities	$3,001,677,000
Academic activities	$337,611,000
Total Net Revenue	**$3,339,288,000**
We spent:	
Clinical activities	$3,065,061,000
Academic activities	$323,999,000
Total Expenses	**$3,389,060,000**
Transfers and other adjustments	-$4,755,000
Decrease in net assets	**-$54,527,000**

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PHOTO BY CARL CANWELL

Throughout the month of October, Loma Linda University Health projected illuminated pink ribbons on both main campus and surgical hospital signage to honor all of our patients, employees, and families who are survivors or currently undergoing treatment for cancer.

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Loma Linda University Health remains dedicated to our mission of continuing the teaching and healing ministry of Jesus Christ, and alumni like you help take this legacy of service into the world when you graduate. Thank you!

You can support this mission as a part of your estate plan by **making Loma Linda University Health a beneficiary of your checking, savings, investment or retirement accounts.** This type of gift is simple. Just update the beneficiary designation form on file at your financial institution. You can name your family, *and* the mission you care about, to receive what's left of these accounts when you pass away.

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LOMA LINDA UNIVERSITY
HEALTH

homecoming

Thursday, March 2 – Monday, March 6

2023

For all the latest updates, visit
llu.edu/homecoming.