

LOMA LINDA UNIVERSITY  
**SCOPE**

Winter 2009

*Also ...*

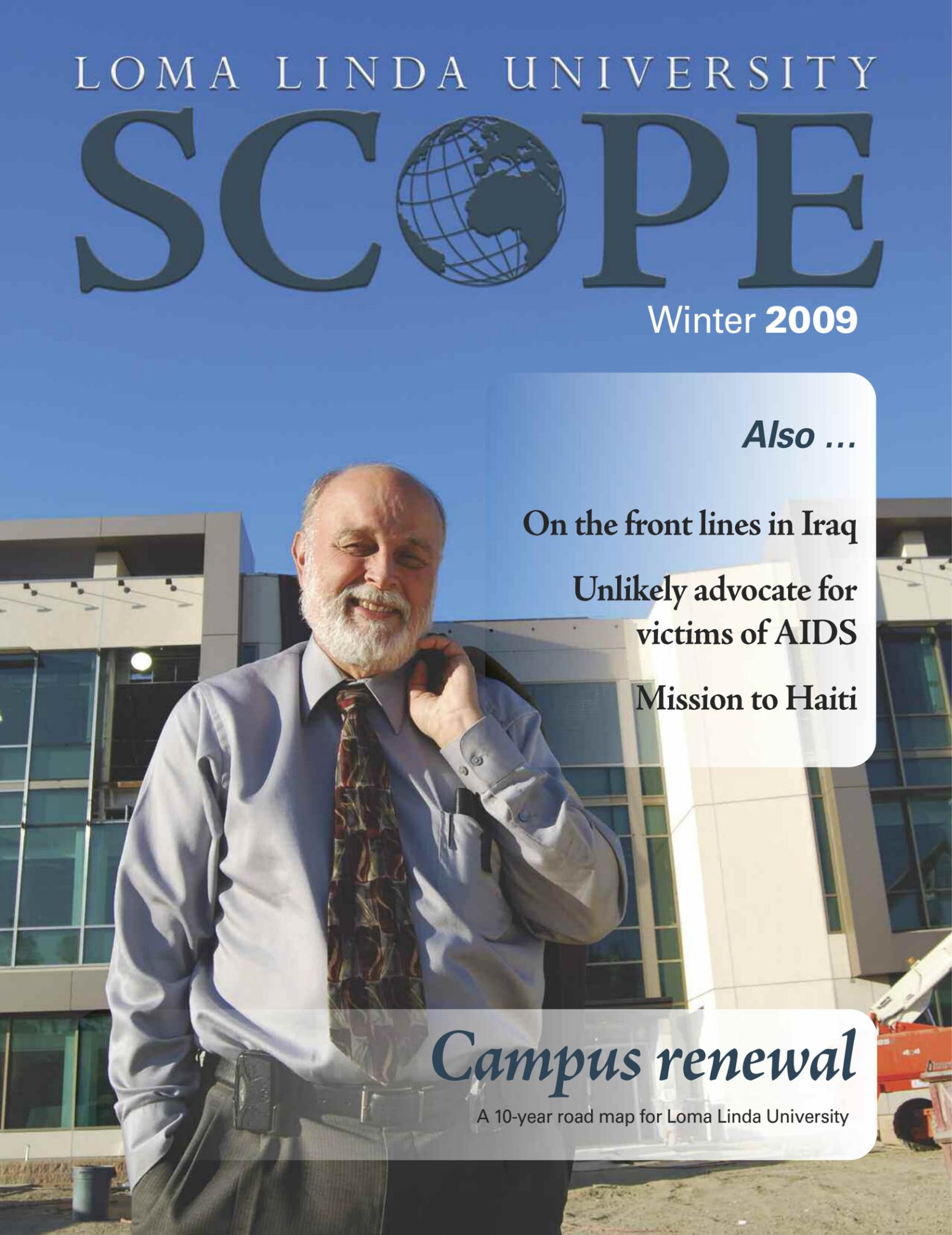
**On the front lines in Iraq**

**Unlikely advocate for  
victims of AIDS**

**Mission to Haiti**

*Campus renewal*

A 10-year road map for Loma Linda University



# LOMA LINDA UNIVERSITY transforming lives

CHAN SHUN PAVILION  
CANCER INSTITUTE

COLEMAN PAVILION  
SCHOOL OF MEDICINE

## Allied Health Professions

Clinical laboratory sciences (BS)  
Communication sciences and disorders (BS)  
Communication sciences and disorders credential (MS)  
Cytotechnology (BS)  
Dietetic technology (AS)  
Emergency medical care (BS)  
Health information administration (BS♦)  
Health information administration health information technology progression (BS)  
Medical radiography (AS)  
Nutrition care management (MS♦)  
Nutrition and dietetics (BS, MS)  
Nuclear medicine technology (certificate)  
Occupational therapy (MOT, OTD†)  
Physical therapist assistant (AS)  
Physical therapy (progression MPT, DSc, DPT entry level, post-professional DPT)  
Physician assistant (MPA)  
Radiation sciences (BS♦, MS†)  
Radiologist assistant (BS♦)  
Rehabilitation sciences (PhD)  
Respiratory care (BS✓)

## Dentistry

Dental anesthesia (MSD)  
Dental hygiene (BS♦)  
Dentistry (DDS)  
Endodontics (MS, MSD)

Implant dentistry (MS, MSD)  
International dentist program (DDS)  
Oral and maxillofacial surgery (MS, MSD)  
Orthodontics and dentofacial orthopaedics, advanced (MS)  
Pediatric dentistry (MS, MSD)  
Periodontics (MS, MSD)  
Prosthodontics (MS, MSD)

## Medicine

Anatomy (MS, PhD)  
Biochemistry (MS, PhD)  
Medicine (MD)  
Microbiology and molecular genetics (MS, PhD)  
Pharmacology (PhD)  
Physiology (MS, PhD)

## Nursing

Nursing (AS, BS✓, MS✓, post-master's certificate, PhD)

## Pharmacy

Doctor of pharmacy (PharmD)

## Public Health

Biostatistics (MPH, MSPH, certificate)  
Emergency preparedness and response (post-bachelor's certificate)  
Environmental and occupational health (MPH)

Epidemiological research methods (certificate)  
Epidemiology (MPH, DrPH, certificate)  
Global health (MPH, DrPH)  
Health care administration (MBA, BSPH, GIS certificate)  
Health education (MPH♦✓, DrPH♦✓)  
Health geoinformatics (certificate)  
Health policy and leadership (MPH)  
Lifestyle intervention (certificate)  
Lifestyle medicine (MPH)  
Maternal and child health (MPH)  
Nutrition (MPH, MS, DrPH)  
Preventive care (DrPH)  
Public health practice (MPH♦✓)  
Reproductive health (certificate)

## School of Religion

Biomedical and clinical ethics (MA, certificate)  
Clinical ministry (MA, certificate)  
Religion and the sciences (MA)

## Science and Technology

Case management (certificate)  
Child life specialist (MS, certificate)  
Clinical mediation (certificate)  
Clinical social work (PhD)  
Counseling (MS)  
Criminal justice (MS)  
Drug and alcohol counseling (certificate)  
Family counseling (certificate)  
Family life education (certificate)  
Family studies (MA, PhD)

Forensic science (certificate)  
Gerontology (MS)  
Marital and family therapy (MS✓, DMFT, PhD)  
Public administration (DPA)  
Psychology (MA, PhD, PsyD)  
School counseling (certificate)  
Social policy and social research (PhD)  
Social work (MSW)

## More Information...

**Office of Enrollment Management**  
11139 Anderson Street  
Loma Linda, CA 92350

**(800) 422-4558**  
**www.llu.edu**



LOMA LINDA  
UNIVERSITY

♦ Also offered in distance education format.

† Only offered in distance education format.

✓ Also offered in blended format, with instruction on campus, off campus, and/or via distance education format.

SCOPE | Winter 2009



**Front cover:** Loma Linda University president Richard H. Hart, MD, DrPH, stands in front of the Centennial Complex, currently under construction and expected to be finished soon. The state-of-the-art facility will incorporate many innovative technologies. *Larry Kidder, photographer*

**Back cover:** This collection of photos provides some artistic perspectives of the new LLU Heart & Surgical Hospital. *James Ponder, photographer*

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## SCOPE

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▲ The 10-year plan for Loma Linda University is illustrated graphically in the rendering above.

# University campus renewal

A 10-year road map for the campus of Loma Linda University

The campus of Loma Linda University is changing from day to day. The ground rumbles and throbs with the sounds of heavy equipment. Giant cranes tower over the landscape. Fences surround many areas in an effort to lessen the visual impact of heavy construction.

On a health sciences and health care campus, it is no secret that growth can be painful and inconvenient at times—particularly from a medical perspective. Likewise, traffic congestion, dust, and noise carry with them a certain level of pain.

The campus is experiencing growing pains. Like parents who find it difficult to imagine their gangly teenager as a handsome adult son or beautiful daughter, it may be difficult to picture where the campus will end up.

Unlike parents, who must hope for the best when it comes to their children, there is a step-by-step plan to guide the process of transforming the campus, with accompanying graphic representations that are fairly close to the end result. Perhaps, if you know

what the end result will most likely be, the traffic congestion, dust, and noise will seem a little less annoying and a little more bearable for the time being.

### A master plan for the next 10 years

Following is an explanation of the 10-year master plan for the Loma Linda University campus. The key word to remember is “plan” and the fact that a plan will almost certainly evolve over time in reaction to a myriad of circumstances.

The article immediately following this one will address expansion on the health care side, which includes plans for a new children’s hospital complex north of the railroad tracks, major growth in rehabilitation facilities at Loma Linda University Medical Cen-

**This rendering shows the Centennial Complex and surrounding areas, including the new thermal energy storage tank just across Anderson Street. ►**

ter East Campus Hospital, incorporation of the Loma Linda University Heart & Surgical Hospital into the system, construction of the LLU Behavioral Health Institute, and medical facilities in nearby Beaumont and Murietta.

### Projects completed, nearing completion, or soon to begin

The most recent addition to the campus is the new residence hall building, which was occupied the beginning of November.

This brand-new facility features two styles of rooms: a dorm-style suite with shared kitchen and bathroom facilities, and four private attached rooms; and a studio apartment suitable for one individual or a couple. All of the rooms are completely furnished and ready to move in.

The four-story complex has an underground parking area, 12 suites, and 12 studio apartments, as well as a spacious dean’s apartment.

The Centennial Complex is expected to be completed by the fall of 2009. The cliché “state of the art” is often overused, but in the case of the Centennial Complex, it is completely apropos. All of the

chairs in the classrooms and amphitheatres include a personal media center where students connect to the presentations by professors, or quickly access the Internet or LLU intranet as needed. In addition, the entire building will be equipped with wireless Internet so that no matter where students are, they have Internet access.

In addition, distance communication technologies will be employed to connect Loma Linda with virtually any location internationally that is appropriately equipped. Courses can be shared in real time, with full interaction between students and professors via the technology.

The simulation laboratory, located on the topmost floor of the Centennial Complex, will be one of the largest and best-equipped such facilities in the United States. This laboratory will allow health professionals to practice on “dummies” who are anything but stupid.

The practice mannequins simulate real-life medical conditions and complications, requiring participants to take appropriate life-saving actions—or at least keep trying until they are successful.

Across Anderson Street from the Centennial Complex will



be the new thermal energy storage tank. This new facility will allow the power plant to create chilled or heated water (depending on the season) during the hours when electricity is the least expensive and store it for use during the day. With the high cost of energy, the new tank is projected to save the University and Medical Center major dollars during the coming years.

Much of the current construction along Anderson Street in the northeast corner of the campus is a result of tunnels being built to transport the water to and from the thermal energy storage tank, which will occupy a corner of what is presently a parking lot.

The closure of Stewart Street between Campus and Anderson Streets will allow the tunnel to continue toward the Centennial Complex, as well as eventually cross Anderson Street. However, the primary purpose of this closure is to allow a collaborative effort between Loma Linda University and the City of Loma Linda to proceed. Stewart Street will dip halfway through the block to allow construction of a walkway over it, connecting the Centennial Complex with the rest of the campus.

**The re-landscaped entrance to Loma Linda University will be much more inviting to visitors. ▼**

*Projects to be completed within the next three years*

Stewart Street will be expanded to four lanes when it reopens. Increased safety for both pedestrians and motorists, as well as aesthetic improvement, will be some of the results of this effort.

During the interim, University Avenue has been reopened and is serving as the connector between Anderson and Campus Streets. At certain times of the day, the lines of automobiles can be long and slow-moving. A major reason for the Stewart Street improvements is to relieve that very congestion in the future.

Completion of the Stewart Street project will allow for the Centennial Pathway project to move forward, since the pathway will extend over the walkway closer to the Centennial Complex than originally planned.

The Centennial Pathway will include a walkway stretching from Magan Hall to the Centennial Complex marking important events in Loma Linda's history. In addition, individual pavers donated by contributors in honor or memory of someone important to them will complete the walkway.

At a point near the center of the north quadrangle will stand a modernized globe, representing the global impact and outreach of Loma Linda University.

As guests to the campus top the railroad bridge on Anderson

Street just north of the campus, they will be treated to a new entrance to the campus. They will have no question that they successfully found Loma Linda University.

The centerpiece to the new entrance will be a pull-off area where guests can stop by a visitor's center to learn more about the University. Stretching west in front of them will be the north quadrangle with the new Centennial Pathway and globe.

The new entrance is designed to be warm and welcoming, encouraging visitors to take a stroll through the campus. Signage will be pleasingly aesthetic and clear, pointing them in the directions they need to go.

In addition to the near-term projects already mentioned, the University will be renovating the Del Webb Library, not only updating the library but creating an information commons. Look for more details in the coming months.

Four final projects are certainly worth mentioning. The student center will be relocated from Drayson Center to the area recently occupied by La Loma Credit Union, as well as the current University cafeteria. All of the student government, student affairs, and marketing offices will reside in this renovated facility.

While Drayson Center has served as a great location for student government offices since it was built more than a decade ago, the new location will be more centralized and accessible to students.

The Heritage Park Museum will be constructed west of Nichol Hall on the hill near the historic cottages—the only remaining original buildings from Loma Linda's purchase in 1905.

Between Mortensen Hall and the Campus Chapel, a cul-de-sac will be created opposite University Avenue.

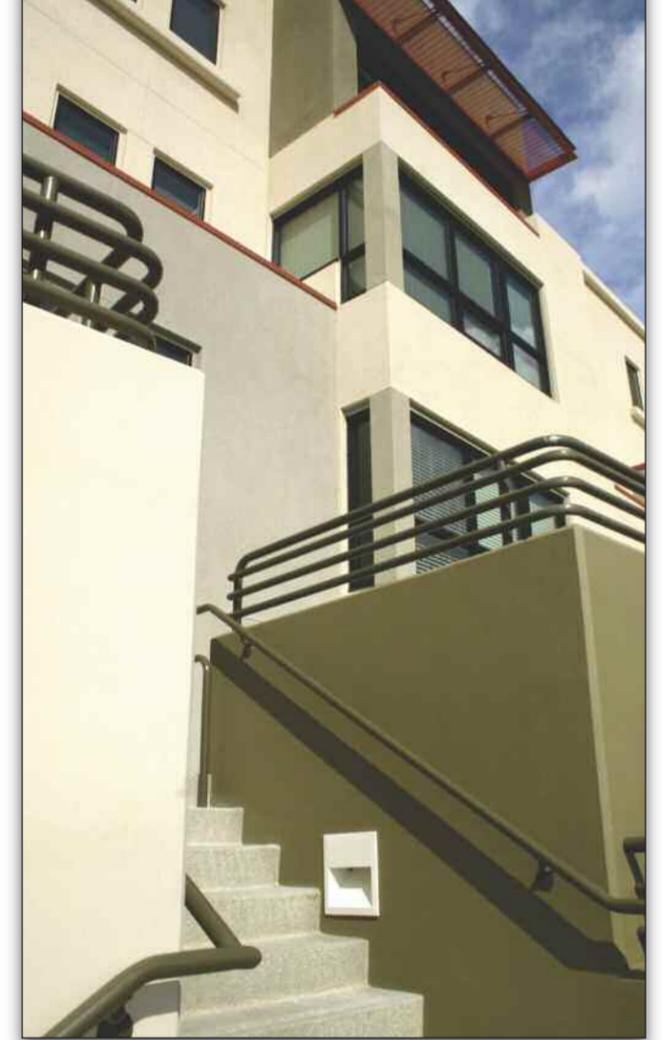
A last major project will dramatically increase campus parking. Known as the West Hall Parking Structure, this new parking complex will extend the current parking structure opposite LLU Church nearly to West Hall, adding additional capacity to the existing parking structure.

