

SCOPE

LOMA LINDA UNIVERSITY

Summer 2010

*Reaching out to
a global community*

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Allied Health Professions

Cardiac electrophysiology, post-BS certificate, AS †
Clinical laboratory science, AS, BS
Coding specialist, certificate
Communication sciences and disorders, BS, MS
Cytotechnology, certificate, BS
Diagnostic medical sonography, certificate
Dietetic technology, post-BS certificate, AS
Emergency medical care, BS
Health care administration, BS ††
Health information administration, post-BS, executive certificate ♦ †
Health professions education, post-BS certificate, MS
Medical dosimetry, certificate
Medical radiography, AS ♦
Nuclear medicine technology, certificate ♦
Nutrition and dietetics, BS, MS
Nutritional care management, MS ††
Occupational therapy, MOT
Occupational therapy, OTD ††
Orthotics and prosthetics, MS
Physical therapy, MPT, DPT ♦ (post-professional DPT only)

Physical therapy, DSc
Physical therapist assistant, AS
Physician assistant, MPA
Polysomnography, post-AS certificate
Radiation therapy technology, certificate ♦
Radiation science, BS, MS ††
Radiologist assistant, MS ††
Rehabilitation science, PhD
Respiratory care, certificate, BS ♦

Dentistry

Dental hygiene, BS †
Dentistry, DDS
Biomedical sciences/dentistry, post-BS certificate
Dental anesthesia, post-doctoral certificate, MSD
Endodontics, post-doctoral certificate, MS, MSD
Implant dentistry, post-doctoral certificate, MS, MSD
Oral and Maxillofacial Surgery, post-doctoral certificate, MS, MSD
Orthodontics & dentofacial orthopedics, post-doctoral certificate, MS
Pediatric dentistry, post-doctoral certificate, MS, MSD
Periodontics, post-doctoral certificate, MS, MSD

♦ Offered off campus.

Prosthodontics, post-doctoral certificate, MS, MSD
Periodontics/prosthodontics, post-doctoral certificate, MS, MSD
Periodontics/implant dentistry, post-doctoral certificate, MS, MSD
Prosthodontics/implant dentistry, post-doctoral certificate, MS, MSD

Medicine

Anatomy, MS, PhD
Biomedical sciences, post-BS certificate
Biochemistry, MS, PhD
Medicine, MD
Microbiology & molecular genetics, MS, PhD
Medicine/anatomy, MD/MS, PhD
Medicine/biochemistry, MD/MS, PhD
Medicine/microbiology, MD/MS, PhD
Medicine/pharmacology, MD/MS, PhD
Medicine/physiology, MD/MS, PhD
Pharmacology, MS, PhD
Physiology, MS, PhD

Nursing

Certified advanced practice, RN
Clinical nurse specialist
Growing family, MS, post-master's certificate
Adult and aging family, MS, post-master's certificate
Nurse practitioner
Neonatal nurse practitioner, MS, post-master's certificate
Pediatric nurse practitioner, MS, post-master's certificate
Family nurse practitioner, MS, post-master's certificate
Adult nurse practitioner, MS, post-master's certificate
Psychiatric nurse practitioner, MS, post-master's certificate
Nursing, BS †
Nursing, MS
Nursing administration
Nurse educator: growing family ♦
Nurse educator: adult and aging family ♦
Nursing, PhD, DNP

Pharmacy

Doctor of Pharmacy, PharmD

Public Health

Basic epidemiology, post-BS certificate
Biostatistics, MPH, MSPH, post-BS certificate

† Also offered online.

Basic biostatistics, post-BS certificate
Emergency preparedness and response, post-BS certificate
Environmental and occupational health geographic information systems, MPH
Epidemiology, DrPH, PhD, post-BS certificate
Epidemiology
Environmental epidemiology, MPH
Health services research, MPH
Medical epidemiology, MPH
Nutritional epidemiology, MPH
Research epidemiology, MPH
Spatial epidemiology, MPH
Epidemiology research methods, post-BS certificate
Global health, DrPH
Global health
Global epidemiology, MPH
Global health and maternal and child health, MPH

Health care administration, MBA ♦
Health education, DrPH ♦
Health education, MPH †
Health geographics & biomedical data management, BSPH
Health geoinformatics, post-BS certificate
Health policy & leadership, MPH, DrPH
Lifestyle Medicine, MPH
Lifestyle Intervention, post-BS certificate
Maternal and child health, MPH, post-BS certificate
Nutrition, MS, DrPH
Public Health Nutrition, MPH
Public Health Practice, MPH ♦ †
Preventive Care, DrPH
Tobacco control methods, post-BS certificate

Religion

Bioethics, post-BS certificate, MA
Clinical Ministry, post-BS certificate, MA ♦
Religion and the sciences, MA

Science and Technology

Biology, MS, PhD
Case management, post-BS certificate
Child life specialist, post-BS certificate, MS
Clinical meditation, post-BS certificate
Clinical social work, PhD
Counseling, MS
Criminal justice, MS
Drug and alcohol counseling, post-BS certificate
Earth science, PhD

†† Offered online ONLY.

