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Scope

Loma Linda University Publications

Fall 2024

#### Stronger Together

Loma Linda University Health

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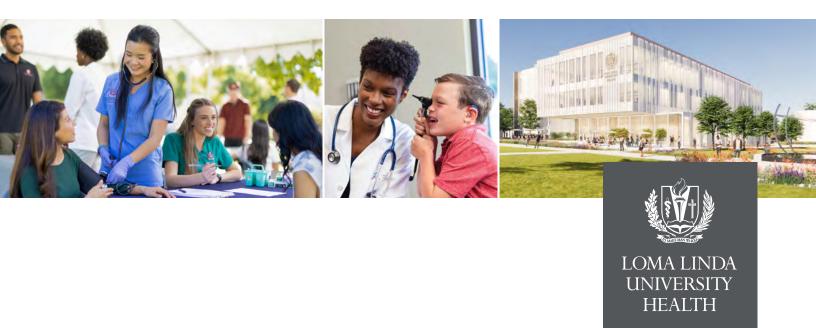
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#### OUR COMMUNITY | OUR MISSION | OUR NEXT STEPS



# / From our President /



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

## STRONGER, THANKS TO YOU

Loma Linda University Health's reputation is bringing an ever-increasing number of patients and students to our doors. They expect to receive the latest advances in treatment options and educational exposures. This can only be done by a continual push forward in research and innovations. Though we are a relatively small academic health science center, we have made some very important contributions to the advancement of medicine. This drive for excellence must continue.

Philanthropic dollars are the propellant that makes this all possible. New strategies entail financial risk and the ability to leverage that risk into viable new treatments. This takes time, creative faculty, and available laboratories to bring those innovations to the bedside. That is what Loma Linda University Health does so well and intends to continue. Our particular focus on cancer today will incorporate and build on the incredible advances in personalized cancer treatments that promise to lead many diagnoses into cures. This special issue of Scope focuses on our Stronger Together strategy to enhance Loma Linda University Health's ability to accomplish our mission. You will see various initiatives, including our major push for enhanced cancer research and treatment options on our campus. This is critical to maintain our leadership in this vital area of clinical care.

Complementing this cancer thrust will be our continued commitment to quality education. COVID has significantly decreased the ranks of nurses today, and the State of California has asked us to double our output of nursing graduates. The applicants are waiting, but we will need more space to do this well. And keeping our tuition costs attainable is always a goal in all our schools.

Please enjoy reading about these strategic priorities and our dreams for the future. You are what makes Loma Linda University Health vibrant, and I thank you for all you do. We will continue to pursue what you have always come to expect from us.



#### LOMA LINDA UNIVERSITY CANCER CENTER



Mark Reeves, MD, PhD Director Loma Linda University Cancer Center

Cancer is one of the top two leading causes of death in this nation, and for many children and young adults it has cut lives far too short. Many of us will one day need care for this lethal disease.

It is not with a little emotion that I deliver the news of a cancer diagnosis to a patient almost weekly. I know the huge amount of work they will now have to put in to go through their cancer treatments and therapies. But for so many, there is hope, and there is healing on the other side of those treatments.

Some therapies in use today didn't even exist just a few decades ago, and they have now become part of standard care because previous generations of innovators, clinicians, companies, and donors made them possible. Statistics suggest that some of you reading this will need treatment for cancer. And I'm excited that one day new therapies will exist throughout this nation because of places like Loma Linda University Health and its partners, people who took an extraordinary step in preparation and in faith that lives could be changed and people could be healed with new innovations. These innovations are now just on the frontier of medicine today but will become standard in the future.

We have the opportunity here at Loma Linda University Health to push the frontiers further. Here are some of the modalities:

**CAR T-cell therapy.** This is a personalized cancer therapy that involves drawing a sample of the patient's blood, extracting the T cells for their role in immunity, modifying them in a lab by adding the Chimeric Antigen Receptor (CAR), and then infusing them back into the patient. This provides a treatment mechanism at the cellular level to eliminate cancer cells. This therapy is now used for blood-based cancers such as leukemia and lymphoma but will soon be used to treat solid tumors as well.



**Theranostics.** This combination of "therapeutics" and "diagnostics" has long been used to treat metastatic thyroid cancer and will soon become a personalized cancer treatment standard for other forms of challenging cancers, providing hope where none exists today. We now know that many treatment failures were because of micro-metastases that our usual scans were unable to detect. This new method involves injecting the patient with a compound that seeks out those cancer cells at the cellular level. Theranostic treatment then eliminates those cells without damaging healthy cells around them. It is particularly useful for metastatic prostate cancer now and will expand to other tumor types.