*Up to 10 years down the road*

More long-term plans include a complex north of the railroad tracks and east of Loma Linda Academy that will become the new home of the School of Dentistry; a new residence hall complex east of Lindsay Hall, the current women's residence facility; and a new field house at Drayson Center, located between the east overflow parking lot and the superfield.

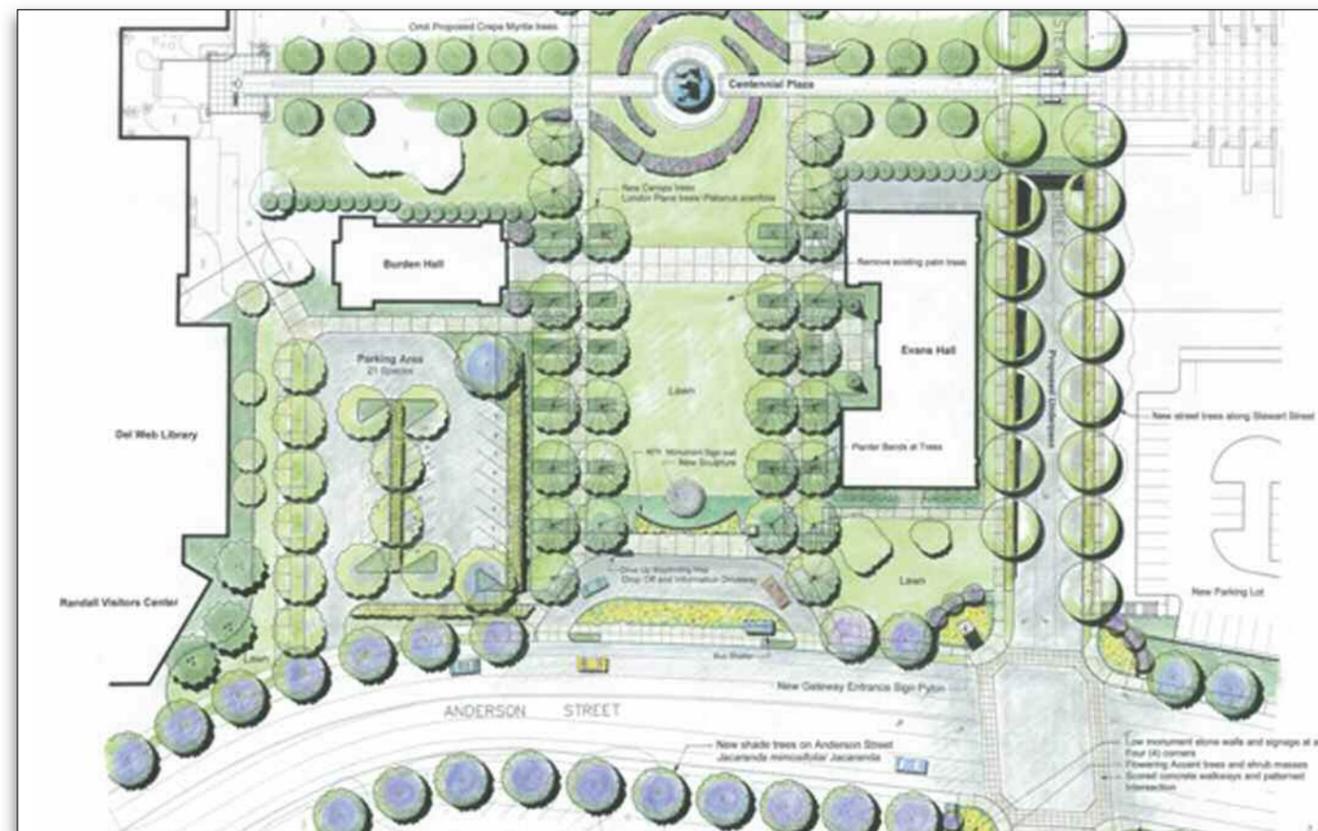
*A little imagination, please*

So as your senses take in the sights and sounds of progress while you drive by on your way to and from work, let your imagination wander to what will be. **SCOPE**



**Campus housing has been a challenge for Loma Linda University students. This addition provides some much-needed housing facilities. ▲**

**The new student center will be centrally located in what used to be La Loma Credit Union, as well as the current University cafeteria. Below is an artist's rendering of the plans. ▼**





## Renewal of the health care campuses

A long-range plan for Loma Linda's health care institutions

Loma Linda's health care institutions are looking beyond the construction noise and temporary relocations to the long-term health care needs of one of the fastest growing regions in the nation. Serving an area that is as large as the New England states combined is no easy task. As the only Level I trauma center in the entire county, Loma Linda University Medical Center (LLUMC) serves the sickest individuals in need of expert health care.

Under the umbrella of Loma Linda University Adventist Health Sciences Center (LLUAHSC), the Medical Center is in the planning and construction phases of a number of projects that will help meet the medical needs of the region.

Ruthita Fike, MA, CEO and administrator of LLUMC, shared the long-term vision and goals for the institution in the Summer 2007 issue of *SCOPE*. Following is an update, illustrating a system-wide strategic and facility plan to increase and improve Loma Linda's service to the region.

### LLU Cancer Center

The Loma Linda University Cancer Center, located in Schuman Pavilion, was recently finished and opened its doors to patients. In an effort to provide world-class care, the Cancer Center has been divided into 11 centers of excellence. Each center represents a sub-specialty of oncology with care offered by a talented physician team of medical, surgical, and radiation oncologists.

The Cancer Center is home to several unique capabilities and technologies. The James M. Slater, MD, Proton Treatment and Research Center, which opened in 1990, has been working with Optivus Proton Therapy, Inc. in developing a new state-of-the-art proton technology that will be available beginning in June 2009.

Image-guided proton therapy will allow the Proton Treatment and Research Center to treat up to 50 percent more patients, amounting to 175 to 200 patients per day, or one patient every 10 minutes. The increased number of treatments will be more cost effective for the Medical Center and decrease wait times for patients

**The new LLU Behavioral Health Institute, just across Iowa street from the LLU Behavioral Medicine Center, will provide office and research space, allowing clinical, educational, and research areas in behavioral health to be under one roof.** ◀

seeking cancer treatment with proton beam therapy.

The new technology will provide the most rapid, sub-millimeter beam precision available in the world. The beam precision allows the beam to be focused precisely on the tumor, decreasing damage to healthy adjacent tissue while reducing patient complications and side effects.

### LLU Heart & Surgical Hospital

An example of the evolution of the facility plan is the recent purchase of Loma Linda University Heart & Surgical Hospital, located near the Redlands border on the north side of Barton Road.

The new hospital has 28 inpatient beds—16 of which are private—six operating suites, two procedure rooms, two Cath laboratories, a 1.5 tesla magnetic resonance imaging (MRI) machine, and a 64-slice computed tomography (CT) scanner.

The new LLU Heart & Surgical Hospital, which opened in January 2009, houses heart and vascular surgery, minimally invasive surgery, robotic surgery, women's health, urology, head/neck, and ear, nose, and throat (ENT) surgery services. The hospital will focus on patients who require little or no hospital stay.

The Medical Center purchased the 66,000-square-foot facility in 2008, placing on hold plans for an ambulatory care pavilion that was to be constructed on the east end of Schuman Pavilion.

### LLU Behavioral Health Institute and LLUMC East Campus Hospital

Following the theme of bringing together research, education, and clinical care, the new Loma Linda University Behavioral Health Institute project will result in a 46,000-square-foot facility, located east of the current LLU Behavioral Medicine Center.

For the first time, several specialties—counseling and family sciences, psychiatry, psychology, social work and social ecology, and outpatient programs—will be brought to one location. The Institute is scheduled to open in the fall of 2009.

LLUMC East Campus Hospital is well on its way to becoming an integrated facility for rehabilitation, medical research, education, and clinical care. The 24-bed rehabilitation addition is scheduled to open near the beginning of 2010.

The ground floor of the Tom & Vi Zapara Rehabilitation Pavilion will include "Independence Square," an area simulating

everyday situations for patients that allows them to work on essential skills such as walking, counting change, and buying groceries.

### Off-campus facilities

In an effort to reach a widening patient population, Loma Linda has partnered with other health care institutions and physician groups to expand services in the cities of Beaumont and Murrieta.

The 90,000-square-foot facility in Beaumont is expected to open by mid-2009 and will include a medical office building, outpatient surgery center, urgent care, and a variety of medical and surgical programs. Ancillary services such as imaging, laboratories, and physical therapy will also be on site.

A 106-bed, state-of-the-art hospital and medical office buildings are currently under construction in Murrieta. Loma Linda University Medical Center—Murrieta is expected to generate 500 jobs with an estimated payroll of \$32 million after five years of operation, according to an economic estimate by Surgical Development Partners. The hospital will ensure easy access to world-class medical care for the thousands of residents in the area.

### Seismic retrofitting and other improvements

Building codes in California are evolving to require structures to withstand increasingly stronger earthquakes. Loma Linda University Medical Center has been mandated to perform a retrofit project with a price tag of about \$400 million. In addition to the seismic retrofit, the Medical Center continues to upgrade and renovate various units. The main operating suites, located on the second floor, will receive major upgrades and remodeling.

### LLU Children's Hospital

Loma Linda University Children's Hospital (LLUCH) continues to refurbish existing clinical areas—including one of the largest and most advanced neonatal care centers in the world, with 22,000 square feet dedicated to caring for some of the tiniest babies.

The Children's Hospital is renowned as the preeminent facility for wholistic pediatric care in Southern California. With nearly 250 beds, the Hospital has been designated by the American Board of Surgeons as a Level I trauma center, providing the highest level of trauma care within the Inland Empire four-county area.

In early 2009, LLUCH received a grant to expand its pediatric wholistic clinic, allowing this type of alternative medicine to be brought into the future. It is the only academic pediatric wholistic clinic in the county, and many children who have not been able to have access to wholistic care now have a place to receive treatment and new hope. **SCOPE**

# On the front lines in Iraq

An LLU alumnus serves in the line of fire

**T**erry R. Schmunk, DDS, is not a typical person. He is an adventurer at heart. In his early years, Colonel Schmunk would pour over maps of the world dreaming about traveling to exotic places. Not content to only look at maps and photographs, Colonel Schmunk put his dreams into action.

During his years before entering Loma Linda University School of Dentistry, Colonel Schmunk traveled throughout Europe and across northern Africa.

Shortly after graduating from the School of Dentistry in 1973, Colonel Schmunk accepted a mission appointment from the Seventh-day Adventist Church as a dentist practicing at Saigon Adventist Hospital in the war-torn country of South Vietnam.

As a dentist in Vietnam, Dr. Schmunk would take weekend “mission trips” throughout South Vietnam providing dental services to underserved areas—and that included most of the country. Now, 32 years later, Colonel Schmunk, a colonel in the United States Army Reserve, serves in another war zone—this time in Iraq.

From the air, Balad Air Base in northern Iraq appears like a small American city in the middle of the desert.

Located in the most hostile parts of Iraq, Balad Air Base is home to approximately 25,000 men and women—mostly Americans. But driving through the “city” of Balad, there are constant reminders that this is not a typical American city. This is a military base in a war zone.

While soldiers drive as fast as they can when they are outside the perimeter of the base to avoid roadside bombs and ambushes, while on base, they must drive their Humvees 10 miles per hour, a strictly enforced speed limit. The names of streets ring with familiar names—California Street, New York Avenue, Brooklyn Road.

Down the main street of the “city” sits a warehouse-size building—the local PX. The shelves of the PX are lined with the latest electronic equipment and racks of new CDs and DVDs. Located adjacent to the PX are familiar fast food restaurants like Pizza Hut, Subway, Burger King, Cinnabon, and Taco Bell. A nearby cafeteria serves in excess of 100,000 meals per day. Of the 25,000 or so troops stationed at Balad Air Base, only a few hun-

**Colonel Terry R. Schmunk, DDS, surveys the terrain around the city of Abraham, Ur of the Chaldees. ◀**

dred have jobs that take them off base.

The city’s most distinctive feature is the long runway located at the perimeter. Air Force officials say that the runway at Balad Air Base is one of the world’s busiest—right behind London’s Heathrow in air traffic. Balad is the launching point for many aircraft including C-5 Galaxy transports, unmanned aerial vehicles, and more than 200 helicopters including Apaches, Black Hawks, and Chinooks.

Even when the pilots return to Balad having not fired a single bullet or missile, they are crucial to the war mission by just the deafening roar of their jet engines. The menacing sound is often enough to scatter insurgents and to reassure soldiers on the ground that assistance is at hand.

In the midst of this city is Colonel Schmunk’s headquarters, where he commands 57 soldiers—dentists, dental hygienists, dental assistants, and others.

“I have the honor and privilege to command the 307th medical company out of Vallejo, California,” Colonel Schmunk says. “We are part of the second United States Army medical division in the Army Reserve. We are a field dental unit, so we go out there and make things happen with a minimum of material. We are trained to go out as close to the front as possible.”

But in Iraq, providing dental care to the troops is more like a dental practice at home, according to Colonel Schmunk. In Iraq, the dental team under Colonel Schmunk’s command worked in fixed facilities.

“Presently our mission is to provide dental services for the Southern Command Dental Mission. We provide dental care from Baghdad south to the Kuwait border.

“We have the opportunity and privilege to serve at seven different dental clinics—providing dental services to approximately half the United States military personnel in the Iraq theater.”

Services provided to the soldiers are similar to those provided stateside. “We provide our troops with every type of dental care that is available at home,” says Colonel Schmunk. “We even provide emergency maxillofacial surgery on wounded soldiers, and then send them to our hospital in Germany for followup care.”

Colonel Schmunk’s office is designed for efficiency. On his desk are two computers—one for routine work—and the other for

classified information. At the entrance to his headquarters stand two flags—the United States flag and the California flag.

When you walk into Colonel Schmunk's office, you will see a United States flag that Colonel Schmunk personally carried out of Saigon Adventist Hospital (formerly the United States Army Third Field Hospital) just three days before the fall of Saigon in April of 1975.

Other areas of Colonel Schmunk's headquarters look like a kindergarten classroom. Strategically placed on walls throughout the headquarters are hand-drawn, crayon-colored notes from children across the United States.

"I have a 5-year-old pen pal from Arizona," Colonel Schmunk says. "I just love her. She asks questions like 'What do you eat? Are you happy? What do you do in your spare time? Have you ever killed anyone?'"

"I wrote back to her and told her that I am happy that I have never killed anyone. In fact, most of us who serve in Iraq do not have to use our weapons," he explains. "We are here to support those out in the forward operating bases who are protecting the Iraqis' freedom and ours."

"The people back home are extremely generous," Colonel Schmunk says. "I think that this conflict has given our young people in grade school and even up into high school an opportunity to connect with us and realize that we are real individuals and to get to know us in very real ways."