Environmental sciences, BS
Family counseling, post-BS certificate, MS ♦
Family life education, post-BS certificate, MS ♦
Family studies, MA, PhD
Geology, BS, MS
Group counseling, post-BS certificate
Marital and family therapy, MS, PhD, DMFT ♦
Natural sciences, MS (non-thesis)
Program planning and evaluation, post-BS certificate
Psychology, MA, PsyD, PhD
School counseling (PPS Credential Program), post-master's certificate
Spanish studies for health care professionals, post-BS certificate

Interschool combined programs

Dentistry, DDS/MPH, DDS/MA, DDS/MS, DDS/PhD
Health sciences, BS
Medicine/oral & maxillofacial surgery, MD/post-doctoral certificate
Nursing/public health, MS/MPH
Nursing/bioethics, MS/MA
Health education/marriage and family counseling, MPH/MSW
Health education/psychology, MPH/PsyD
Maternal and child health/social work, MPH/MSW
Preventive care/psychology, DrPH/PsyD
Bioethics/medicine, MA/MD
Social policy and social research/bioethics, PhD/MA
Bioethics/psychology, MA/PsyD, MA/PhD
Clinical ministry/marital and family therapy, MA/MS



LOMA LINDA UNIVERSITY

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SCOPE | Summer 2009



Front cover: The look of fear, grief, and uncertainty on the face of a young survivor of the massive earthquake in Haiti exemplifies the feelings of an entire nation. The little boy lost his arm as a result of the disaster. *Story on page 2.*

Back cover ...

Top photo: More than 550 people attended Healthy People 2010, held on the campus of Loma Linda University, where the topic was "lifestyle and chronic disease." *Story on page 30.*

Left photo: The Loma Linda mission group, composed of Loma Linda University students and sponsors, lived on this boat for a week while traveling down the Rio Negro of the Amazon rainforest. *Story on page 27.*

Right photo: Abbey Umali, just 11 years old and serving her third successive term as National Goodwill Ambassador for the Muscular Dystrophy Association, sang during opening ceremonies for the Tom & Vi Zapara Rehabilitation Pavilion, while Michael Jackson, MPH, administrator of LLUMC East Campus Hospital, and others in attendance listened. *Story on page 36.*

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SCOPE

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Out of the rubble

Loma Linda University works to strengthen Hopital Adventiste d'Haiti

Eight-year-old Sebastien Lamothe was playing with his friend and grandmother in a second-floor apartment of a three-story building in the Carrefour district of Port-au-Prince, Haiti, when the earth started to shake.

The city laid in ruins as Sebastien's aunt rushed to the house where her nephew and mother were last seen. The house was little more than rubble, and she was told that everyone inside was dead.

Sebastien has never had an easy life; he's never known his father, and his mother died of an illness last year. Over the next three days, little Sebastien would go through more than most people endure over a lifetime.

Two days after the earthquake, a man passing Sebastien's house heard a voice. Sebastien's aunt rushed to the ruins and heard Sebastien yelling for help. He was squeezed deep in the rubble between the first and third floors of the collapsed building; his right leg was crushed, the bone was exposed. The dead bodies of his friend and grandmother lay on top of him, keeping him trapped in the rubble.

Attempts were immediately made to reach the boy, but progress was slow. Friends and relatives were able to get food and water to Sebastien, but they could not get him out of the collapsed house. As the sun went down on the second day after the earthquake, Sebastien asked only that he not be left alone.

The next day two men, who did not know the family, came to the house, crawled into the rubble, and began to work their way toward Sebastien. After hours of work, one of the men emerged from the rubble. There was not enough room for two people to work. Hours later the other man stumbled out of the ruins with Sebastien in his arms. His aunt then took him to Hopital Adventiste d'Haiti, where doctors determined that his leg needed to be amputated. When Sebastien woke up and saw that he was missing a leg, his only wish was to go to church so a pastor could pray for him and his leg would grow back.

Eight-year-old Sebastien Lamothe is one of many young Haitian children who lost limbs following the catastrophic earthquake on January 12, 2010. Hopital Adventiste d'Haiti is working to help these children and many others. Watch Sebastien's story at <www.llu.edu/360>. ◀

January 12, 2010, found Hopital Adventiste d'Haiti (HAH), located in Carrefour, Haiti, at the epicenter of a fierce 7.1 magnitude earthquake. Early reports suggested the hospital was completely destroyed, while others stated that the hospital was partially destroyed but completely useless.

Fortunately, the hospital, a 70-bed facility built in 1978, received minimal damage. This facility had joined Adventist Health International (AHI), a nonprofit international organization based at Loma Linda University (LLU) in 2001.

"We had already been working with Haiti for a number of years," reports Richard Hart, MD, DrPH, president of LLU and AHI, "so we knew the facility well and had direct relations with the hospital leadership."

In the days that followed, HAH began serving as one of the clinical centers for the nation, helping hundreds of patients and families like Sebastien's. Many of these patients camped outside the hospital, waiting to be treated. Scott Nelson, MD, an LLU School of Medicine graduate based in the Dominican Republic, came to HAH and began performing orthopedic surgeries immediately. He was soon joined by Andrew Haglund, MS, a faculty member from LLU's School of Public Health, who was dispatched to coordinate logistics at the hospital.

"This nation has lost upwards of 225,000 people; almost 1 million of the surviving population are without proper food, water, shelter, or sanitation; and somewhere between 7,000 and 10,000 have had limbs amputated, not to mention the huge number of patients with surgically treated injuries," says Mr. Haglund. "Loma Linda University and Adventist Health International are providing an incredible service here in Haiti and continue to need your support."