**BNCT.** Boron Neutron Capture Therapy is still experimental and does not exist in the United States but shows great promise. This therapy uses a form of boron that is incorporated into cancer-seeking molecules and then injected into the patient. The boron compound has an attraction for a tumor and successfully enters these cancer cells. That area is then radiated with neutrons to create alpha particles that destroy the cells they are in. The alpha particles are short-lived and do not travel far, so normal cells around the cancer cells are not damaged. This modality can treat glioblastomas and other cancers of the brain because of its ability to cross the blood-brain barrier.

All of these options require additional research, clinical trials to prove their efficacy, and clinicians skilled in their utilization. We are building a Good Manufacturing Practice (GMP) cell therapy lab that will allow us to make customized CAR T and other cell therapies to personalize cancer treatments. Already, CAR T-cell therapy and Theranostics are available at Loma Linda University Cancer Center, and we are working to expand our research capacity to develop new cancer applications through these transformational treatment approaches as well as becoming the first BNCT Center in the United States.

As we continue to invest in new and better ways to diagnose and treat cancers, expanded treatment and research space is critical to match our capacity for ongoing discoveries and making these available to more people. We are planning now for this expanded access through a new research and treatment facility located in the heart of campus. This initiative is also key in our progress toward becoming the first faith-based National Cancer Institute-designated Comprehensive Cancer Center in the world.

Together, we can open the future to a new generation of cancer treatment for the Inland Empire and the world.



## LOMA LINDA UNIVERSITY CHILDREN'S HEALTH



Richard Chinnock, MD Chief Medical Officer Loma Linda University Children's Hospital

I'm always surprised by how fast they grow up. Our patients are babies and children and teenagers, but within a few years they are adults. Sooner than I realize, they start their own families and become valued members in our communities throughout the region.

They come to us at Children's Health for many reasons. Sometimes for annual well-child visits. Unfortunately, many need more advanced and specialized care. Our job is to help them at every stage of their young lives, whether their health needs are routine or complex, so they grow into healthy, happy adults.

Some of them will even become doctors, nurses, and healthcare staff — and maybe even one day help care for you and me.

Your past support has ensured that Loma Linda University Children's Hospital has continued to deliver world-class care here in the Inland Empire. Our need now is to provide a central home for our specialists, which will help so many of our patients and their families get the access to care they need. This will be especially important for patients who need complex and coordinated care. With a new Pediatric Outpatient Pavilion, we'll bring 30 specialties and services that are currently held in multiple locations across the community into one convenient facility. Your help will make this new 105,000-square-foot space a reality near our Children's Hospital.

This new Pavilion will help patients like Sarah Avram, who was born with spina bifida. This is a significant congenital condition that affects development of the spinal cord. Part of her vertebra developed outside of her back, which required surgery. She also needed a ventriculo-peritoneal (VP) shunt, which is a tube to drain excess cerebrospinal fluid in her brain down to her stomach. This condition requires care from several specialists, especially in the patient's early years. Housing the myriad of services that children like Sarah need in a



Sarah Avram

common location not only provides greater access, but also greatly reduces the stress, time, and challenges parents and their children encounter in coordinating this lifesaving comprehensive care.

Today, Sarah is 18 years old and has been able to stand and can walk slowly with the help of leg braces. We are so proud of this young lady. She has worked hard and hasn't let her disability stop her from what she wants to do. She and her family regularly visit regions in Eastern Europe, where disabilities are misunderstood. Her trips there include speaking at churches to encourage people with her experience and testimony.

Sarah recently told us that Loma Linda University Health is her top choice because of the personalized care she has received here over the years. And she's now studying healthcare science and hopes to one day become a provider of pediatric care.

I'm grateful for how our team has been able to support all our patients over the years. Now is the time for us to work toward expanding access to children's specialty care. By bringing services into one location, we can provide a coordinated one-stop outpatient service for families who need it most.





## LOMA LINDA UNIVERSITY SCHOOL OF NURSING



Shawn Collins, PhD, DNP Dean Loma Linda University School of Nursing

Healthcare today faces several significant challenges following the COVID-19 pandemic. One of the most urgent is dealing with a national shortage of qualified nurses. Right across the street from the School of Nursing, Loma Linda University Medical Center averages 300 to 400 open nursing positions at any given time. Hospitals across the nation face similar shortfalls every day.