"My responsibilities take me throughout Iraq. As you can imagine, traveling in a war zone is not easy. It is difficult and

time consuming. The old army adage of 'hurry up and wait' is practiced a lot."

The most practical way for Colonel Schmunk to visit his clinics is by air—usually by C-5 Galaxy or Black Hawk helicopter.

His travels have taken him north of Al Assad—the site of Jacob's well—and to Tallil Air Base, located about 180 miles southeast of Baghdad. Located about 10 miles from Tallil is the ancient city of Ur of the Chaldees—the site of Abraham's home.

"From a Biblical perspective, being stationed in Iraq is a bonus that I didn't expect to see when I was first notified that our unit was being assigned to Iraq."

"Being here gives you a sense of Biblical history," Colonel Schmunk says. "Seeing the site where the Garden of Eden was located, the Tigris and Euphrates Rivers, Nineveh, and other Biblical sites gives you a whole new perspective."

Communication between Iraq and the United States is easy, according to Colonel Schmunk. "I remember during the Vietnam years that I had to make an appointment to call home. Most of our communication during that time was through letters and audio tapes. Now we have the ability to connect to our family almost on a daily basis through satellite telephone or through e-mail."

"This is probably the first conflict in history where we are able to keep in touch with our families—not only in our hearts, but

**Colonel Terry Schmunk (fifth from left) visits with soldiers under his command at Camp Liberty, located northeast of Baghdad International Airport. ▼**



also through daily communication."

While Colonel Schmunk served as a missionary in Vietnam at Saigon Adventist Hospital—the former United States Army Third Field Hospital—the facility had a contract to provide dental and medical services to United States embassy personnel and to other non-governmental agencies still left in South Vietnam.

"We were a Department of Defense contractor, so we were serving both God and country in a very unique way," Colonel Schmunk says.

Colonel Schmunk is still serving his God and country. "I have a wonderful church family in Iraq," he says. "Every Sabbath is a highlight. We have church members from Fiji, Uganda, and other parts of the world. We have Army, Navy, and Air Force members from throughout the United States."

**Colonel Schmunk examines an Iraqi army tank destroyed during Operation Iraqi Freedom. ▲**

"Meeting with fellow church members each week means a lot to me and to the others—more than we can ever express."

"Most Army physicians and dentists who come overseas as reserves or National Guard personnel are here for 90 days. I've had the opportunity to be over here for almost a year so far."

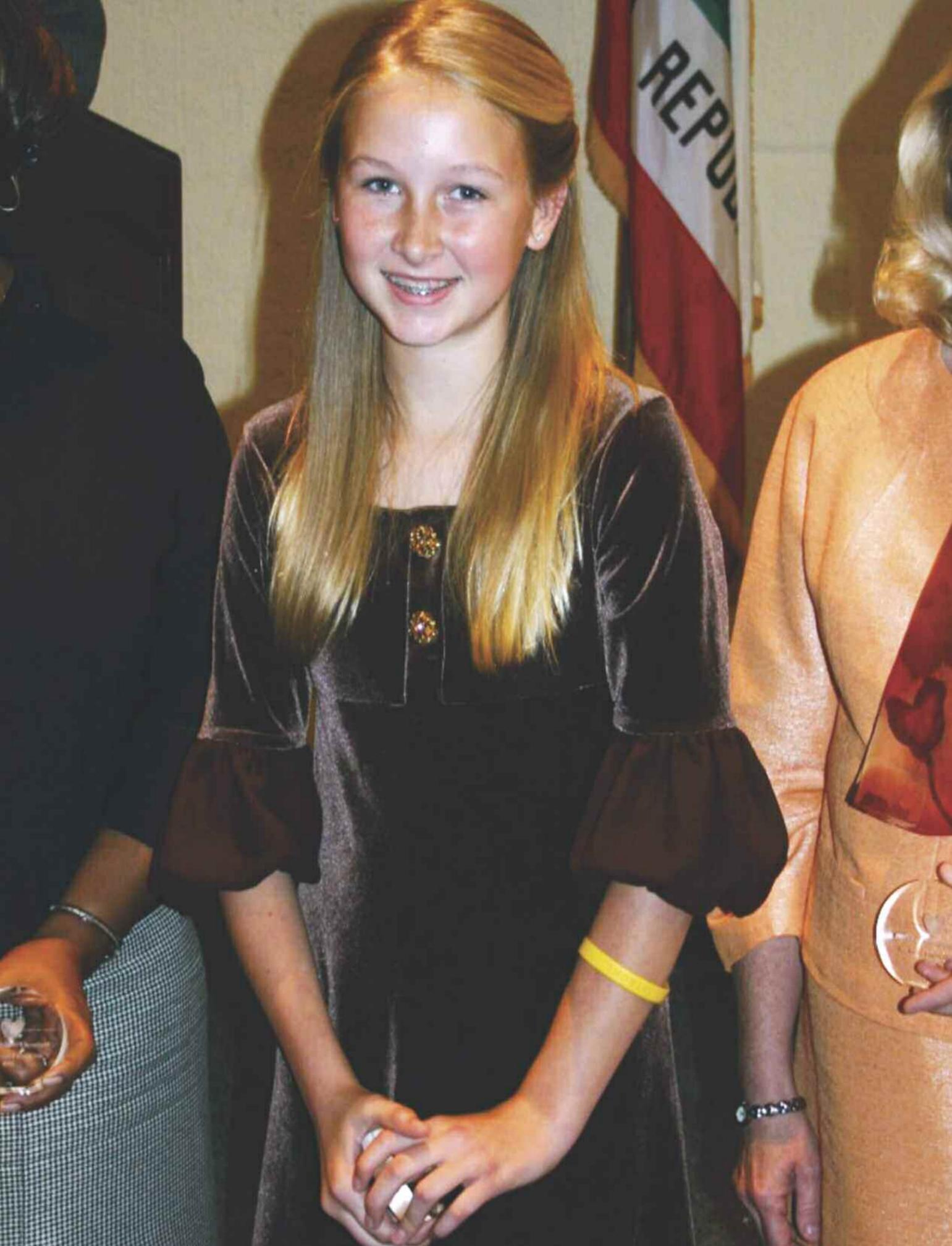
Colonel Schmunk receives many "care" packages and notes. "They all say, 'Terry, I'm praying for you and your troops.' We all feel that. It makes a tremendous difference to us over here. I want to say that there is no place I'd rather be than here. I wish I didn't have to be here, but I am glad that I am here and have an opportunity, both as a leader and a follower, to make a difference here in Iraq." SCOPE

*Note from the author:* "In early 2008, I had the opportunity to be embedded with the 307th Medical Company (Dental Services) in Iraq under the command of Colonel Terry R. Schmunk, DDS, MPH, a 1973 graduate of the Schools of Dentistry and Public Health," author Richard Weismeyer explains. "I first became acquainted with Colonel Schmunk in 1974 when he was a missionary dentist at Saigon Adventist Hospital in South Vietnam and have maintained that friendship throughout the years. Approximately 20 years ago, Colonel Schmunk joined the United States Army Reserve. In late 2007, his dental unit was called up to serve in Iraq. He recently completed serv-

ice as commander for the 307th Medical Company (Dental Services) and was stationed at Balad Air Base in Iraq. "To be embedded within the military, I completed a three-page media embed application. Information requested included personal data, contacts in the event of an emergency such as death or declared missing, and a medical history with three questions—allergies to any medications, any heart condition, and any disabilities that prohibit the applicant from running. "Getting to Iraq involved flying commercial from the United States to Kuwait. From Kuwait, all transportation within Iraq was provided by the United States military."

## Child philanthropist

Savannah Edwards raises funds for children with cancer



It isn't every day that a 12-year-old girl from Columbia, Tennessee, receives a standing ovation in Southern California. Yet that's precisely what happened on Thursday, November 13, 2008, when Savannah Edwards—winner of the Inland Empire chapter of the Association of Fundraising Professionals' Youth Volunteer of the Year award—recounted how devotion for her beloved cousin, Stephen, motivated her to raise more than \$7,000 for a variety of charitable causes, including more than \$5,200 for children with cancer at Loma Linda University Children's Hospital.

The story of how Savannah became a philanthropist blends equal parts tragedy and triumph. During the 2005 Christmas season, Savannah's cousin, Stephen Neil Dysinger, was diagnosed with a rare cancer. Unfortunately, for Stephen—whose father, Wayne S. Dysinger, MD, chairs the department of preventive medicine at Loma Linda University School of Medicine—the disease is fatal when discovered in the late stages as his was. The news hit Savannah hard.

"I remember sitting in my room feeling so sad that he was sick, and wishing I could do something," she recalls. "I wanted to help in a big way. I decided I would use my creativity to make handmade cards, dishcloths, and baby blankets to sell and raise money for him."

Savannah soon exceeded her goal of raising enough money to outfit Stephen with comfortable clothes to replace the ones he outgrew after losing weight to his disease. What to do with the money left over? Stephen suggested she come to California and pay him a visit.

The trip proved to be a bittersweet experience for Savannah. While profoundly inspired by Stephen's indomitable spirit, she was shocked by the change in his appearance as a result of the chemotherapy he was receiving at Loma Linda University Children's Hospital. "He had lost all his beautiful hair," she notes. "Seeing him like that made me realize how sick he really was. I wished

**A cousin dying from cancer motivated Savannah Edwards to become a young fundraiser for children with cancer. Here she receives the Youth Volunteer of the Year Award, given to her by the Inland Empire chapter of the Association of Fundraising Professionals. ◀**

I could take his place, or that he wouldn't have to be so sick."

Despite his condition, Stephen remained positive. "I was amazed at how strong he seemed to be," Savannah offers. "He could be in the bathroom vomiting one minute, then come out and say, 'Let's go to the movies!' We had a great time. We played Monopoly, read books, and went to the movies and out to eat."

Savannah's mother, Janelle, concurs with her daughter's assessment of Stephen's attitude. "He was a fighter," Janelle affirms. "He fought cancer with every ounce of energy he didn't even have—harder than anyone I have ever seen! I think seeing him like that gave Savannah the inspiration to fight just as hard to help others in her ministry."

Once she returned home, Savannah mobilized her siblings, Zack and Maryssa, and two of the neighbor kids, Zachary and Chloe Kiffmeyer, into helping her open a lemonade and Kool-Aid stand. Chloe and Zachary had lost their grandma to cancer and were eager to join the cause. Not only did neighbors buy her lemonade and Kool-Aid, but worshippers at Grace Point Seventh-day Adventist Church in the nearby town of Franklin, Tennessee, and the First Cumberland Presbyterian Church in Columbia became repeat customers.

"My church families support me a lot," she insists. Some feed her new ideas; others print labels for her ministry—Children Helping Children in Their Fight Against Cancer—or provide card stock. One generous couple donated a paper cutter. "People definitely believe in what I'm doing and want to help out."

As Stephen's disease progressed, he drew inspiration from his relationship with God. He had been baptized at the Azure Hills Seventh-day Adventist Church almost a year before anyone knew he had cancer, but as Pastor John Brunt would point out in his eulogy of Stephen, the young man's heart had always belonged to God. "His nightly prayer was, 'Dear Jesus, please live in my heart. Help me be Your boy.' He showed an awesome strength, but was also at peace with death because he knew that heaven was next."

Savannah remembers Stephen asking their grandparents an important question a short while before he passed away. "What's the big deal? The next thing when I wake up, I'll get to see Jesus." Still it wasn't easy for Savannah to face the facts.

"When I found out he wasn't going to live, I cried," Savannah

shares. "He was so young. But I also saw the journey God put Stephen on during his time of being sick." She pauses a moment, then reflects on his fortitude. "Stephen is one of my heroes. He was 13 years old and in seventh grade at Loma Linda Middle School when he died. He was full of life—ALWAYS—even when he was so sick."

The Saturday night following Stephen's death on Thursday, July 20, 2006, found Savannah selling crafts at a church social to raise money for a round-trip ticket to attend his funeral along with her mother, and brother Nick, who spoke at Stephen's memorial. "I was sad at the service," she remembers. "The hardest part was when Nick talked. I had never seen him that sad. I felt kind of sad realizing that Stephen wouldn't be there anymore."

Now that he's gone, keeping Stephen's memory alive is enormously important to Savannah. Her remarks at the luncheon underscore the source of her inspiration.

"I am happy I could come to California for this occasion," she affirmed, "and I want to thank you all very much for this honor. I began my ministry of raising money for children's cancer almost three years ago when my 13-year-old cousin Stephen Dysinger was sick and being treated at the Loma Linda University Children's Hospital. I was very sad when he passed away and I thought it would be meaningful to continue my efforts in his memory. It makes me happy to be helping others, and I believe God has greatly blessed what I've done."

After thanking a number of individuals—notably her mother and family, and church families in Tennessee as well as her new friends from LLU Children's Hospital—Savannah cited her Uncle Wayne Dysinger, who accompanied her to the luncheon. "A special thanks goes to my Uncle Wayne, who has been a continual support in helping me to keep Stephen's memory alive." Savannah also credits her maternal grandparents, P. William and Yvonne Dysinger, for setting an example of benevolence with their lives.

Savannah concluded her remarks by presenting the LLU Children's Hospital Foundation Cancer Center checks totaling



\$2,186.61, which she had raised the previous weekend in Stephen's memory. "I have never seen anyone fight a disease as hard as Stephen fought his," she noted. "I will always continue to fight for all the other children that have to endure this horrible disease. Thank you!"

Another highlight of Savannah's trip was getting to spend an evening with her good friend Cyndee Pelton, RN. Ms. Pelton works on the pediatric hematology/oncology unit at LLU Children's Hospital, where Stephen was treated. She and Savannah have become the best of friends and stay in touch on a regular basis.

Joanna DeLeon, director of the LLU Children's Hospital Foundation, applauds Savannah's philanthropic heart. "Since raising funds for her cousin a few years ago," Ms. DeLeon observes, "Savannah has extended her outreach and made fundraising for Loma Linda University Children's Hospital her ministry. For such a young girl, Savannah has incredible compassion for others, and we're excited to celebrate her accomplishments through the Youth Volunteer Award. Savannah puts others first and is an inspiration to everyone."

As she heads home, Savannah looks forward to greeting her family, raising money for her ministry, and resuming her ballet lessons. Most of all, she anticipates a very important reunion. "I can't wait to see Stephen in heaven," she shares, "and tell him all the cool things I got to do because of my love for him." **SCOPE**

*Readers who would like to join Savannah Edwards in her efforts on behalf of children with cancer are invited to send their donations to: Savannah's Fund, Loma Linda University Children's Hospital Foundation, P. O. Box 2000, Loma Linda, California 92354.*

**Wayne Dysinger, MD (left), shares a pensive moment with his niece, Savannah Edwards, outside the Mission Inn, in Riverside. Dr. Dysinger's business card may designate him as chair of the department of preventive medicine at the Loma Linda University School of Medicine, but more importantly it identifies him as "Savannah's Uncle." ◀**



## Unlikely advocate for victims of AIDS

A transformed Victorian dispenses hope in the age of AIDS

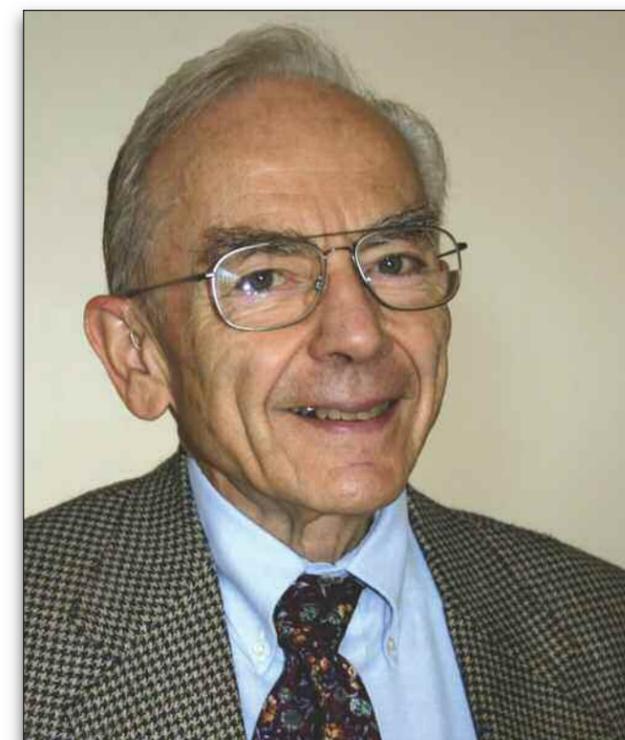
**H**arvey Elder, MD, former chair of Loma Linda University Medical Center's department of infectious diseases, thinks God is enjoying a laugh at his expense.