To maximize response to the humanitarian crisis in Haiti, Loma Linda University partnered with Florida Hospital in Orlando, Florida. From this collaborative effort, a reliable system for scheduling and transporting medical teams, supplies, and equipment into Port-au-Prince emerged. Loma Linda University has been coordinating volunteers who arrive in Haiti at the rate of 20 to 30 per week, and include medical personnel and logistics support from many other entities.

After visits by both the United States and French ambassa-





Andrew Haglund, MS, assistant professor of geoinformatics in the LLU School of Public Health, served as emergency relief administrator for Hopital Adventiste d'Haiti during the months following the earthquake. Here, he leads out in a morning logistics meeting. ▲

dors, the flow of fresh water and other supplies from international donor agencies increased dramatically.

"All indications are that when some of the temporary medical facilities leave Haiti, Hopital Adventiste d'Haiti will be the most advanced hospital in the country," says Mr. Haglund.

Assistance to the hospital arrived from all corners of the globe, with volunteers coming from Adventist Development and Relief Agency (ADRA), Union College, ACTS, and many other entities.

The LLU School of Public Health Center for Public Health Preparedness began making plans to help in Haiti immediately after the earthquake and deployed its public health disaster assess-



Scott Nelson, MD (left), a 1996 graduate of LLU School of Medicine, pauses between surgeries with Lesly Archer, MD, medical director of Hopital Adventiste d'Haiti. ▲



Chris Jobe, MD (left), professor of orthopedic surgery in the LLU School of Medicine, chats with Didier Le Bret, French ambassador to Haiti. Behind Dr. Jobe and Mr. Le Bret is the overwhelming orthopedic surgery schedule for HAH. ▲

ment and response team (PHDART), which was on the ground in Carrefour less than 10 days after the quake.

Trained to lead response activities in areas such as environmental health (potable water, sewage, latrines, and trash management), maternal and child health, and communicable disease risk reduction, the team members collaborated with ADRA in responding to the immediate needs of more than 15,000 displaced persons on the grounds of Universite Adventiste d'Haiti. Recognizing the need to quickly assess the health situation and respond to the imminent public health disaster, PHDART's goal was to determine the immediate public health needs and provide emergency public health services for the camp. Additionally, several of the team members worked at HAH to provide safe drinking water and access to latrines in order to improve sanitation conditions on the hospital grounds.

The team's initial assessment showed a priority need to establish a supplemental food program for malnourished children under 5 years of age, as well as to provide services and education for lactating mothers. When the rest of the team returned to the United States on February 2, Walleska Bliss, MPH, project coordinator, and Jesse Bliss, MPH, director of the Center for Public Health Preparedness, stayed behind for three additional days to welcome LLU's International Behavior Health Trauma Team (IBHTT) and to help facilitate IBHTT's integration into the framework created by the PHDART. During the additional days, Mr. and Mrs. Bliss collaborated with UNICEF and CONCERN



Hopital Adventiste d'Haiti withstood the many tremors of the January earthquake and is currently among the best hospitals in all of Haiti. ▲

Worldwide to train four malnutrition nurses and to establish a supplemental feeding center on the campus.

After returning to Loma Linda for two weeks, LLU received a request from ADRA for continued support by the School of Public Health, and so the Blisses returned to Haiti in late February and remained there until the end of March. This time, ADRA asked them to coordinate and manage the entire camp operation, the population of which had grown to more than 20,000 displaced persons.

As Haiti's rainy season brought with it an environment where pathogens can transmit and thrive more easily, preventing the transmission of communicable illnesses was a top priority. School of Public Health personnel worked to address the spread of diarrheal disease and malaria, and had already encountered several cases of typhoid, a serious illness that is easily passed on without proper hygiene and sanitation facilities. David Dyjack, DrPH, dean of LLU School of Public Health, also visited the camp, where he lent his expertise in environmental health and spent several days assisting with the water and sanitation response for the camp, as well as for HAH.

"It was a blessing to see the many volunteers cooperate," reports Chris Jobe, MD, professor, orthopedic surgery, Loma Linda University School of Medicine. Dr. Jobe travelled to HAH with an orthopedic team. "Lives and limbs are being saved because of the collective effort of so many people."

According to Dr. Jobe, people from different countries and religions were working together. "It was a blessing just to see people from all over the world cooperating with one purpose—to save as many lives as they could," he says.

Adventist Health International and the Global Health Institute at LLU continue to receive names of individuals offering to assist at the hospital, as well as donated medical supplies. They will continue to send volunteers to HAH in response to the current needs.

Along with many of the other patients, Sebastien and his aunt moved into a small tent in the post-op section of the camp outside the hospital. He was given crutches and began to learn how to live with one leg.

Living in the camp in front of the hospital is a constant reminder that the future is not decided.

Much of Sebastien's future is uncertain, but there is hope. He has a loving family, and there are now aid organizations that are beginning to work in Haiti specifically to help the many new amputees.

One thing is certain for Sebastien: following his ordeal, he knows that he wants to be a doctor when he grows up.

A website at LLU is accepting donations for Hopital Adventiste d'Haiti. Funds donated thus far have been used to purchase a sterilizer, a generator, orthopedic saws, medications, and numerous other medical supplies.

Individuals who would like to donate to the relief effort of HAH are invited to visit the website at <www.llu.edu/news/haiti> or contact Adventist Health International at 11060 Anderson Street, Loma Linda, California 92350. The phone number is (909) 558-4540. Please make checks payable to: Adventist Health International—Haiti.