Expanding the School of Nursing is an essential way that Loma Linda University Health can strengthen our local, national, and global community. We have ambitious plans to train more nurses to fill our profession's critical shortage. The State of California has called on Loma Linda University to double the number of graduates to help meet this need.

But we don't just want to train more nurses. We want to train more Loma Linda nurses! When Loma Linda's graduate nurses enter the workforce, they are equipped with the most current technical skills, but they also understand the importance of treating the whole person and not just the disease.

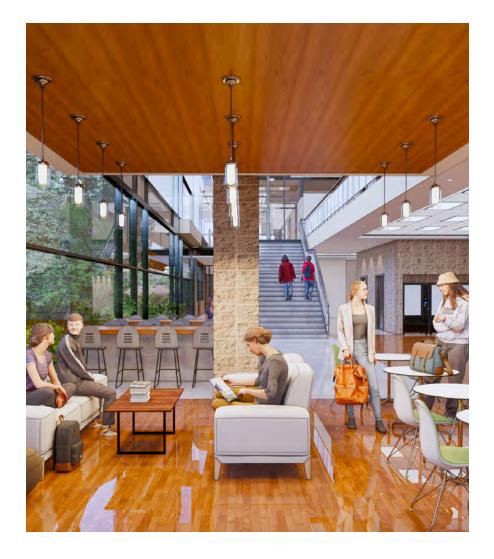
The dollars raised through the Stronger Together initiative for the School of Nursing will result in the construction of a three-story addition to our School of Nursing that will include more and larger classrooms, student collaboration and study space, and faculty development space needed to expand our teaching capacity. However, the true impact of those dollars will be through our graduates who redefine global standards of nursing excellence in whatever area of practice they choose.

Stronger Together's impact will touch our community, region, and world. Our students come from around the world to Loma Linda University. They learn from talented professors. They implement their classroom studies by working with experienced nurses in the Medical Center. After graduation,

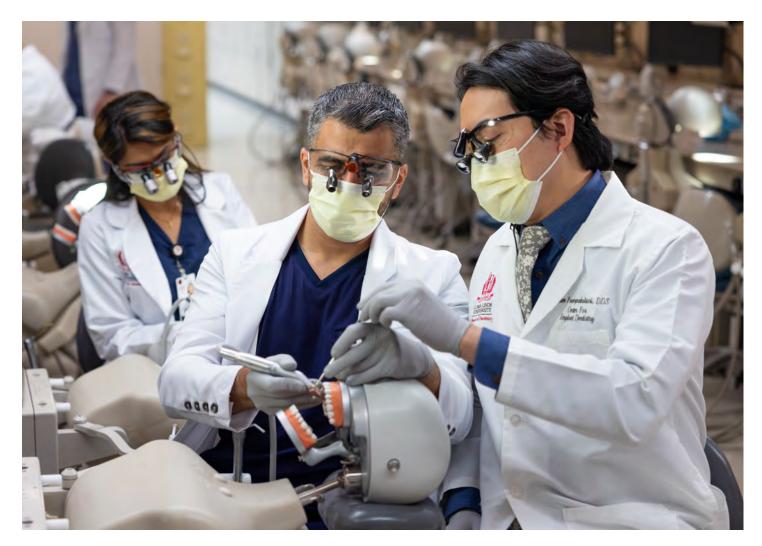


Loma Linda University nurses continue the teaching and healing mission of Jesus Christ wherever they serve worldwide.

The coming decade will be challenging. Our response must be to push harder, identify opportunities, and stay focused on our commitment to provide world-class Christ-centered education to more Loma Linda nurses. That has been our goal since our founding in 1905. And Stronger Together will provide the necessary support to allow us to faithfully build on our legacy of Christian Service and educational excellence.







## LOMA LINDA UNIVERSITY SCHOOL OF DENTISTRY



Robert Handysides, DDS Dean Loma Linda University School of Dentistry

Loma Linda University School of Dentistry has educated and inspired generations of oral healthcare professionals to combine clinical excellence with a Christian concern for each patient's total well-being. The Stronger Together initiative will play a key role in how we build on our 70 years of history and continue the innovative ways we shape the brightest dental minds for service in the years to come.