"Why else would He have chosen me to take care of people with HIV/AIDS?" Dr. Elder asks. "When I treated my first AIDS patient in January of 1983, I was a very Victorian, naïve young man with lots of prejudices. I didn't know any gay people or injection drug users, and I knew I wouldn't like them if I saw them."

As predicted, Dr. Elder didn't like his first AIDS patient. "He didn't particularly like me, either," he recalls. "He did everything he could to embarrass me. But the good Lord got a hold of me. I met a young fellow in June of 1983 with AIDS—let's call him Robert—whom I couldn't help liking."

Robert had AIDS. He came from a family of 10 kids and all 10 were injection drug users. Robert and four of his siblings were also homosexuals. One had already died of AIDS, and Robert suspected that another brother had the deadly disease as well.

"Each of the children had been systematically physically,



emotionally, and sexually abused by the father," Dr. Elder discloses. "I realized there was no rational reason that Robert had AIDS and I didn't. It occurred to me that I had received a grace he hadn't, and that wasn't fair."

A month later, Dr. Elder woke up at 1:30 in the morning wrestling with a tough question: "If Jesus Christ was an infectious diseases physician at Loma Linda today, what would He do? The answer was obvious to me: He would take care of people with HIV/AIDS."

That insight revolutionized Dr. Elder's life and practice. At the time, he was working at the Jerry L. Pettis Memorial V.A. Medical Center and chairing the infectious diseases committee at LLUMC. As he prepared to visit one of his patients at the V.A. hospital one afternoon, a nurse approached him and informed him that he needed to suit up.

"She was wearing a mask, hat, gloves, booties, gown—the whole thing. I was going in with my usual white coat and ordinary attire. Since the patient had AIDS, the nurse tried to make me suit up. She threatened me with, 'I'm going to tell Dr. Elder about you!'" Elder, of course, was amused, but undeterred.

With the support of Diane Eldridge, RN, his clinical nurse, Dr. Elder transformed his practice into a friendly place for people with AIDS. "I attracted a large number of patients—mostly drug users and gay men from the Inland Empire, Coachella Valley, and Las Vegas." Since there was no treatment for the disease at that time, Dr. Elder managed their pain and treated the associated medical complications. But he also sought to alleviate the guilt and shame many patients were expressing.

"When patients first find out they have HIV, this is major crisis time," he shares. "I ask where they're getting the strength to cope. Probably 60 percent of them say they get it from God. Ironically, many of them didn't even have a relationship with God before that."

Dr. Elder finds that Christian patients cope with the disease rather well, but the others are often very angry. "Some of my patients become Christians, and that makes a big difference in how they deal with the disease."

Patients seldom object when Dr. Elder asks permission to talk about spirituality. "When I finish the history and physical, I

ask, 'How does this work for you? Do you talk to God?' Then I ask if it would be O.K. for me to bring God up from time to time. I also ask if it would be helpful if I prayed with them before I leave. If they hesitate in the slightest, I say, 'That's O.K.; I don't want to push that.'

Dr. Elder identifies three spiritual issues associated with HIV/AIDS: guilt and shame, worthlessness, and hopelessness with a sense of meaninglessness. He says the love and forgiveness of Christ are perfect antidotes for all three.

"One of my patients took a long time to resolve the issue of worthlessness," Dr. Elder remembers. "He had been the controller of a large corporation, but when he contracted HIV/AIDS, he was reduced to collecting aluminum cans to survive. Encased in guilt and shame, and unemployed, he felt that he no longer mattered. I am worth less than worthless!" he said. But after three and a half years, it sank in that he was precious to God."

The man had been raised a Lutheran, so he went back to the Lutheran Church and shared his story. "The church embraced him," Dr. Elder shares. "They said they were glad he was there, and they loved him."

Before meeting Dr. Elder, one of his patients was suicidally despondent. He was actively searching for a place to slash his wrists when a volunteer from Victory Outreach approached him and said, "You need Jesus." The statement offered hope, and he accepted the invitation to receive Christ as Lord. As a result, Jesus completely turned the man's life around. Today, he works as a counselor in leading other people to God.

"About a third of my patients become Christians," Dr. Elder informs. "I use a Campus Crusade for Christ pamphlet titled *Would You Like to Know God Personally?* with my patients. It includes a prayer of surrender to Christ."

Another patient had been a missionary when he contracted HIV. "He was very anxious," Dr. Elder recalls, "because missionaries aren't supposed to have sex with prostitutes—yet that's what he had done. When I asked the man if God had forgiven him, he replied, 'I don't know!'" Dr. Elder assured him that the text of 1 John 1:9—"If we confess our sins, he is faithful and just to forgive us our sins and to cleanse us from all unrighteousness"—applied personally and specifically to him. "The man went home free of guilt," Dr. Elder reports.

A few decades ago, the perception of AIDS was different than today. To raise awareness of the disease, Dr. Elder joined colleagues Richard Hart, MD, DrPH, who is currently the president of Loma Linda University, and Elvin Adams, MD, MPH, a fellow health educator, in developing a conference on HIV/AIDS at Lilongwe, Malawi. "About 250 people attended the conference from

22 countries," Dr. Elder reports. "There were doctors, nurses and health experts from many parts of the world." The conference spawned 20 to 25 similar conferences that sprang up across Africa in its wake. "One of the problems in the early days," he notes, "was the perception among Caucasians that AIDS was a gay disease, and among African-Americans that it was a white gay disease."

The outlook is much better for AIDS patients today than it was when Dr. Elder met Robert in the 1980s. "In the beginning, there were no drugs or any effective treatments," he recalls. "Then we got AZT. It symbolized hope. It was the only drug we had back in '87, but it wasn't very good. By '92, we added three more drugs that were a little better." The breakthrough came in 1996 with highly active anti-retroviral therapy.

"A new era had dawned," Dr. Elder notes. "We now had an effective therapy, but the poor patient was looking at 25 to 30 pills per day and some of them were big enough to gag a horse! Some of them had to be taken on an empty stomach and some of them had to be taken with food. Fundamentally, we dictated the patient's total day."

One of the biggest problems now is making sure some patients take all their pills on time every day. "Many of these people used to live chaotic lives," he notes. "Now we're telling them to live highly disciplined lives." Some of Dr. Elder's patients become very motivated however, once they realize that God loves them and cares for them. "As this becomes increasingly clear, patients value themselves more and more, and take increasingly better care of their bodies. They begin to feel better and realize even more strongly that God loves them; they are truly on a circular staircase upward at that point. They have moved from death to life."

As he reviews the last three decades of his life and career, Dr. Elder is very glad that God used Robert to direct his life and career toward helping people with AIDS. That might be an understatement. As he recently said after a counseling session in which one of his patients came to know Christ, "Sometimes I go home so excited that I could fly and carry the car!" **SCOPE**



## Snakes alive!

Snake wrangling in the name of science—and adventure!

It's 10:15 on a Saturday night in August. Ken Solanky, Carl Person, and I are cruising the Mojave Desert to collect sidewinders for Carl's doctoral studies at Loma Linda University. The air is warm, the sky is dark, and we're excited.

Most people consider Kenny to be a normal person. The 2005 graduate of the LLU School of Public Health works as a business intelligence analyst in Los Angeles. He loves to play guitar, has

a great sense of humor, and maintains a healthy fear of snakes. But he's also an adventurer, or he'd be elsewhere tonight.

Carl might not be normal. He caught an eastern diamond-back rattlesnake at age 12—barehanded, no less. As a professional herpetologist, he's been bitten six times. He admits that alcohol was involved, but says he hasn't touched a drop since becoming a Seventh-day Adventist years ago. Kenny and I are glad—Carl's driving!

I hope to catch my first rattlesnake tonight. I assure my wife, mother, daughter, sister, and Aunt Helen that I wouldn't be doing this if I hadn't met LLU's two snake doctors, Sean Bush, MD, and Bill Hayes, PhD. The ladies suspect I'm crazy.

To adults, Dr. Bush may be an emergency care physician at Loma Linda University Medical Center, but kids know better. He's a boy who loves snakes, only taller. When he was 5, he received a venomous snake as a present from his grandfather. The hognose isn't a dangerous serpent, but it injected a lifelong passion for venomous creatures into the boy and inspired him to devote his career to treating people bitten by snakes, spiders, and scorpions.

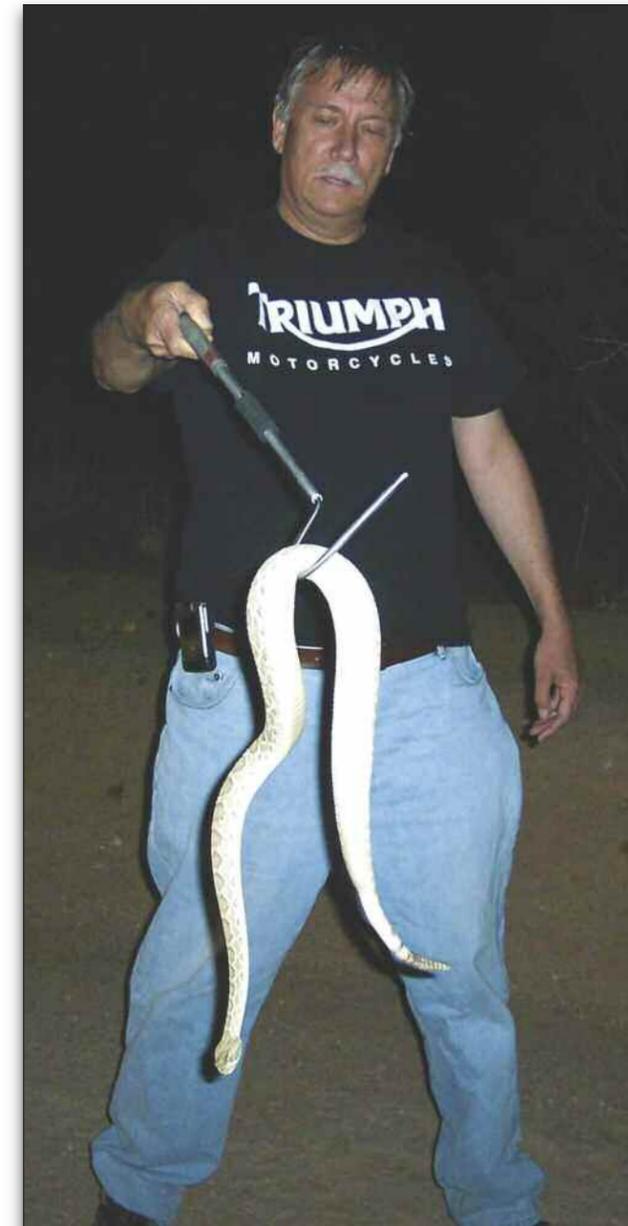
Those people owe their survival to his grandfather's gift of a hognose snake.

The denizens of Bill Hayes' laboratory really love him. Why else would they wag their tails like that when he walks by? One of them—a feisty red diamond rattlesnake (*Crotalus ruber*)—lunges at Dr. Hayes with fang-baring machismo. Dr. Hayes, a professor of biology in the department of earth and biological sciences at LLU, deftly averts a painful bite, then captures the animal on a snake stick.

As the snake settles into dangling repose on the end of the instrument, he turns the full force of that wicked-looking death stare directly on you. A full 15 inches of air separates you from the deadly fangs. Dr. Hayes says you're not in any danger, but if you don't mind my asking, how's your comfort level right now?

Rupert, the friendly cobra, flares into an intimidating hooded posture and hisses menacingly. The pet of herpetologist Samantha Ofelia Willis, Rupert—a Pakistani black cobra (*Naja*

**Author James Ponder catches his first rattlesnake, a Mojave green, while on a snake wrangling adventure with Loma Linda University researcher Carl Person and friend Ken Solanky. ◀**



naja karachiensis)—likes to eat, sleep, and lurk in dark places. He doesn't like having his picture taken. Every time the camera flashes, Rupert hits the glass with a loud thud and hiss. He repeats the gesture three more times to make sure we understand the message. We do—loud and clear!

Dr. Bush recently spent six months in Australia. While he didn't get to do as much snake wrangling as he might have liked—"wouldn't have been fair to the family," he explains—he formed a conclusion that contradicts the late Steve Irwin's contention that Australia has the deadliest snakes in the world.

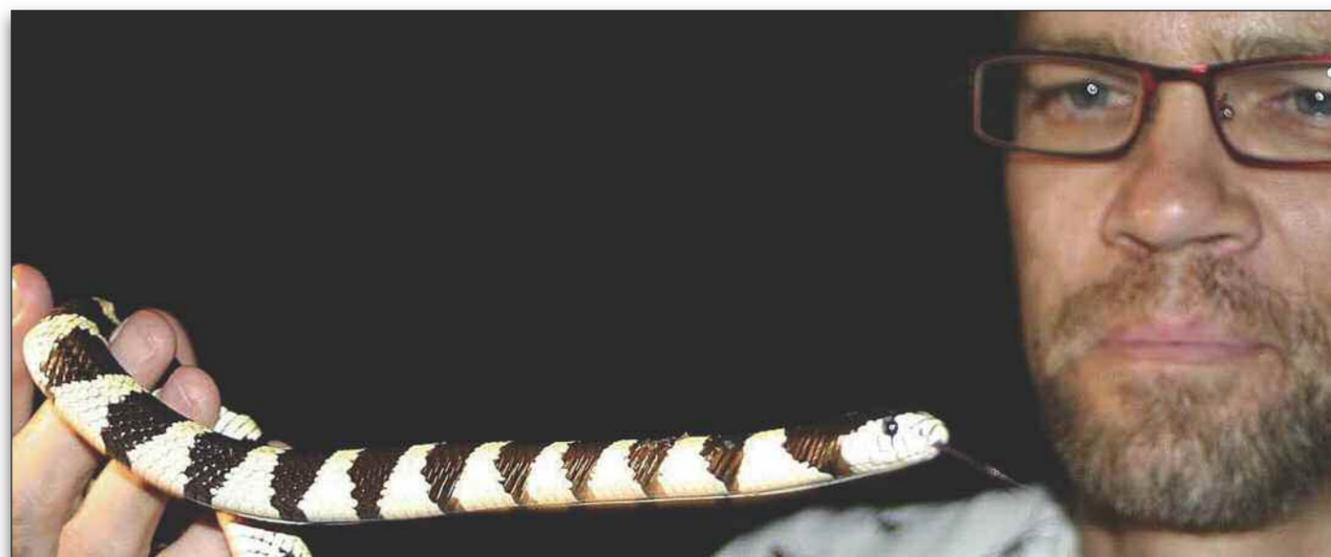
"Steve was a very good man!" Dr. Bush notes. "I met him at the Australia Zoo, and I grieved when he died. But I'm not sure the deadliest snakes live in Australia." Dr. Bush explains that while Australian snakes have the highest concentrations of venom of any snakes in the world, there aren't many humans in the Australian outback, so humans and snakes don't interact a lot there.