Look for a special documentary on Sebastien, Hopital Adventiste d'Haiti, and the aftermath of the January earthquake. Titled "Out of the Rubble," the documentary premiered this summer in Atlanta, Georgia.



Afghanistan and Loma Linda University

An enduring relationship that spans nearly 50 years

Advertisements in local English language magazines tout the advantages of driving an armored vehicle. One ad notes that at any moment, within a matter of seconds, your vehicle could become a target. Of course, this isn't a problem if you have an armored vehicle.

High security surrounds Kabul hotels. Afghan soldiers conduct frequent automobile checks along the highways coming into Kabul from the surrounding countryside. But still, suicide vehicles get through and cause horrific mayhem directed toward the United States military, as well as causing many deaths to innocent Afghan civilians.

Afghanistan was once a place only a few Westerners vaguely knew about. Most school children and many adults were unable to easily find the country on a map.

In the 1960s, Afghanistan was a place for Americans to land if they wanted to drop out of society. Today, the realities of 9/11 have brought images of this landlocked country into households

around the world on a daily basis. This year, the war in Afghanistan will become one of America's longest wars.

Slightly smaller in area than the size of Texas, Afghanistan is bordered on the south and east by Pakistan, on the west by Iran, and on the north by Turkmenistan, Uzbekistan, and Tajikistan. Afghanistan's recent history is a story of war and civil unrest. The former Soviet Union invaded the country in 1979, but was forced to withdraw 10 years later by the anti-Communist mujahedeen supported by the United States government.

Subsequent fighting among the various mujahedeen factions gave rise to a state of warlords that eventually spawned the Taliban, who seized power in 1996. Following the 9/11 terrorist attacks on New York City and Washington, D.C., the United States, assisted by the Afghan Northern Alliance resistance forces, toppled the Taliban regime.

It is against this backdrop that Loma Linda University has been working to improve the lives of the citizenry of Afghanistan.

Homes blanket the hillside in a Kabul residential area. While unrest and violence are more common in other parts of the country, life for the residents of Kabul has become relatively peaceful and routine. ◀

In 2004, a team of five health care professionals from Loma Linda University, headed by Richard H. Hart, MD, DrPH, LLU president, traveled to Afghanistan to evaluate a request made by the country's ministry of health to operate one of Kabul's major hospitals—the Wazir Akbar Khan Hospital.

At the time of the visit, the hospital was being completely renovated by the Norwegian Red Cross under the auspices of the International Committee of the Red Cross. The Wazir Akbar Kahn Hospital was constructed approximately 40 years ago and is located among a cluster of medical facilities that include a children's hospital, a physical therapy clinic, and an allied health educational complex.

This most recent project—a contract completed in 2009—has resulted in Loma Linda University upgrading the management and training of the local physicians and administrative staff.

The project, funded by the United States Agency for International Development (USAID) and run by Loma Linda for the past five years, transformed this major trauma and surgery hospital in the center of Kabul from a nightmare of squalid wards and filthy corridors into the premier hospital in Kabul.

Habibullah, who uses only one name, lies back in his bed with an IV in his arm dripping fluids and medicine to combat his heart troubles. He is 60, but looks 80 with his wrinkled face, swollen arms, and wispy white beard.

The former baker has been fighting heart disease for some time and knows from experience what this place used to look like before the USAID health project began to upgrade the hospital.

"I came two years ago," he says, resting against a white pillow and on clean sheets as his son sits nearby in front of a small electric heater. "Now it is so clean, so well-equipped, and so good." His son says his father pays nothing for his care or his medication because he is poor. Food is also provided, but his father prefers food from home.

Until recently, most Afghan hospitals were on the level that might be expected from a country listed as 133rd out of 182 on the United Nations human development index. Just a few years ago, hospitals in Kabul, the most developed place in the country, revealed a shocking scene. Patients lay in their street clothes on straw mats, filthy mattresses, or soiled sheets.

Wazir Akbar Khan Hospital was managed by Loma Linda University for five years as part of a project funded by the United States Agency for International Development (USAID). The project was completed in 2009; the university is considering other ways to be involved in the region. ▼



Dim lighting came from the handful of fixtures that were not broken. The horrific smell of overflowing toilets and soiled bandages permeated the air. Patients groaned in pain and medicine was only given when family members went to the pharmacy in the market outside and sold their belongings to buy it.

But not at Wazir Akbar Kahn Hospital. In addition to its cleanliness, Loma Linda's hospital administrator, Mike Mahoney, now executive director of operations for Loma Linda University Health Care, used USAID funds to provide basic medicine, fix or install basic medical devices such as ventilators, heart monitors, defibrillators, x-ray and other machines, as well as upgrade the emergency room and introduce changes to bring the hospital up to speed.

In his role as administrator, he brought in a team of American surgeons who worked with Afghan physicians to improve their skills. Mr. Mahoney shows a list called "essential package of hospital services" that tells what surgeries and other innovations the facility should provide to anyone who walks in or is carried in the door of this primary trauma center in the capital of four million.

Part of the reason for Loma Linda's success at the hospital

Patients in the Wazir Akbar Kahn Hospital convalesce from a variety of injuries and conditions—many of which are direct or indirect results of the unrest. Land mines and other explosives still provide major hazards for residents. ▼

and other projects in Afghanistan is the work of a tough-looking former mujahedeen fighter against the Soviets, Mohammed Ayub, who was the country director for the project. "He got things done," Mr. Mahoney said. It was Mr. Ayub's persistence and loyalty to Loma Linda that protected Loma Linda's interests during the time when the Taliban regime was overthrown.