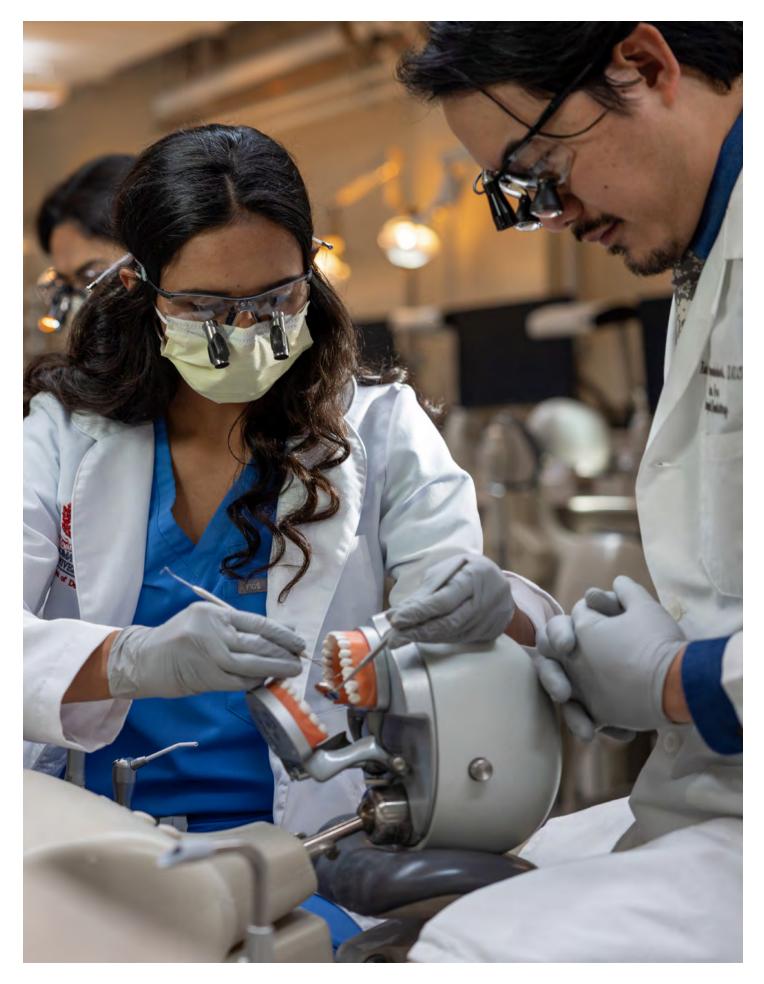
School of Dentistry graduates enter the workplace with a practical familiarity with the most recent tools of their profession and the ability to provide exceptional, research-based oral healthcare. We have now reached a point where we must modernize to provide the best possible patient-focused education.

Stronger Together's funding will allow us to reimagine our teaching and clinical spaces. Renewed clinical space will contribute to better learning outcomes for our students. These investments will also benefit the many people who come to our clinics seeking the advanced dental care we offer. We have a responsibility to help these patients who otherwise would suffer for years in silence.

Stronger Together will support the rapid transformation of the School of Dentistry's education and research initiatives. But it's not just about our current needs. Stronger Together is truly about our work long-term. What will we put in place today that will support our students 20 or 30 years from now?

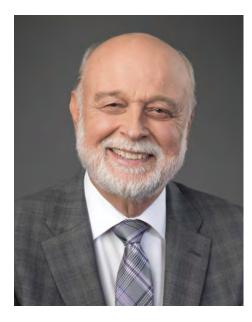
School of Dentistry students learn from professionals who teach from a Christian perspective. Our goal is that our graduates will be prepared to deliver life-enhancing, whole-person care to their patients while making positive, extra-professional contributions to their communities.

"Service is our calling" is more than our school motto. It's a commitment we make every day in how we teach and in how we provide care. Your willingness to stand together with us is critical to how we will train our students to change the future of oral health.





#### UNIVERSITY VILLAGE



Richard Hart, MD, DrPH President Loma Linda University Health Imagine a place where students, faculty, staff, and the community can gather to discuss the latest research, read up on innovations in healthcare, or take a break from it all and focus for a few moments on friends, family, and a great meal. University Village could be that place.

Plans have been developed for a new dynamic place to foster community, wholeness, and learning in both academic and student spaces. University Village will provide staff, faculty, and students with this environment to forge friendships and create a sense of community. It will include additional student housing and consolidate student services into one central student center. It will also provide retail spaces such as eateries and shopping, a new parking structure equipped with solar panels to ease parking challenges, and a beautiful courtyard with a garden and relaxing areas to facilitate mental, physical, spiritual, and community wellness. This project will not be funded through philanthropy but investment relationships, and we are looking forward to the impact this initiative will have on the campus as a whole.