"We get more snakebites here," he says. "We treated five snakebite victims in the Medical Center emergency department on a recent Monday. That's more than I saw in six months in Australia. More people die from snakebite here."

Surprisingly, Dr. Bush says driving is deadlier than snake hunting. "Fewer than six people die from snakebites in the United States every year," he says. By contrast, more than 42,000 people died in vehicle accidents in 2006 alone.

Even so, he doesn't advise playing with snakes. "Snakebites

**Sean Bush, MD, gets a tongue flicking from a California kingsnake (*Lampropeltis getulus californiae*) on a desert road near Cabazon. The snake flicks its tongue to gather sensory information. ▼**



occur," Dr. Bush says, "when people—usually young males trying to prove their bravado—try to catch snakes, kill them, or give them a bad time." Other dangerous activities include walking at dusk, hiking in rocks or brush, riding bikes, and gardening at dusk when snakes are active and light is low. If you can't see where you step, wear leggings to protect against snakes in the grass.

What do you do if a snake bites? Call 911. Don't cut an "x" over the wound to suck the venom out. Just call 911, even if you have to walk to the phone. Dr. Bush says it's the safest way to get help. And remove any rings you wear before you start to swell.

Why would a university whose motto is "to make man whole" maintain an active venomology program? Because the more we know about dangerous creatures, the better we can equip humans to survive unwanted encounters.

That's the official explanation. The real reason is these guys just love snakes!

Dr. Hayes certainly does. *The Biology of Rattlesnakes*, a textbook he co-edited with Sean P. Bush, Kent R. Beaman, and Michael Cardwell, will educate future generations of students once it rolls off the Loma Linda University Press in a month or two. Meanwhile, the current generation of venomology students conducts a bevy of exciting studies in his lab.

Gerad Fox hopes to determine whether the stings delivered by male desert hairy leg scorpions (*Hadrurus arizonensis*) to females during the mating ritual contain venom or not. Unfortunately, he's having quite a time getting them to mate in captivity.

Carl Person is examining sidewinders and Pacific rattlesnakes to see if differences in related snakes from various locations reflect local variants in a trend of variation across the animal's range instead of subspecific factors. If his hypothesis holds, his study



**Although generally good-natured, Rupert the Friendly Cobra (his official name), has been known to throw a "hissy fit" when annoyed. Because of the danger involved in interacting with venomous snakes, they should only be handled by trained professionals. ▲**

will up end as the widely held belief in subspecies.

Aaron "Rattler" Corbit is evaluating human interactions with red diamond rattlesnakes in the Inland Empire. If you encounter a red diamond, or any kind of rattlesnake, don't try to catch it yourself, just call Aaron at (909) 800-1601. He's not the only one with a nickname; Dr. Hayes is sometimes known as "Fang."

The three of us have been cruising for two hours when Carl suggests we call it a night. I say we stay out 30 more minutes. Something tells me tonight's the night.

Something was right! Just up ahead, a three-foot male Mojave green (*Crotalus scutulatus scutulatus*) scrambles up the shoulder of the road. Carl slams on the brakes and I bolt from the car in nanoseconds. Mr. Mojave strikes at lightning speed, but I avert disaster with the snake stick. In one of the most electrifying moments



**Bill Hayes, PhD, and friend—a Southwestern speckled rattlesnake (*Crotalus mitchelli pyrrhus*)—smile for the camera in the venom lab. Although often maligned, rattlesnakes provide a service of enormous significance to humans: by keeping rodent populations under control in the wild, they prevent outbreaks of the hantavirus and similar plagues. ▲**

of my life, I hoist the animal triumphantly into the air.

As Kenny and Carl search for the camera, the angry serpent thrashes off the hook. He strikes furiously at me, but the combined length of my arm and the stick exceed his reach. I slide the stick under his belly and raise him up again.

Once more, the snake gyrates off the hook, this time landing way too close to my foot. I jump back like a scared rabbit before swooping him up for one last hurrah. Three camera flashes later, I return the agitated viper to his habitat.

Kenny slaps me a hearty high five. Carl says my snake is the feistiest, most aggressive rattler he's seen in a long time. "Not too shabby," he insists. "You caught a Mojave green for your very first snake!"

I'm so pumped, I call just about everybody I know. Even though most of my friends aren't ready to try snake-wrangling themselves, they're excited for me.

Not the women in my life, however. They say it only confirms their suspicion. **SCOPE**

# Guests with a purpose

Public health students learn through home stays in tiny Peruvian villages

In the remote Peruvian village of Chijnaya, sheep and cattle frequent the dusty streets more often than vehicles. But this past summer, the tiny town saw some unusual traffic: a van arriving with several School of Public Health students, all ready to learn about public health in an international setting.

Chijnaya is one of three villages in the Peruvian highlands where global health students took their classroom on the road. This annual trip builds up a partnership that benefits both the local people and the students, who are there to learn by serving.

Eleven students, three team leaders, and Peruvian support staff were divided among the villages of Lluco, Ccotos, and Chijnaya—remote locales where the indigenous population often wears traditional clothing and primarily speaks the Quechua language. LLU is working to build up relationships with these communities; this was the second summer going to Ccotos and Chijnaya.

The trip is a required class for students earning a master's of public health (MPH) in global health. The three-week summer course, called integrated community development, ties together principles the students have learned during the previous school year.

There are two locations to choose from—Peru or the Philippines. In each, students enhance their classroom knowledge with activities such as observing the operations of agencies like the World Health Organization, CARE, USAID, and Adventist Development and Relief Agency International.

They also engage in service projects. In the Philippines this year, for example, students helped implement a patient data management system at a health clinic in the municipality of Mendez. Other students worked on projects involving smoking policy, community gardens, and nutrition programs.

The Peru trip combines its service projects with home stays in small villages. For several days, the students are immersed in village life, learning what it's like to live on a few dollars per day—or less. They stay with families in their small adobe homes, partake of the local diet, and observe a slice of rural indigenous life that few Americans ever see.

The service projects in the villages included helping build an

eco-latrine, assisting in the construction of a cattle shelter, offering dental hygiene education, fluoridating children's teeth, and conducting community surveys and assessments. The students and professors designed these tasks with the input of the local communities as well as nonprofit organizations that work with these villages.

The eco-latrine, for instance, is a project requested by the local women's group in Ccotos. Prior to its construction, there was no toilet at the village's sole health clinic.

Now there is a facility that will not attract flies the way the town's pit latrines do. It also creates a safe, effective fertilizer for local crops. Before leaving, the team trained village women on properly using and maintaining the latrine so that its benefits can be realized.

Cattle shelters are a concept that people in the region are increasingly eager to have. The students in Lluco were able to help a family with four children begin construction of their cattle shelter—one of the first few in the village. In it, the cattle will get sick less often and be protected from the frigid climate at 12,000 feet above sea level. That means increased milk production of 30 to 40 percent, and the resulting improvement in income helps families with food, education, and health costs.

But beyond the labor that they do, students and faculty say that the relationships formed with the local people are a big part of the trip's significance—both for themselves and the Peruvians.

"That's definitely God working both in our lives and their lives to be able to have such a special exchange," says student Nikki Grey, who went to Lluco.

Dana Johnson agrees, noting that the team members were taken in as family. He believes that simply participating in the daily lives of Lluco's people made the biggest impact on them.

"As the first-ever outsiders to stay in the town, I think the best thing we did was to simply connect on a human-to-human level," he says.

Adjunct professor of global health Ann Stromberg, PhD, MPH, led the team in Chijnaya.

"The families love to share their lives, their stories, their wisdom, their concerns, their ambitions," she says.

When working in international development, it is key to avoid setting up a paternalistic dynamic of giver and receiver, haves

**Melissa Preciado (left) and Cynthia Ortega work on the eco-latrine for the health clinic in Ccotos. ◀**





Schoolchildren from Chijnaya practice using their new toothbrushes after a lesson in oral hygiene. ▲

and have-nots, notes assistant professor of global health Juan Carlos Belliard, PhD, MPH.

“One of the best things we can do when we go to a community is make sure that they understand we’re all students and we’re there to learn from them,” Dr. Belliard says.

This message was brought home to students including Jamie Goyette, who discovered that she had more to learn from the community members, and how they have adapted to their environment, than she could teach them.

And she says there were many things the people of Lluco wanted to demonstrate about their day-to-day lifestyle and achievements: organic quinoa farming practices, cheese production from local milk, and traditional artisan craft-making, to name some.

“They were just so proud of the things that they’d done on their own. Even the Seventh-day Adventist church was largely built in three months by three members of the community,” Ms. Goyette says.

While learning what they could, the students also reached out to educate where they were able to. This included impromptu moments, such as when the mothers group in Ccotos asked whether vaccinations for their children are wise.

“We had the opportunity to share why they were good, using the examples of specific diseases that are rarely seen in the United States because of routine vaccination,” says student Pat Oddie.

The students were also able to demonstrate through their example practices such as routine hand-washing and the use of res-

piratory masks during tasks that create irritants. Some people began to pick up on the hand-washing and expressed a desire to begin using masks, students report.

But the big educational drive in each village was oral health. Between the three villages, the students reached about 200 children and numerous adults with the message of how to properly care for one’s teeth. They also distributed toothbrushes, and in the two villages where dental needs are greater, they fluoridated children’s teeth, helping to prevent tooth decay.

In Chijnaya, where the people have little access to dental services, the team used a three-part strategy for dental education. First, they hosted a community theater night during which local individuals created and performed skits demonstrating principles of maintaining a healthy mouth. At another gathering, the team discussed how food choices affect oral health. Finally, on the last day in Chijnaya, the students went into the local primary school, where they used skits, puppet shows, and posters to educate the children on caring for their teeth. They also fluoridated 98 children’s teeth; the water supply in Chijnaya is not fluoridated.

Tina Pruna worked with a group of fourth-through-sixth graders. When the children stepped outside to practice using their new toothbrushes and toothpaste, she observed that several of the kids’ gums bled because of gingivitis and lack of routine care. During the fluoridation, she saw more damage.

“I don’t think I fluoridated a single child that didn’t have a cavity,” she observed. “Lots of cavities, lots of rotted teeth—some were

basically skeletons of teeth and remnants of what used to be there.”

But there is some hope for these children’s oral health. The team’s goal is for children to continue receiving fluoride treatments every three to four months at the local health clinic, which has been stocked with enough fluoride to last through March 2010, thanks to a donation from the Peruvian American Dental Association secured by student Silvia Trigos. The toothbrushes that students distributed to children and adults in Chijnaya were also donated.

The student teams in all three villages worked to fund raise for their projects. Community members and nongovernment organizations also contributed, whether through labor, materials, or money.

Ms. Pruna says the experience in Peru was the highlight of the MPH program thus far. “There were several times during our trip that a little light bulb went off in my head when I would see something that we had previously learned in the classroom,” she says.

Mr. Johnson says the trip helped bring together the community development work they spent the prior academic year doing.

“It really opens your eyes to the reality of life in the field and connects you to a greater sense of humanity,” he says.

The professors observe the students learning and changing as they plan for and experience the trip.

“I see them grow in initiative, creativity, teamwork, and leadership. I see them gain new insights into their own strengths and into areas in which they can grow,” says Dr. Stromberg.

Dr. Belliard says the trip helps students understand what kind of work they are best cut out to do. For some students, the trip gave them clear direction about their futures. That was the case for Ms. Trigos.

“This course provided me with a unique opportunity to meet people, learn more about the varying degrees of Peruvian culture, and study the complexity of health systems in a developing country,” says Ms. Trigos, who lived in Peru until she was 5 but has usually since visited the country’s tourist areas. “Before traveling to Peru, I knew I wanted to pursue a career in global health, but this trip only helped to solidify that goal.” SCOPE

(From left) Nikki Grey, Dana Johnson, Rebecca Medina, and Jamie Goyette prepare earth for use in the construction of a cobertizo, or cattle shelter. ▼





## Mission to Haiti

The School of Medicine class of 2010 adopts a hospital

By Bryan Hill, third-year medical student

It is a truth universally acknowledged that a poor student in possession of a good medical education must be in want of a free meal. However, it isn't frequent that the sponsors of the food are fellow classmates. So when a couple of my classmates provided lunch for the entire class while they presented their grand, all-inclusive mystery project, I was curious. Talk is talk, but food is a legitimate reason to listen to someone prattle on for a good half hour. And so I sat there, becoming increasingly sated, as they presented their idea: that we, the Loma Linda University School of Medicine class of 2010, develop an ongoing relationship with the Hopital Adventiste d'Haiti, and for starters, raise \$100,000.

I was skeptical at first. There seemed to be no real plan. It seemed to be a giant fundraising scheme for ... poor people, maybe? Children? HIV/AIDS orphans? No one seemed to really know. The cynic in me was about 99.5 percent sure that this hair-brained notion to raise a hundred grand for some little clinic would get ap-

proximately two weeks of legitimate attention before everyone, including the ringleaders, would completely forget about this hospital, the entire nation of Haiti, and poverty in general. But then, that never happened. My classmates' enthusiasm remained—winning me over in the process—and the scope of the project continued to grow, and the details of the operation became increasingly defined. So things came together, and in the middle of June, during the last two-week gasp of summer vacation we'd ever have in medical school, 10 of the members of our class flew to Haiti to visit the hospital and gather information.

Our approach to this task is not unlike the process we go through when we see a new patient. First things first: take a history and get a physical exam. In the patient-care setting, this means talking to the patient (and/or accompanying family members) and examining the patient's body. In the hospital-care setting, this means talking to the administrators, housekeeping, the lab, the pharmacy, and the different departments, as well as examining the facilities.

Discerning the capacities and deficiencies of a hospital as a third-year medical student is surprisingly similar to assessing a heart murmur as a third-year medical student: you do your best, and then, because you aren't quite sure of yourself yet, you ask the expert to check. Therefore, accompanying my classmates were a surgeon, an ophthalmologist, an anesthesiologist, a physician assistant, and the dean of our medical school. Furthermore, the president of our University, who is a longtime champion of medical mission projects both locally and internationally, took the time to attend a board meeting.

While in Haiti, the group ran an ophthalmology clinic, did some surgery, and helped with construction, painting, and inventory projects. They got to know some of the university students and spent time visiting, singing, and praying with patients.

However, the primary objective of the trip was to do an assessment. We talked to many of the administrators and employees, and we toured the establishment. The needs are numerous. The hospital needs a reliable source of power. Currently, the hospital runs off of gas-powered generators because it's unable to reach an agreement with the government electric company for reliable and inexpensive energy. The individual departments have needs as well. To name a few: the operating rooms need sterilizing equipment, the emergency room needs an ultrasound and a crash cart, the nursery needs an incubator, the lab needs to increase its testing capabilities, housekeeping needs linens and a way to keep them clean, and the compound needs to get rid of the standing water that serves as a breeding ground for mosquitoes.

The immediate future of our project involves a couple of different areas. Some of us will spend time applying for grants and raising funds for these aforementioned pressing needs. We're also looking to set up an endowment so that the hospital can afford to care for people who can't afford to pay. Furthermore, we hope to make this hospital a potential elective site for fourth-year medical student rotations, as well as organize trips for our classmates and other supporters both during school and in the years to come. The ultimate goal is to help the hospital provide better care and reach a point where it can be self-sustaining while providing a high level of care, as well as to provide our class with something to rally around even once we've graduated from medical school.

This is the story of a group of committed individuals. In our society, it seems it's often the individual who is lauded for his or her single Herculean efforts, and while there have been remarkable individual contributions, the overriding theme of this whole endeavor is the incredible collective power of many people with the same vision. For that reason, we will continue working closely with other groups (including the Loma Linda University Schools of Public Health, Dentistry, and Pharmacy as well as our local Adventist

academies, youth groups, and churches) to incorporate their areas of passion and expertise. There's only so much we can do on our own, but with the help of others, we have no idea where the limit might be.