But Loma Linda University's history with Afghanistan did not start there. For all of its 105-year history, Loma Linda University has been involved in international health care initiatives. The roots of the Adventist health message in Afghanistan began in the early 1920s. Pastor J.E. Fulton, living in India and writing in the September 1920 issue of the *Loma Linda Medical Evangelist*, reported that one of the leading officials in the Afghani government had urged members of the Seventh-day Adventist Church working in India to come to Kabul to investigate the opening of a sanitarium. In his article, Pastor Fulton noted "this Afghan delegate is an influential man and has promised to help us in various ways to get our health work started in this country."

It was in this setting that, in 1962, Loma Linda began its official involvement in Afghanistan. Anchored by G. Gordon Hadley, MD, dean emeritus of the School of Medicine, this effort provided faculty and consultation resources to the leading medical school in Afghanistan and other similar facilities throughout the country. The effort temporarily stopped when the Soviet

Union invaded the country in 1979.

In 1996, at the request of national and medical school officials in Afghanistan, a team from Loma Linda University, headed by Joan Coggin, MD, MPH, retired vice president for global outreach, and Dr. Hadley, returned to Afghanistan to assess the needs of the medical school curriculum and see what help could be provided.

As a result of this visit, a teaching facility, named the Loma Linda Center, was constructed at Kabul Medical University. This center consisted of teaching laboratories, a medical library, and a computer center for students and faculty.

The Loma Linda efforts progressed rapidly. Previously, the medical school's library consisted of books and journals dated prior to 1972. This changed. Books and journals donated by Loma Linda University, various international entities, and publishers vastly improved the holdings in the medical library.

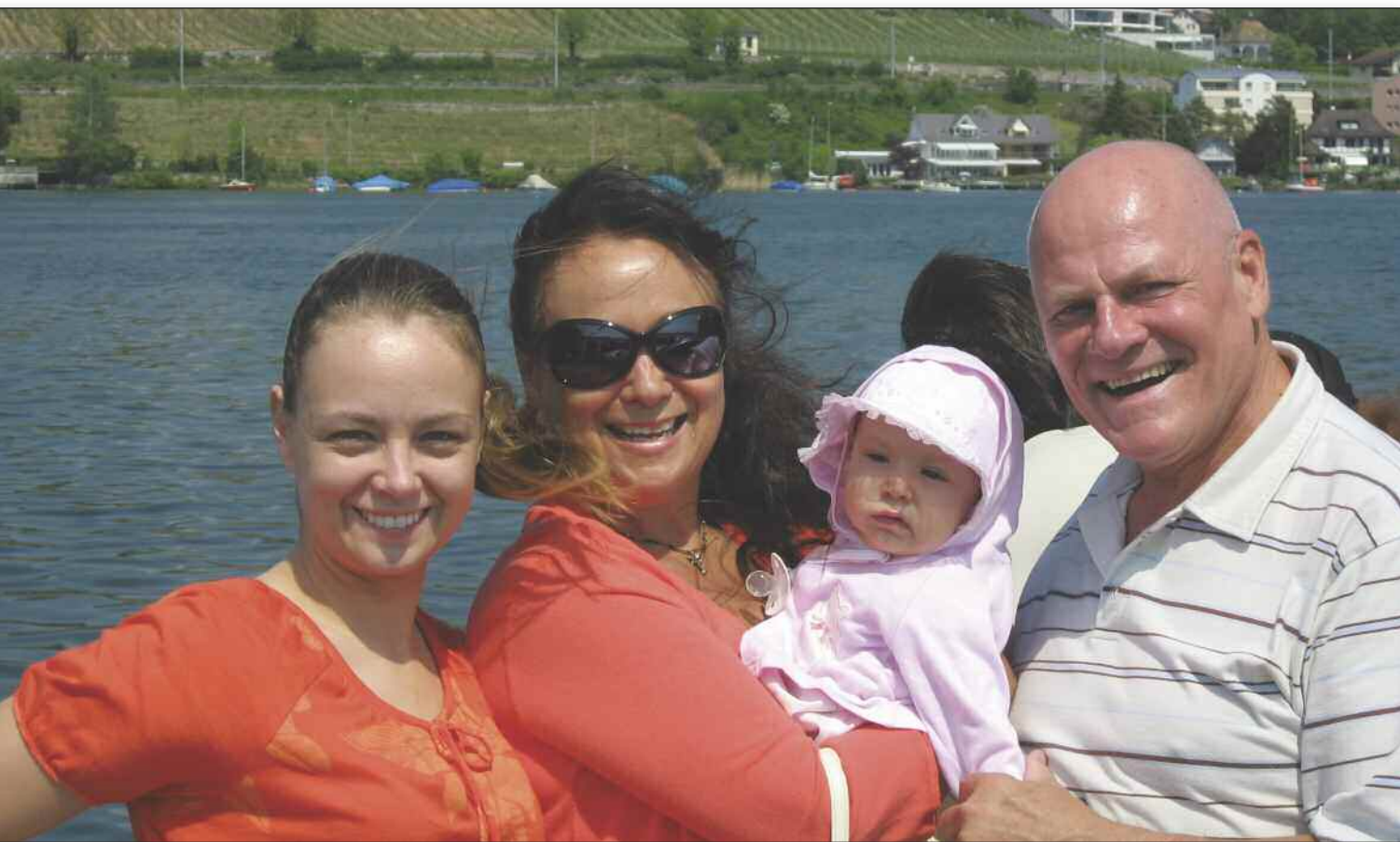
On September 11, 2001, all of Loma Linda's efforts in the country came to a halt. Fortunately, at the time, no Loma Linda personnel were in the country during terrorist attacks on the United States. But in 2004, Loma Linda University was again heavily involved in Afghanistan. Today, Loma Linda is exploring future contracts to assist the Afghan people.