Loma Linda University's campus with eight health sciences schools provides a landscape for interprofessional learning not found on most campuses. These experiences equip students, like recent graduate Harrison Hamada, '23, to head toward his pharmacy residency at New York-Presbyterian hospital equipped to support patients through a whole person care approach to pharmacy.

Harrison shared, "The biggest 'aha' moment I had was when I started to attend clinics with other students, like the medical students. These interprofessional experiences showed me the value pharmacy has in various healthcare settings and gave me the confidence to push on."

University Village will provide more wholistic student experiences that will prepare students for success in real-world, life-transforming settings across the globe. Together, we can support the success of the next generation of healthcare professionals by creating a University Village that fosters collaboration and engagement outside of the classroom.









#### ADDITIONAL STRONGER TOGETHER INITIATIVES

Loma Linda University Health educates more than 4,000 students annually and treats more than 1.9 million outpatients from a region that covers more than 25% of the state of California. We are determined to alleviate suffering and pave the way for healthier futures while honoring our mission of extending the teaching and healing ministry of Jesus Christ.

#### **HEALTHCARE INITIATIVES**

Our Loma Linda University Medical Center — Murrieta facility meets the healthcare needs of the Temecula Valley, one of the fastestgrowing areas in Southern California. Continued over utilization makes the need for additional beds paramount in Murrieta. Stronger Together will enable the addition of 15 beds to its capacity, reduce stress on key services, and create a foundation for future expansion opportunities.

Loma Linda University Medical Center's role as a faith-based academic medical center makes it a gateway for health services to the region's population. Stronger Together will allow for key investments in an ambulatory infusion center, update technology for PossAbilities, our program that supports patients adapting to physical limitations, and fund lab space and equipment for a comprehensive sickle cell disease clinic.

#### UNIVERSITY INITIATIVES

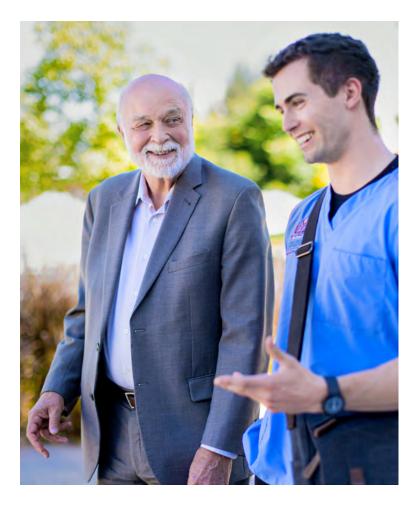
Our eight schools and San Manuel Gateway College continue to be at the heart of Loma Linda University Health. Expenses increase, however, resulting in higher tuition rates. While we endeavor to control costs, there continues to be a critical need for student scholarship support in all our schools. A particular emphasis today is on Inter-Professional Education, a strategy that trains students from various disciplines together so they fully understand the respective skills and roles of each other. We accomplish this through our Simulation Labs, shared mission trips, community projects, and various activities on campus.

Another priority is emphasizing our core values in all we do. We are making sure that every student understands and pursues both personal health habits and develops the skills to share these with their future patients and colleagues. The foundational concept of Wholeness permeates this campus and instructs our daily lives.

As a university committed to the development of expanding the boundaries of knowledge, our faculty and students are involved in many kinds of research activities. As an academic health science center, most of our initiatives focus on health concerns — both preventing when possible and treating when necessary. A major thrust is on what is called "translational research," where we bring discoveries from the laboratories to the bedside. This is what we intend to do with cancer and other diseases that still cause so much suffering and loss of life.

It is this integration of science and faith, education and service, experience and research that makes Loma Linda what it is today. We remain totally committed to our motto, "To Make Man Whole," even as we grow and touch the world in so many ways and places.









LOMA LINDA UNIVERSITY HEALTH

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Join Stronger Together, a \$300 million philanthropy campaign that promises to fuel a healthier future for all of us! Together, we will develop groundbreaking research and treatment for the world's most debilitating diseases, bring the most advanced clinical and diagnostic equipment to the region, and expand access to specialty care for those who need it most.

Learn more at **Iluh.org/giving/** stronger-together.



For additional information, email **giving@llu.edu** or call **909-558-5010**.

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