The support has already been generous. The assessment trip was sponsored in part by friends, family, local churches, the dean's office via the National Auxiliary Board, and the Alumni Association. The medical supplies taken on the trip came from a retired physician and from Whittemore Enterprises, Inc. in Rancho Cucamonga, California. The project has also received monies and commitments for more than \$30,000.

You too can be a part of this, and there are many ways to help. Visit our website at <www.luhaitiprject.org> and stay informed. Join us in sponsoring a particular need, or help rally your church or worship group to take on a more involved project. Send us letters of encouragement, or simply keep us in your prayers. We invite you to participate with us at the Hopital Adventiste d'Haiti, but ultimately our purpose is to share the love of God with everyone. Our hope is that you choose to involve yourself in that mission in some way.

*Soli Deo gloria.*



**Jessica Claridge, a third-year medical student, takes a man's blood pressure as part of his complete ophthalmology exam. Ms. Claridge was the key organizer of this trip, working with Students for International Mission Service (SIMS). ▲**



**Raymond Lloyd Larsen, MD, (class of '73A), ophthalmologist and father of Brian Larsen from the class of 2010, is the subject of a little Haitian patient's curiosity. ▲**

## Blog: September 12, 2008

By Krystal Zupan, third-year medical student

**S**leepy from the red-eye flight, and sticky from Haiti's humidity, we sit in the airport and wait for our adventure to begin. We are a group of young (nearly) professionals, still in school, visiting a country where the average education level is between second and third grade. We come from a country where obesity has been called an "epidemic" and now find ourselves in an area labeled by the UN as the third hungriest country in the world. As students, many of us consider ourselves poor; visiting a country where the average yearly income is between \$200–400, we find we are abundantly rich. There are many differences between our group and the people we find ourselves among, but for two weeks we will have at least one thing in common—the Hopital Adventiste d'Haiti in Port-au-Prince.

Our days begin with morning worship—us wearing our scrubs and lab coats, the nurses and other staff in their fresh pressed white uniforms, and a few patients and families from the hospital. After this, we grab breakfast and head off to our individual assignments. Our daily tasks range from doing public health surveys, painting, picking up trash, taking inventory, assessing the needs of each individual department of the hospital, assisting in the ophthalmology clinic, or taking vitals for the clinic doctors.

In the downtime that isn't specifically scheduled, we keep ourselves entertained by playing with kids, throwing Frisbee with

whoever can be found down in the parking lot, visiting patients, or just hanging out trying to learn Creole with the Haitians. Occasionally, if we are lucky, a surgery occurs and then the small operating room is crammed with eager students.

As the hot muggy days melt into somewhat cooler evenings with refreshing breezes, the last of us straggle back upstairs from ophthalmology clinic for a dinner with tropical fruit. Soon after, we have our own worship and debriefing of the day and go to bed, praying the water and electricity will stay on all night to keep us slightly more comfortable and the mosquitoes slightly less excited about their new-found prey.

On the trip we found typical mission trip hard work, camaraderie, warm sunshine, and excellent food. We also found dedicated doctors striving to help a hospital in need of more paying patients, a functioning autoclave, a better-equipped emergency room, and a consistent, cost-effective source of electricity.

It is our hope that by assisting, Hospital Adventiste d'Haiti will be able to offer services to those who could not otherwise afford the medical care they desperately need. A group of 25 of us began this huge project by discovering the needs and beginning to build relationships. But to really make a difference we need people from all walks of life with a variety of skills and interests to get involved. We are at the beginning of the journey down a long road and we would love to have you join us.

## Blog: How God can use the least savvy of travelers

By Brian Hill, third-year medical student

This past summer, I had the privilege of traveling with some classmates to Port-au-Prince, Haiti. While there, I spent 10 days serving as a construction worker, painter, garbageman, groundskeeper, and medical student. What I enjoyed most about Haiti was the opportunity to experience its beautiful Creole language, customs, and culture.

I do have experience in one foreign language, Spanish, but only to the capacity of ordering food, getting directions, or buying things. It takes a little time for me to work up a good sentence, execute its proper construction, and then carefully listen to the response. In the end, however, I can always manage to get my enchiladas without chicken. Not so in Haiti. Creole and I never made proper acquaintances.

So there I was in the airport at Port-au-Prince with no way to ask for food, directions, or a restroom. I was completely dependent on the three people in our group who spoke a combination of French and Creole, as well as the stern-looking woman that worked in foreign relations and wore rather threateningly pointy shoes.

Time passed at the airport and I became desperate for a bathroom. I consulted with the French experts and practiced the all-im-

portant phrase. "Oo-ay le twa—let?" I stammered to a complete stranger. I was directed around the corner and sure enough, there was the door with the universal men's room sign. It had a round head, a body with his hands on his sides, and most importantly, no dress. I had found the twalet. One word down, thousands more to go.

Navigating the language barrier was quite daunting, but I found the culture shock in regards to wardrobe quite amusing. I am now of the opinion that Americans could use a little fashion sense. To my astonishment, we were constantly out-dressed at the airport, the beach, and even in the streets. Around town, I wore jeans and t-shirts because I was told shorts may be offensive.

Unfortunately, my casual attire could never match the Haitian's slacks, ironed collared shirts, ties, and black leather shoes that they wore to work every day in sweltering heat and suffocating humidity. It did not matter if you were the accountant, or the deliveryman. One must look his best at all times. Overall, I learned that Haitians are classy people and that next time, I would be sure to bring some extra ties.

As the days went by, I began to realize that our imperfect communication didn't matter. It didn't matter that we were out of our comfort zone. God doesn't worry about how we speak, or if we look out of place. He is willing to use us the way we are, and all we have to do is take action. Translators helped us take medical histories and instruct patients on how to take their medications. And my jeans and t-shirts? Well, they were excellent painting and construction apparel.

Every day I added new words to my vocabulary so that by day five, "good morning" came out as bonjou and "good evening" was bonswa. I realized that most things in French and Creole sounded much better than in English. "Thanks for the chow" sweetly rolled off my tongue as mesi boukou, manje a tre byen. Inquiring after someone's name was as beautiful as Ki gen ou rele?

Just as soon as I had figured out how to make it through "How Great Thou Art" in perfect French, it was time to head back home. I dressed a little nicer this time, got stared at a little less, and promptly found the twalet at the airport.

Now that I'm home, I often wish I could wake up on the east wing of the hospital overlooking the mountainside. I wish I could rinse off in the cool water, put on my scrubs, and go to work. There was something so simple about that when you compare it to a life filled with traffic, computers, iPods, and television. And while I think I'm going to stick with the English language, I think I'll keep the word twalet handy next time I'm in an upscale restaurant. **SCOPE**



**Medical students (from left) Alex Coutsoumpos, David Puder, and Dan Westerdahl clear out an area to make into another patient room. ▲**

# An evidence-based education

School of Dentistry students and professors emphasize research

Dental student Ryan Falke responds with a wry smile when he hears the words “evidence-based education.” “Oh,” he says, “the current buzz words.”

Notwithstanding his smile, Ryan’s response suggests that an emphasis on evidence-based education (EBE) at Loma Linda University’s School of Dentistry is getting through. To avoid a disposition to prefer one’s clinical experience over evidence-based practices, the School of Dentistry monitors its clinical and classroom instruction to identify the components that encourage EBE.

A 2008 mid-year questionnaire exploring the presence of EBE in the School’s courses went to faculty in the predoctoral and graduate programs in dentistry. Responses (see tables 1 and 2) came from instructors in 86 predoctoral courses and 68 graduate study program courses. Additionally, four representatives from the dental class of 2009 submitted to interviews regarding their exposure to EBE.

Asked to recall times when he has been alerted to the importance of EBE, dental student Vince Drouin cited “every lecture in Dr. Jay Kim’s statistics class. Dr. Kim,” he said, “spent a lot of time encouraging us to read widely in professional literature. Dr. Kim contrasted practitioners who do and don’t pursue research literature.” Currently, he notes that when consulted, Bryan Novy, DDS, “always references articles on materials.” And when he poses ques-



Dental student Vince Drouin knows his question to Robert Handysides, DDS, MSD, associate professor of endodontics, will include evidence-based citations. ▲

tions to faculty who are specialists (Robert Handysides, DDS, MS, in endodontics, for example), he knows to expect specific citations.

Day one, 8:00 a.m., entering students learn they are to develop the skills necessary for assessing research and determining its validity and applicability to a clinical situation. They hear their biochemistry professor, Danilo Boskovic, PhD, announce, “You can hardly wait to put out your shingle. But you must understand that if two molecules don’t meet, nothing happens. You must have some appreciation of what is going on at the molecular level. Otherwise, it’s back to the barber shop. Dentistry used to be about pulling teeth or getting dentures. In the future, we’ll be asking, ‘What can we do if we actually lose a tooth? How can we start a new tooth growing in that spot?’ That requires a lot of research and switching from technical skill to understanding what is going on so that dentistry preserves itself as a true discipline. This course gives the language for all other basic courses.” Thus the professor alerts the student to the world of dental inquiry.

Their assignment: Browse in journals focused on basic dentistry (some options given). Examine any three individual issues and list the number of research articles that present studies at the molecular level.

A second assignment sends students to the literature again: Browse in journals that involve the utilization of biochemistry in solving a research problem related to dentistry. List pertinent articles from five journals. Select one paper for which you identify aspects of biochemistry that are helpful in understanding the paper. Summarize the main point of the paper, focusing on the biochemical aspects. Then describe how this paper relates to your future work as a dentist, researcher, and/or scientist. This introductory exploration of dental literature challenges the student to employ critical thinking skills in identifying dental practices that have evidence-based support.

Studying management of dental caries (first year, spring quarter), students learn that the course is rooted in “an evidence-based foundation for the understanding and management of dental caries by dentists.” There is the acknowledgment that “our understanding of the dental caries is still not complete and there exists a considerable amount of diversity of opinion; not all literature and speakers will share the same conclusions. Part of the goal

of this course is to expose students to these differing opinions and whenever possible provide harmonizing insights.”

Three years later, Ryan Falke says, “As I do work in the clinic, I remember stuff from the foundational courses. In the clinic, it comes together.”

Students cite both the reputation of the School’s excellence and its faculty’s participation in cutting-edge research as contributing to their confidence in the faculty and their respect for EBE. As Vince Drouin comments, “The teachers in specialties are doing research. They are saying ‘According to . . .’ repeatedly.” He adds, “I feel the teachers base all their beliefs and ideas on research. All the knowledge comes from research, although it’s not always articulated as such in the clinic.”

Dental student Sue Jean Park notes that many of her professors are currently producing significant research on their own. They have submitted to the rigors of the profession’s research protocols. “Take implant for example,” she says, noting “massive studies” in implant dentistry. She hears her implant professors discussing the application of 3D modeling, computer-guided surgery in the diagnosis, treatment plan, and placement of dental implants—all current research projects.

Rubbing shoulders with faculty engaged in research gives students an enriched learning experience. They are meeting professors whose evidence-based research supports the textbooks, textbook chapters, and journal entries they produce.

This year, the two most prominent evidence-based textbooks in endodontics were published by LLUSD faculty (*Endodontics, Principles and Practice*, edited by Mahmoud Torabinejad, DMD, MSD, PhD, in cooperation with Richard E. Walton, DDS; and *Ingle’s Endodontics*, 6th edition, edited by Leif K. Bakland, DDS, in cooperation with John I. Ingle, DDS, MSD, and J. Craig Baumgartner, DDS, PhD).

Students have been involved in Dr. Torabinejad’s research related to development of mineral trioxide aggregate (MTA), a much-researched material for root end filling and pulp cap material, as well as the dental material MTAD, a root canal disinfectant solution. As an active researcher, Dr. Torabinejad articulates a researcher’s position to his students: “The purpose of research is to find out reality. We may or may not like the results of an investigation. We have to have the courage to accept the results irrespective of our own self-interests. We owe it to the profession and the public to have the answers.”

Graduate students have also participated in the research of Jaime Lozada, DDS, and Joseph Kan, DDS, related to the evaluation of clinical outcomes and description of guidelines for predictable results in the placement of dental implants in the esthetic



Dental students Sue Jean Park and Michael Wall view a DVD prepared by Charles Goodacre, DDS, dean of the School of Dentistry. ▲

zone. Within the last five years, nine scientific articles, some involving clinical research and others involving randomized clinical studies, have been published from the implant dentistry group.

In the Center for Dental Research, Yiming Li, DDS, and Wu Zhang, DDS, are two of the major consultants for students’ research projects. With 350 laboratory projects completed in their laboratory in the past 10 years, these scientists have set a rigorous standard for research. Producers of commercial dental products fund many of the center’s research studies, knowing that the laboratory is committed to stringently designed studies that may or may not recommend their product. That very stringency in turn gives credibility to the center’s studies that establish the efficacy of a product and demonstrates to participating students the importance placed on research pursued with integrity.

In another setting (the clinic), a primary attending, Nathan Dinsbach, DDS, receives credit from Todd Wesslen, DDS, for meeting with his clinic group almost every week to share current literature. “One week it could be materials; another it’s about controlling caries,” says Todd. “He [our professor] correlates this with his own experience and practice.” Todd adds, “When every other thing you do is for the first time, you question a lot of things.” Todd finds his primary a good source for answers. “I think I can also assess studies,” Todd says, “although it’s not yet an efficient process for me.” His professors, according to Todd, typically cite sources of evidence when they present new materials and procedures.

For Ryan Falke, evidence-based education “doesn’t mean cutting edge, advanced, or better than any other. It means it has been checked out. We still need to ask how was the evidence collected? We don’t always ask if it’s good evidence. We ask does it work? If it worked in the study reported, it may work for you. It gives you another idea to try.” He realizes, he adds, there are a million ways to do dentistry. EBE doesn’t really mean “one way.” Vince Drouin describes his own research project, pursued with three classmates and a faculty mentor. His preparation for the study led him to read 20 to 30 articles on the subject, he recalls. And because the study in-

volved human subjects, his team learned the protocol for human subject protection when it submitted its research design to the Institutional Review Board.

Sue Jean Park, Todd Wesslen, and Ryan Falke agree: They “totally” can confront a professor with alternative information. As Sue Jean comments, “My professors welcome discussion about what I bring from my studies. Dentistry isn’t a black and white process.”

So what does the future look like for these fourth-year dental students? “In the future I will be seeing the broader range of care,” Todd says. “I will be comparing my experience. I will be looking at studies and asking, ‘Will this work in my private practice?’ I think it will be easier to do out there.”

Ms. Park is optimistic. “All my friends from last year’s graduating class are avidly pursuing the results of respectable research—for example, they’re watching instructional DVDs during their breaks at Starbucks.” (The School’s ongoing project of developing electronic programs has produced DVDs that contribute unique visual and aural stimuli to students’ learning and alert them to the School’s priorities placed on life-long learning.)

In 2001, Dr. Lozada developed the first electronic implant dentistry CD-based educational program for predoctoral students; more recently Leroy Leggett, DDS, has developed a program for orthodontics, and Dean Charles Goodacre’s recently developed DVDs include Tooth Preparation and Associated Clinical Procedures, Dental Anatomy and Interactive 3-D Tooth Atlas, and Atlas of Human Occlusion and the Temporomandibular Joint—all of them supplied with evidence-based information that is updated yearly. Additionally, more than 60 continuing education courses are offered annually, with heavy emphasis on evidence-based research.

“Dentistry is very visual,” Ms. Park observes. “My boyfriend (just graduated) is even more motivated to study now. His key thing is watching the dentistry DVDs prepared by Dr. Goodacre. And he’s brushing up on pediatrics to hone his skills with children. Graduates feel an urgency to read up, keep up.”