A local merchant stands watch over his fruit and vegetable stand in Kabul. Such local commerce is a good indicator that life has become more routine. Traffic jams, a reality of city life, are also fairly routine. ▼▲



Mohammad Malek, a 19-year-old resident of Kabul, had both of his legs blown off in a land mine accident. In 2009, he came to Loma Linda University East Campus Hospital to be fitted for prosthetic limbs. Currently he attends high school in Kabul, placing second in his class. He also trains regularly, competing in local competitions for swimming and running. He is the subject of an upcoming documentary, produced by the LLU office of university relations. ▲





Journey back to health

A physician travels from Germany to Loma Linda for proton therapy

Loma Linda—is that a type of medicine? thought Arndt Hallmeyer, a physician living in Berlin, Germany, when he first heard the name.

Dr. Hallmeyer, 57, had spent his entire professional life in health care—first as a surgical nurse and later as a physician working in the field of occupational medicine.

Healthy and strong, Dr. Hallmeyer was married to Cornelia, who was also a physician. He had never been a patient; he'd never even had a physical.

The Hallmeyers were proud of their daughters: Birgit, vice director of a German international bank in Frankfurt; Sandra, an orthodontist; Sigrun, a physician; and Christina, who was attending law school in Boston.

In 2000, Dr. Hallmeyer was months away from the age when his own father had passed away. "Looking back," he says, "I now see

that one of the reasons I had avoided having checkups was because I was terrified of being given the same diagnosis: prostate cancer."

During his medical career, Dr. Hallmeyer had treated prostate cancer patients and had participated in their surgeries. "I had decided," he says, "never to be examined by a urologist. I had convinced myself that if I did contract prostate cancer, that death would be the best option for me."

But he had underestimated the power of the love of Cornelia, his spouse, best friend, and champion. "When I first developed bone pain," he recalls, "Cornelia insisted that I undergo medical testing." As part of the testing Dr. Cornelia Hallmeyer searched for tumor markers; she also ordered a PSA test. "We were devastated to learn the results," he says. "My PSA* had reached 420."

And the Hallmeyers would soon receive more devastating news: adenocarcinoma had been discovered in four of seven of

During a vacation at Zurich Lake, Dr. Arndt Hallmeyer enjoys time with his wife, Cornelia, daughter Sandra, and granddaughter Eleni. ◀

his biopsy specimens.

Dr. Hallmeyer's darkest fears were now a reality. He became deeply depressed; he'd been a medical student when his dad had begun fighting prostate cancer. Its attack was devastating: the cancer eventually metastasized to his father's liver and kidneys. "I couldn't help it—I began imagining the end of my own life," Dr. Hallmeyer says. "I grieved that I would not live to see my grandchildren, just as my father had not lived long enough to see his grandchildren."

That's when Cornelia took charge. "She counseled me just as she had her other patients," he says. "She sent my lab results to a leading urologist who began to search for the most experienced surgeon and the best hospital treating prostate cancer in Germany.

"I also began researching treatment options," he says, and that's when he first heard the words "Loma Linda."

"I happened to ask a well-known radiologist if he would recommend a surgeon to me. His answer was: 'You don't need a surgeon; all you need is Loma Linda! I'd never heard those words and had no idea what Loma Linda was. Was it a medicine?' Feeling numb and depressed, a powerful new medication was more than he could have hoped for. "No," his friend answered, "Loma Linda is the only place in the world where you can be healed."

Dr. Hallmeyer immediately called his daughter Sigrun, who was completing her medical residency and was living in Harrisburg, Pennsylvania. "Sigrun went to the Loma Linda University Medical Center website and read about the James M. Slater, M.D. Proton Treatment and Research Center," he says, "and within 15 minutes she was convinced that I should travel to California for treatment."

Sigrun began making phone calls on her father's behalf. She also transcribed his medical records from German to English before faxing them to the Proton Treatment and Research Center.

On December 15, 2000, Dr. Hallmeyer had his first appointment at the James M. Slater, M.D. Proton Treatment and Research Center. He would learn that, as his daughter had sent his medical records to Loma Linda, the fax machine had added a speck to one of the pages. "So instead of a PSA test result of 436," he says, "it read 43.6. My doctor and the entire Proton Treatment Center staff were incredulous when they learned the actual number. I believe it was meant to happen; I'm convinced that no one comes to Loma Linda by accident."

"I received proton therapy," he says, "and because of my extremely high PSA, I received photon treatments, too. In addition,

I was given hormone blockers for even more safety."

During his eight-week stay, "Loma Linda,"—the words that had once sounded so unfamiliar and that had held only a brief glimmer of hope—began to take on a deep and lasting meaning for the Hallmeyer family.