His interaction with post-doctoral students has revealed to Vince Drouin that they read “stacks and stacks,” assigned to them by the professors. He predicts that like other graduates, when he completes dental school studies, he will load up on professional reference books, because he’ll no longer have professors at his side. He’s waiting until graduation so that the books will be updated, although he notes that some disciplines, such as pathology, have a rather stable literature.

The data collected from faculty responding to questionnaires indicates that in all but four courses, the director indicated that some component of EBE is present. Three of these four courses are clinical laboratories where, as one professor noted, the major use of evidence-based content in his department’s clinical courses comes with the application of EBE that has been covered in other courses. And another professor commented after careful response to the questionnaire: EBE “is implemented on a very informal manner. As the faculty work with students on the clinic, they may discuss pertinent facts, but not on a formal basis.”

Tables 1 and 2 provide the questionnaire items and indicate the number who responded positively to each item.

To assess the presence of evidence-based education in the School, we are seeking the following information. Evidence-based education focuses on empirical evidence derived from scientifically based research. In circumstances where research evidence is absent

**Table 1. Course directors’ tabulation of EBE occurring in predoctoral courses (N = 86 courses)**

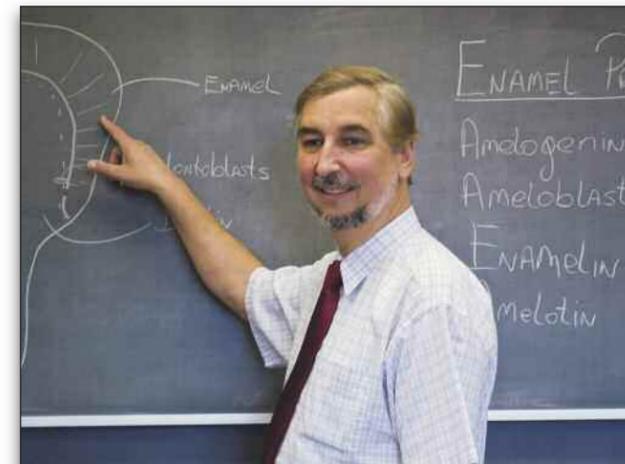
EBE is incidental	Principally in one lecture	Discussed throughout the course	No response	Yes	%
[33]	[1]	[23]	[29]		
a. Have students completing this course been required to use relevant professional journals or texts?				[55]	[63]
b. Have the professional literature references in the course syllabus been updated within the past 24 months?				[52]	[60]
c. Have students engaged in discussions of the relevance and quality of evidence in specific literature?				[34]	[39]
d. Have students had opportunity to identify unconditional claims?				[24]	[28]
e. Have they had opportunity to identify conclusions diverging from evidence?				[39]	[45]
f. Have they had opportunity to identify a mixture of opinions with evidence?				[57]	[66]
g. Have they had opportunity to identify inferior publications or publications with biased agendas?				[16]	[19]
h. Does course content address the role of lifelong learning and self-assessment for maintaining competency?				[70]	[81]
i. Have students received information about what constitutes research misconduct?				[9]	[10]

**Table 2. Program directors’ tabulation of EBE occurring in the “non-research” courses they offer (N = 26)**

EBE is incidental	Principally in one lecture	Discussed throughout the course	No response	Yes	%
[0]	[1]	[20]	[5]		
a. Have students completing this course been required to use relevant professional journals or texts?				[22]	[85]
b. Have the professional literature references in the course syllabus been updated within the past 24 months?				[24]	[92]
c. Have students engaged in discussions of the relevance and quality of evidence in specific literature?				[22]	[85]
d. Have students had opportunity to identify unconditional claims?				[20]	[77]
e. Have they had opportunity to identify conclusions diverging from evidence?				[20]	[77]
f. Have they had opportunity to identify a mixture of opinions with evidence?				[22]	[85]
g. Have they had opportunity to identify inferior publications or publications with biased agendas?				[17]	[65]
h. Does course content address the role of lifelong learning and self-assessment for maintaining competency?				[23]	[88]
i. Have students received information about what constitutes research misconduct?				[10]	[38]

or incomplete, it relies on the best wisdom arising from the experience and opinions of recognized professionals. EBE guides students in exploration and evaluation of professional literature, equipping them to assess new theories and trends in dentistry in the light of scientific knowledge and principles.

The graduate programs at LLUSD incorporate a number of strategies for introducing EBE: (1) regular meetings provide a setting for residents and other graduate students to discuss a variety of contemporary topics including a review of literature, (2) an introduction to research methodology develops an increased awareness of its importance in assessing clinical procedures and patient management, (3) opportunities to present research papers at national and international meetings introduce students to the dental research world, (4) exposure to problem solving incorporates use of the scientific method, and (5) comprehensive treatment planning seminars with students and faculty of various departments convene to discuss complex advanced treatment. A student completing the seminar observed, “I have a wider appreciation for the wide range of ways to arrive at the elimination and correction of oral problems.”



All program directors in the School’s eight graduate study programs responded to the questionnaire regarding their course offerings. Forty-two of the courses offered (representing 198 units) in the eight programs are dedicated to research and/or literature review. An additional 26 courses (totaling 263.5 units) for which reports were submitted have specific evidence-based components. Results tabulated from the graduate studies program directors’ assessment of the 26 “non-research” courses appear in table 2: Program directors’ tabulation of EBE occurring in the “non-research” courses they offer (N = 26).

Students who have been directed to pertinent literature in more than half of their courses have an advantage, though not a guarantee, of becoming lifelong learners. In at least 81 percent of the predoctoral courses covered by this report (and in 88 percent of the graduate courses), students have heard the role of lifelong learning addressed.

Interviews with faculty respondents to the EBE questionnaire suggested that in an academic setting where colleagues’ references to evidence-based information have achieved an agreed-upon shorthand, they may at times be transmitting evidence-based information in the classroom where they fail to identify the source and degree of certainty supporting their positions. The simple questionnaire administered in this study stimulated attention to the manner of conveying such information. **SCOPE**

**Danielo Boskovic, PhD, assistant professor of biochemistry, challenges entering dental students, “You must have some appreciation of what is going on at the molecular level. Otherwise it’s back to the barber shop.” ◀**

## LLUAHSC Board names administrators

During the past year, the Board of Trustees for Loma Linda University Adventist Health Sciences Center has named several administrative appointments. These include president, a new provost position, and vice president of development and public affairs.

### *Richard H. Hart, MD, DrPH*

Dr. Hart, chancellor and chief executive officer of Loma Linda University, was named president and chief executive officer of Loma Linda University Adventist Health Sciences Center (LLUAHSC) in early 2008. He replaced B. Lyn Behrens, MBBS, who announced that she would be retiring in early 2008.

Dr. Hart assumed the role of president of the University and the Medical Center, and he continues to serve as chief executive officer of the University.

Dr. Hart, who has been chancellor since 2001, has served Loma Linda University in a variety of capacities since 1972—in various academic appointments in the Schools of Medicine and Public Health, as director of the Center for Health Promotion, and as dean of the School of Public Health.

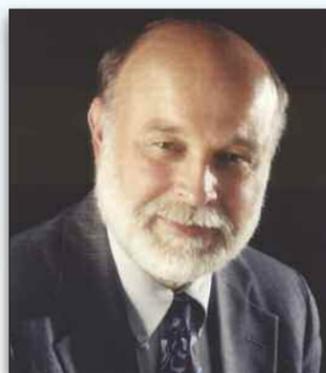
During his tenure at Loma Linda, Dr. Hart's passion for service and global outreach has made him a central force in launching humanitarian efforts in which students and faculty can participate. He has worked internationally to improve hospitals in underserved areas and has made service an even more integral part of the university student's experience.

Dr. Hart received his medical degree and master of public health degree from Loma Linda University, and he also completed his internal medicine residency at Loma Linda University Medical Center.

He received his doctor of public health degree from Johns Hopkins University, Baltimore, Maryland, where he also completed a residency in preventive medicine.

He has authored three books on health, as well as a variety of scientific articles.

Dr. Hart and his wife, Judy, have three daughters—Chandra, Briana, and Kari, and seven grandchildren.



**Richard H. Hart, MD, DrPH**

### *Ronald L. Carter, PhD*

During its December meeting, the Loma Linda University Board of Trustees approved changes in the administrative structure of the University by creating the position of University provost. The provost functions as the chief academic officer, reports to the president, and works closely with the deans on all University academic matters.

The establishment of the office of the provost is accompanied by the decision not to fill the position of chancellor left vacant by the appointment of Richard Hart, MD, DrPH, to the position of president of LLUAHSC and the University. As a result of this change, the designation of chancellor and vice chancellor will no longer be used. All vice chancellors will use their vice president designations.

The Board named Ronald L. Carter, PhD, who has served as vice chancellor for academic affairs, as the new provost, effective immediately.

Dr. Carter received his undergraduate education at Columbia Union College, Takoma Park, Maryland, graduating in 1969 with a degree in biology. He completed his doctor of philosophy degree in biology in June 1971 from Loma Linda University. From 1989 to 1991, Dr. Carter took postdoctoral training in molecular systematics at Rancho Santa Ana Botanic Garden, a division of Claremont Colleges School of Graduate Studies, Claremont.

Dr. Carter's professional career includes serving as associate pastor of the Arlington Seventh-day Adventist Church from 1974 to 1976. Beginning in August 1976, Dr. Carter served as associate pastor and college chaplain at Walla Walla College Church, College Place, Washington. He received his ministerial ordination in the fall of 1977.

In June 1980, Dr. Carter accepted a position as associate professor of biology at Southern Adventist University, Collegedale, Tennessee, a position he held until 1984. That year, he returned to Walla Walla College as chair for the department of biological sciences.

Dr. Carter accepted a position at his alma mater, LLU, in July 1989 as professor of biology and chair of the department. In July 2003, Dr. Carter was named executive associate dean of



**Ronald L. Carter, PhD**

the "new school," a position he held until December 2003 when he was named dean of the "new school," now officially known as the School of Science and Technology.

Dr. Carter's research interests have been in the fields of animal behavior, speciation, and conservation genetics. He has published numerous articles in books and scientific journals.

### *Mel Sauder, JD, MBA*

Mel Sauder, JD, MBA, currently senior vice president for health care business development and signature programs for Loma Linda University Medical Center, has been named senior vice president for development and public affairs for Loma Linda University Adventist Health Sciences Center.

Mr. Sauder is a seasoned health care executive with a career spanning nearly 20 years within four health systems. Prior to joining the Medical Center in 2005, he worked for Centura Health, Colorado's largest health system. He also held positions in the St. Lukes-Shawnee Mission Health System in Kansas City, and with Adventist Health System Sunbelt in Florida.

Throughout his health care career, Mr. Sauder has provided executive leadership over a broad range of hospital operations in multiple settings. He has also had administrative responsibility for a number of service lines, medical staff development, and physician relations. He has overseen support services, financial services, and human resources. Additionally, Mr. Sauder served as administrator over a physician organization consisting of 14 primary care clinics.

Since coming to Loma Linda, Mr. Sauder has been responsible for implementing the Medical Center's regional strategy. He is overseeing development of Loma Linda's new

## LLU Heart & Surgical Hospital opens its doors

The brand new Loma Linda University Heart & Surgical Hospital (LLUHSH) opened its doors to its first patients on January 7, 2009.

The 28-bed, 66,000-square-foot hospital—which is located on Barton Road near the intersection with New Jersey Street—is expected to help expand business and alleviate traffic and congestion on the campus of Loma Linda University Medical Center by attracting as many as 10,000 new patients per year to the LLUHSH for treatment of a variety of conditions ranging from minor outpatient cases to major heart, vascular,

90,000-square-foot outpatient facility in Beaumont, which will open later this year, and was responsible for Loma Linda's investment and participation in a new 106-bed hospital currently under construction in

Murrieta. Mr. Sauder also led the negotiation and acquisition of the new Loma Linda University Heart & Surgical Hospital.

Mr. Sauder holds a law degree from the University of Missouri–Kansas City School of Law, a master's degree in business administration from the University of Texas–Pan American, and a bachelor of arts degree from Southwestern Adventist University. He is a member of the American College of Healthcare Executives, the American Bar Association (health law section), and the Colorado Bar.

He began his career as a pastor for the Oklahoma Conference of Seventh-day Adventists, where he served as pastor for several church districts for a number of years. He received ministerial ordination in the summer of 1987.

Mr. Sauder and his wife, Sue, have two married children—Chris and Amanda. Chris and his wife, Ghysleine, work for Adventist Health; Amanda and her husband, Mike Maggard, work for Adventist Health System Sunbelt.

In his new position as senior vice president for development and public affairs, Mr. Sauder will be responsible for business development, philanthropy, public relations, marketing, and government relations, and will report to Dr. Hart.



**Mel Sauder, JD, MBA**

gynecology, ENT, and urology procedures.

Many procedures will utilize minimally invasive techniques and equipment, including the Da Vinci "S" robot, the most advanced piece of equipment of its kind within the Inland Empire. The new robot is a major equipment acquisition to be used in the new facility.

LLUHSH not only offers private rooms—many of which open onto their own patio—but also room service via telephone or interactive TV, in-room Wi-Fi Internet service, and chairs that fold into an overnight bed for family members or guests.

## Loma Linda hosts fifth international vegetarian congress

More than 700 individuals from 40-plus countries gathered this past March at Loma Linda University for the Fifth International Congress on Vegetarian Nutrition, organized by LLU School of Public Health. The event is the world's major scientific conference on the vegetarian diet.

The congress featured lecturers from across North America, Europe, and South America, including several who presented new, unpublished research.

The event opened with a lecture by David Heber, MD, PhD, of the University of California at Los Angeles, who spoke about cancer and nutrigenomics, and it closed with a symposium on the relationship of food production to climate change. In between, experts discussed the vegetarian diet's relationship to everything from diabetes and cardiovascular disease to aging.

The proceedings of the congress will be published in a special supplement to *The American Journal of Clinical Nutrition*. This was also the case with the previous four congresses.

Over the years the International Congress on Vegetarian Nutrition has offered a platform for the expansion of the knowledge base on the vegetarian diet. With a goal of integrating current knowledge, the first international congress, held in 1987 in Washington, D.C., was planned to examine the evidence relative to the effects of vegetarian diets on various populations.

Subsequent congresses were held in 1992, 1997, and 2002. These broadened the scope of topics for discussion.

**Attendees line up to ask questions of one of the congress speakers. ▼**



**The Combat Center Band of Twentynine Palms razzled and dazzled the crowd at the 15th annual Loma Linda University Children's Hospital Foundation Gala. ▲**

## Children's Hospital Foundation gala raises nearly \$800,000

A Salute to Red, White & You," the 15th annual Loma Linda University Children's Hospital Foundation Gala, exceeded expectations, raising \$790,650 to benefit intensive care services at Children's Hospital.

The evening included the presentation of the Pettis Award by the Honorable Shirley N. Pettis-Roberson.

Ms. Pettis-Roberson, who served the 37th Congressional District of California in the 94th and 95th Congresses of the United States, presented the award to members of the family of Ralph and Goldy Lewis, pioneer Southern California homebuilders. The award is given annually by the Children's Hospital Foundation to recognize outstanding dedication and distinguished service to children. Mary Parks, NBC4's Inland Empire bureau chief and reporter, emceed the program.

The evening's musical entertainment highlighted Daniel Rodriguez and the Combat Center Band of Twentynine Palms. Mr. Rodriguez, also known as the "Singing Policeman," thrilled the gala audience with a performance of "God Bless America." He also sang a duet with soprano Marla Kavanaugh.

The evening also featured both a silent auction and a live auction, which offered a variety of high-end products and services for sale to benefit Children's Hospital. Hundreds of other corporate and individual sponsors from throughout the Inland Empire and surrounding community also came together in a spirit of generosity and charity to lift the 2008 gala well beyond last year's high-water mark.