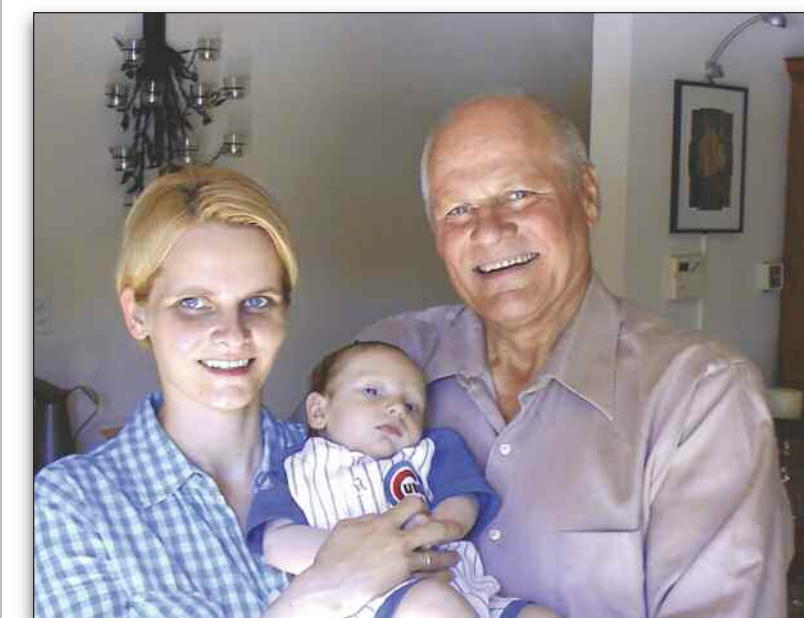
"When I traveled to Loma Linda," he says, "everything was foreign to me. I had no experience being a patient; I had never visited a doctor or a hospital as a patient. And I had no idea what to expect as I began living a daily life in the United States. I had to rent an apartment, a car, and purchase a phone."

Dr. Hallmeyer would discover that the treatments were painless and caused him minimal discomfort. "I scheduled my treatment times," he says, "to take place early in the morning or late in the evening and took day trips. I also hiked in the high mountains of the San Bernardino valley several times."

"My English at that time was very poor," he remembers. "But it was surprising to me to suddenly find many new friends. Each person I met in and around the medical center and in the Proton Treatment Center was very friendly and helpful to me. I never felt like a stranger or a patient—instead I experienced what it's like to return to a family after a long journey. Loma Linda University Medical Center became my second birthplace—a place where I restarted my life. I wasn't only cured of my cancer; Loma Linda is where I learned to live a better life."

As he completed proton therapy treatments and attended a support group Wednesday evenings, Dr. Hallmeyer experienced

Dr. Hallmeyer spends time with his daughter, Sigrun, and 3-year-old grandson, Hans. ▼



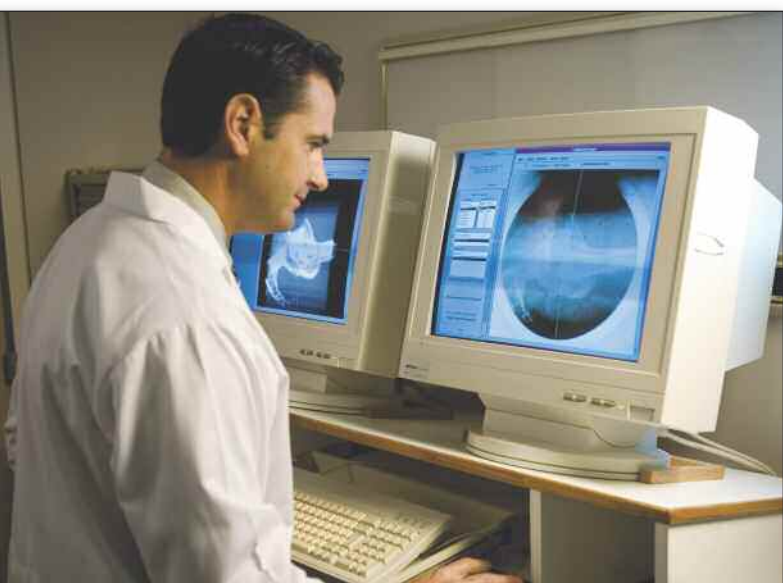


Patients receive proton treatments in one of three gantries in the James M. Slater, M.D. Proton Treatment and Research Center. The gantries can be rotated as needed to target a variety of cancers and other conditions.

the meaning of the medical center's motto, "to make man whole." He says, "For me as a physician and as a patient receiving lifesaving therapy, it was impressive to experience the benefits of the treatment and the care of the entire staff who don't only treat disease—I discovered that they also heal the patient's soul while sharing the special spirit that is Loma Linda."

Dr. Hallmeyer's treatments were completed on March 8, 2001; he would continue to take hormone blockers for one year. And in September 2002, his PSA results were undetectable.

"Now I'm doing fine overall," he says with a warm smile. "I found the road again, and I'm living a normal life, back to my daily work."



Dr. Hallmeyer was invited to join the proton center advisory council and attended his first meeting in May, 2001. The council is composed of former proton patients who work together internationally to promote the benefits of proton therapy and to raise philanthropic support for proton therapy research at Loma Linda.

Dr. Hallmeyer has continued to serve on the council and hasn't missed any of the bi-yearly meetings. In addition, he was invited to join the faculty of Loma Linda University School of Public Health as an adjunct professor for environmental and occupational medicine.