During his remarks at the grand opening ceremonies for the new Loma Linda University Cancer Center, Mark E. Reeves, MD, PhD, told the crowd of 250 spectators that the Center will place Loma Linda University at the forefront of cancer care not only in the Inland Empire, but the nation as well. ◀

## First phase of new Cancer Center dedicated

A crowd of 250 enthusiastic spectators gathered on the lawn in front of Loma Linda University Medical Center for dedication ceremonies for the new Loma Linda University Cancer Center.

"We are standing on the transformational verge of cancer care in the Inland Empire," said Mark E. Reeves, MD, PhD, director of the Cancer Center.

Several factors come together that will make the LLU Cancer Center not only the most comprehensive cancer center in the Inland Empire, but also one of the finest in the nation.

These resources include: the nation's first and largest hospital-based proton treatment program; the only surgical robotics program in the Inland Empire; the first breast MRI in the Inland Empire; a multidisciplinary team that brings experts

from all applicable medical endeavors together under one roof; the resources of an academic medical center with its own world-renowned school of medicine; a biospecimen lab to promote translational research and targeted treatments; a state-of-the-art perfusion center that incorporates hyperthermic intraperitoneal chemoperfusion capabilities for the treatment of abdominal cavity cancer; dedicated cancer surgeons providing both complex and minimally invasive cancer surgery; patient cancer navigators to address the psycho-social needs of patients and their families; and a home-like environment.

As impressive as it is, the new 11,000-square-foot Cancer Center is only a fraction of the size of the anticipated 75,000 square feet it will occupy when all four planned stages of improvements are completed.

## School of Pharmacy professors serve on Malawi mission trip

On June 16, Jerika Lam, PharmD, and LaDonna Jones, PharmD, both members of the LLU School of Pharmacy faculty, left on a mission trip to Malawi.

"The purpose for our trip," Dr. Lam informs, "was to explore avenues for international research, as well as to share ideas for pharmaceutical care and HIV management."

One of their first activities was to tour Malamulo Hospital. The hospital was established in 1908 and currently has 220 beds. A variety of inpatient and outpatient services are provided for children and adults, including surgery and general medical care, as well as obstetrics and pediatrics.

Malamulo Hospital also operates an on-site pharmacy, a medication and supply distribution store, and two warehouses



**LaDonna Jones, PharmD (left), and Jerika Lam, PharmD, traveled to Malawi in June of 2008. ▲**

where donated items such as medications, wheelchairs, toothbrushes, textbooks, and laboratory materials and supplies are stored for distribution.

Drs. Lam and Jones took on the project of helping to evaluate the pharmaceutical needs of the Malamulo Hospital pharmacy.

## School of Dentistry student receives Humanitarian Award

Vincent Drouin, fourth-year dental student, received the 2008 Academy of Dentistry International's Student Tanaka Humanitarian Award. This award, named in honor of Terry Tanaka, DDS, past academy president and noted humanitarian, goes annually to a junior dental student who best exemplifies humanitarian values and service to others. The sixth year for this award, underwritten by a grant from Sunstar Butler Company, comes in recognition of more than 200 hours of service performed by Mr. Drouin during his first three years of dental school.

Mr. Drouin, who accepted the award at the Academy's convocation in San Antonio on October 15, 2008, says his dental career received its impetus when as a child in the small town of Terrace, British Columbia, Canada, his family's circle of friends included many dentists. Most of the dentists in town were graduates of LLU School of Dentistry. They encouraged him to pursue dentistry, and currently he anticipates returning to Terrace to assume the practice of a retiring dentist and friend.

Locally, Mr. Drouin has volunteered his academic skills to mentor and tutor students in other classes. He has served recovering drug addicts at the Compassion Clinic operated by a coalition of eight local churches, as well as local homeless indigents sponsored by Riverside Presbyterian services, and patients in other outreach programs.

Additionally, he spent five days on a dental trip to Loreta, Mexico, and 10 days in September 2007 in Bangladesh. There a missionary dentist from the Czech Republic, whose service commitment he calls "impressive," accompanied the medical/dental team to a village without dental care.



Vincent Drouin

The experience was rich and Mr. Drouin focused on oral surgery, his special interest. Unaware of the humanitarian award that awaited him, he was gaining experience and continuing a commitment to compassion, both of which should enhance his dental practice notably.



During a spring episode, Barbara DeBuono, MD, MPH, executive director for public health and government at Pfizer, talks about the definitions of leadership and public health on "Designs for Health." ▲

## School of Public Health airs educational television series

The School of Public Health has wrapped up one year of airing a televised series called "Designs for Health" on Loma Linda Broadcasting Network (LLBN). This program offers public health education to both SPH students and a potential television audience of more than two million viewers.

Twenty-four episodes aired during the year. Each program begins with an interview of an SPH faculty member or other public health expert, followed by the main speaker. Presenters have included public health officials from San Bernardino and Orange counties, physicians, and academicians from LLU and other institutions of higher education. They discuss topics ranging from asthma to life expectancy to HIV/AIDS.

After their presentations, the speakers answer questions from students—both those who are part of the small studio audience and those who are watching live at the School of Public Health via teleconferencing technology.

"The presenters give a fresh-from-the-field perspective on what is really happening in the greater world of public health," says Boaz Papendick, a global health student who hosted the show during spring quarter.

Episodes of "Designs for Health" are archived online. To view them, visit <[www.designsforhealth.org](http://www.designsforhealth.org)>. To see the schedule for 2009, stayed tuned to this same website. The show airs eight Tuesdays each during the winter, spring, and autumn academic quarters from noon to 1:00 p.m. Pacific time.

The series is made possible by a grant from the Pfizer Public Health and Government Group and broadcast courtesy of LLBN.



The students of the LLUSN off-campus master's program pose for a picture at Mission College, Thailand. ▲

## School of Nursing completes international master's program in Thailand and South Africa

Loma Linda University School of Nursing celebrated the final session of its successful international master's program with two recognition ceremonies. The first was held February 4 in the campus church at Mission College, Thailand, which has also served as the host for the LLUSN master's degree program.

The second ceremony took place July 27 in the Seventh-day Adventist church on the grounds of Helderberg College, located near Capetown, South Africa. These ceremonies served as the final program for the 42 nurses from several different countries.

Richard Hart, MD, DrPH, president of Loma Linda University, gave the address for both ceremonies and shook the hand of each nurse that was recognized.

The off-campus master's degree program has been a project of the School of Nursing for a number of years. It was designed to help individuals recommended by their church conferences, unions, or divisions, or by a specific international



health care facility, to receive a master's degree from Loma Linda University.

Six years ago, Helen King, PhD, RN, former dean of the School of Nursing; Lois Van Cleve, PhD, RN, FAAN, former associate dean of the graduate program, School of Nursing; and Patricia Jones, PhD, RN, FAAN, director of the office of international nursing, School of Nursing, developed a program that the School could take out across the world.

The program was designed to occur over four years with four sessions of at least a month each at a distant location. Faculty taught two week sessions at a time to instruct the students.

Over the following months, the students could complete their coursework and send it via e-mail to the course instructors. Many of the nurses were from Adventist institutions overseas; however, a few nurses were chosen as representatives from their country's government.

"I'm very proud of being a graduate student of LLU," says YuQin Pan, a nurse from China, "but I think that tomorrow, LLU will be very proud of us for being their students. We are going to do a lot to contribute to society, the patient, and to the people around us."

The impact of the efforts by the LLU School of Nursing will be felt internationally for many years to come through these alumni.

The 2008 nursing graduates pose in formal clothing typical of their individual countries of origin. The group is standing in front of the bell tower at Helderberg College, where their final residency session was held. ◀

## Overseas Heart Surgery Team visits Egypt

From November 9 to 20, the Loma Linda University Overseas Heart Surgery Team performed 17 pediatric heart surgeries at Alexandria Main University Hospital in Alexandria, Egypt.

For the past 35 years, this dedicated team has circumnavigated the globe, visiting Pakistan, Thailand, Greece, South Vietnam, China, Saudi Arabia, Kenya, Nepal, and now Egypt, changing the lives and futures of more than a thousand individuals.

But the heart team's mission was twofold. In order to save as many children as possible, the Egyptian doctors needed to learn how to perform pediatric heart surgery on their own. Loma Linda's primary goal was to educate.

"It's one thing to just come and operate. We know we can do that and have the baby be healthy. But that's just that baby. When we leave here, there are hundreds, if not thousands of babies in this area that will be cared for because we're making education our primary goal," says Leonard Bailey, MD, surgeon-in-chief at Loma Linda University Children's Hospital.

Impressive advancements are being made. Three years ago, the heart surgery program in Alexandria, Egypt, did not exist. Now, an entire floor of Alexandria Main University Hospital is dedicated to the advancement of heart surgery in Egypt. Today, the hospital is a government-run facility, but everything, from the beds to the eco-cardiograms, has been donated by philanthropic outside sources.

And so is the majority of the Egyptian heart team's pediatric surgical education.

"The hands cannot do what the mind does not know," says Ahmed Hashim, an anesthesiologist at Alexandria Main University Hospital. "All these patients used to die in front of our eyes, and we couldn't help them. We could do nothing to save these children, despite all of the efforts made by our surgeons, intensivists, and nurses. But now we can, and this is what Loma Linda has done for us."

"Way in the back of our minds, and really the principal feature, is that it will lead to babies and children having better heart health and being able to grow up," says Dr. Bailey. "But the road to that outcome is to be able to impart our experience and knowledge to these folks so they can use it—the



**Loma Linda University Children's Hospital surgeon-in-chief Leonard L. Bailey, MD, operates on a child at the Alexandria Main University Hospital. The team's trip was largely funded by donations from the Inland Empire area. ▲**

parts they think are useful to them. And maybe that will help make a difference in a child's life when we're gone."

## New Slater Proton Treatment and Research Center dedicated

More than 250 supporters attended the renaming and dedication ceremonies for the James M. Slater, MD, Proton Treatment and Research Center at Loma Linda University Medical Center.

When the center opened in 1990, it was the first hospital-based proton treatment center in the world. It remained the only such treatment center in the United States until 2003. Thanks to the incredible successes achieved at the renamed Slater Center—which has given more than 350,000 treatments—other health care facilities around the nation are currently making plans to open proton treatment centers of their own.

Unlike conventional x-rays, and to a lesser extent IMRT x-rays, proton beams can be precisely positioned in 3-D accuracy. They produce almost no damage to normal tissues, nor do they pass through the patient's body and out the other side. With protons, a very precise amount of radiation is delivered to the cancer cells directly.

## Associate professor of physical therapy interviewed for film on laughter

Associate professor of physical therapy in the School of Allied Health Professions Lee S. Berk, DrPH, MPH, will be one of several researchers featured in a film titled "Laughter."

The film is being produced by Neil Davenport from White Buffalo Films and will probably be completed sometime this summer.

Dr. Berk is an internationally known expert in the field of laughter. Last year at the 121st annual meeting of the American Psychological Society held in San Diego from April 4 to 9, Dr. Berk presented research further demonstrating that looking forward to happy experiences may have health benefits.

In this presentation, Dr. Berk reported that the anticipation of happy laughter experience lowers three stress hormones—cortisol (a steroid hormone), epinephrine (also known as adrenaline), and dopac (a major catabolite of dopamine).

This knowledge is significant because chronically high stress hormone levels can be detrimental to a person's health, particularly the immune system.

"Laughter" will be shown on the international film festival circuit and will be released in theaters throughout the United States.



**Lee S. Berk, DrPH, MPH (right), associate professor of physical therapy, School of Allied Health Professions, is interviewed for the film "Laughter" by Neil Davenport from White Buffalo Films. The film is expected to be completed sometime this summer. ▲**



**Volunteer Carole Brodeur (first row, center) is famous for decorating the waiting room of the pediatric dental clinic in the School of Dentistry. She poses for a picture here with her friends, front row from left: Magda Lavergne, Carole Brodeur, Rose Stokes. Back row: Lilian Andrade and Brenda Montesinos. ▲**

## Volunteer services department celebrates 50 years at LLUMC

Volunteer services at Loma Linda University Medical Center celebrated its 50th year serving the hospital. The volunteers for this department have increased exponentially, along with the hours volunteered. In 2007 alone, they had a total of 1,892 individuals donate a grand total of 248,469 hours of service.

Director Denise Winter is quick to point out that the volunteer services department is extremely grateful to all the community partners who raise money, donate blankets and toys, and write letters to support hospitalized children. "Volunteer services has had a community support invitation open for many, many years," she says. "We go to churches, service organizations, schools, and clubs inviting them to get involved."

Organizations like Project Linus, The Kiwanis Club of Uptown Riverside, Cedar Grove Elementary School of Covina, Redlands Junior Academy, and too many others to count hold blanket drives, bake sales, toy drives, and other projects to make sure pediatric patients at LLUMC are not forgotten.

Ms. Winter reports that the Blankets of Love project at Cedar Grove Elementary started when school officials decided they needed to teach their students to love others. So far, the program has distributed more than 1,900 quilts that the students have made for patients at Loma Linda University Children's Hospital and other area hospitals. Each blanket comes with a letter and photograph from the student who made it.



A nine-figure sculpture garden, "Come Unto Me," created by Victor Issa, now resides in a special alcove to the right of Loma Linda University Medical Center's main entrance. Mr. Issa, whose work in bronze is internationally acclaimed, acknowledged that creating an imaginative retelling of the life and mission of Jesus challenged him to the core. But under the influence of the Spirit of God, the set invites viewers to unexpected encounters with Christ. ▲

## New sculpture graces LLUMC entrance

A bronze sculpture, titled "Come Unto Me" and depicting a smiling, happy Jesus Christ welcoming an assortment of eight people and three dogs into the circle of His friendship and healing, now calls patients, visitors, and staff to an encounter with the pivotal figure in human history from its new location in a sunny alcove to the right of Loma Linda University Medical Center's main entrance.

Sculptor Victor Issa took great care to register a broad range of positive emotions on the faces of everyone sharing in the imaginative encounter.

The expression on the face of Jesus radiates kindness, approachability, and acceptance. The work evokes the story in the 19th chapter of Matthew where Jesus welcomed children into fellowship despite the protests of His own misguided disciples who, in reflecting the elitist attitude of their times, felt that religious leaders were too important to socialize with children.

Victor Issa's 21st-century interpretation of the story invites viewers to believe that the Son of Man is equally open to people today. The ancestry of the people depicted reflects the multi-ethnic diversity not only of the Inland Empire, but of Southern California as a whole.

In one segment of the installation, a young girl and an adult male, apparently a physician, assist an elderly gentleman into the presence of Christ. Behind them, a young boy of maybe 5 or 6 years of age races ahead of his mother to join the event. To

the left of the teacher, a young woman hands a bouquet of flowers to a young girl. At the feet of Jesus, a golden retriever and pup watch a light-hearted scenario playing out as a second puppy reaches forward to lick the face of a young boy seated next to the teacher.

Describing it as series of increasingly deeper stages of surrender to God, Mr. Issa said the "Come Unto Me" project challenged him technically, emotionally, and spiritually far beyond any other sculpture he has ever produced. He expressed appreciation to Gerald Winslow for offering wisdom and spiritual support at a very critical juncture. Mr. Issa said the three-and-a-half year process stripped him of self-sufficiency and taught him to rely on God instead of his own abilities.

### The president requests your e-mail!

There are many exciting things happening at Loma Linda University and Richard Hart, MD, DrPH, president of LLU, would like to tell you about them. He writes a quarterly newsletter that tells the story of LLU in a personal way. If you'd like to add your name to this list, please send your name and e-mail address to <[president@llu.edu](mailto:president@llu.edu)>.



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