Back home in Germany, he has referred nearly 60 patients from Austria, Spain, France, and Poland to the James M. Slater, M.D. Proton Treatment and Research Center. "Many were prostate cancer patients," he says, "but there were also patients with brain tumors." One of the patients Dr. Hallmeyer referred to Loma Linda for treatment for lung cancer received treatment in 2004. Dr. Hallmeyer was invited to his 50th birthday celebration on June 5, 2010.

Dr. Hallmeyer is quick to smile, quick to share his story, and quick to urge everyone he meets, "If you ever have the chance, be sure to visit the sculpture of the Good Samaritan that is near the Loma Linda University Church, for it so beautifully captures what Loma Linda is about."

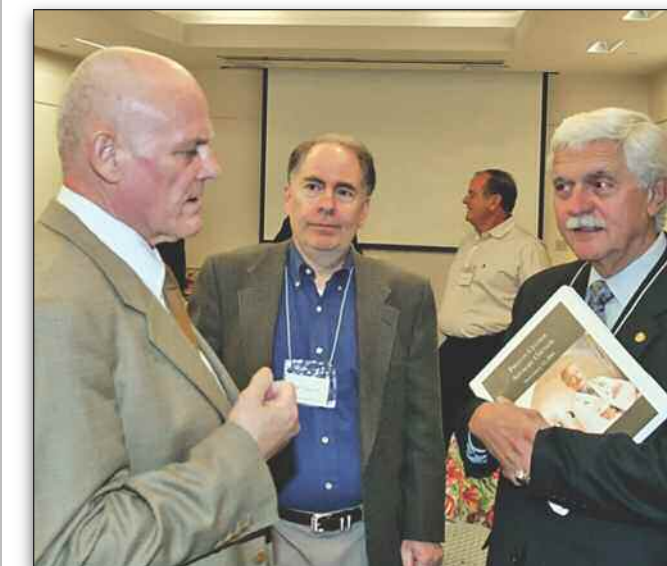
*Prostate-specific antigen (PSA) is a protein produced by

A proton therapy technician closely monitors the levels of proton therapy received by a patient. Proton therapy relies on precision to deliver heavier doses to treatment areas with little or no damage to surrounding tissues. ◀

cells of the prostate gland. The PSA test measures the level of PSA in the blood. These results are usually reported as nanograms of PSA per milliliter (ng/mL) of blood. In the past, most doctors considered a PSA level below 4.0 ng/mL as normal. In one large study, however, prostate cancer was diagnosed in 15.2 percent of men with a PSA level at or below 4.0 ng/mL. Fifteen percent of these men, or approximately 2.3 percent overall, had high-grade cancers. In another study, 25 to 35 percent of men who had a PSA level between 4.1 and 9.9 ng/mL and who underwent a prostate biopsy were found to have prostate

cancer. Source: National Cancer Institute, U.S. National Institutes of Health <www.cancer.gov/cancertopics/factsheet/Detection/PSA>.

During a Proton Center Advisory Council meeting, Dr. Hallmeyer (left) confers with fellow advisory members Steve Cohan (center) and Bob Marckini. ▶



Dr. Hallmeyer (far right) has served on the Proton Center Advisory Council since 2001. Here he appears in a group photo, taken during the spring meeting of the advisory council on May 13, 2010. ▼



Serving on the home front

Two student outreach programs impact Inland Empire communities

According to two recent graduates of the Loma Linda University School of Medicine (LLUSM), two community outreach programs involving LLU students are making a positive impact on the Inland Empire while also providing students with valuable, firsthand community health experience.

Although they share similar goals, the Healthy Neighborhoods and Healthy Communities programs differ in scope and focus. Marti Baum, MD, associate professor of pediatrics at LLUSM, directs the Healthy Neighborhoods project. The other program, Healthy Communities, is sponsored by the San Bernardino County Department of Public Health, but Dora Barilla, DrPH, director of community benefits at Loma Linda University Medical Center, was instrumental in getting it started in the county.

The popularity of the Healthy Neighborhoods program—which recruits medical students to get involved in eight separate projects designed to serve the health and social needs of children

in the San Bernardino area—prompts Dr. Baum to ask a rhetorical question.

“Why would a first- or second-year medical student volunteer to spend an hour and a half to two hours per week tutoring a community kid?” she wonders, “especially during such a busy time in their education?”

The question may be rhetorical, but Luke Strnad, MD, president of the LLUSM class of 2010, sees the answer in practical terms.

“There are two reasons why people choose to get involved,” Dr. Strnad observes. “First, there’s the question of what we get out of it, but second—and this is far more important—it’s the kids we’re helping. Seeing how much this means to them is a great motivator. These are kids nobody has given the time of day to before. They really appreciate what we do for them.”

Dr. Strnad—who recently moved to Boston for an internal medicine residency at Beth Israel Deaconess Medical Center—

worked in the special ops project, mentoring at-risk ninth-grade boys from chaotic or unsafe neighborhoods.

His classmate, Ashlee Hardesty Van Ginkel, MD, served the Healthy Neighborhoods program in two capacities.

“My first year,” Dr. Hardesty Van Ginkel remembers, “I was a mentor for HOPE, working with pregnant and parenting teens. The second year, I served as director of the Community Kids Connection after-school mentoring program for grade school kids, and also as director of the Healthy Neighborhoods program my sophomore year.”

“Volunteering was great!” she beams. “The first year was much more personal because I was a one-on-one mentor. The second year, I was in more of a leadership position. But to understand where these girls were coming from, and how different their lives are from mine, was a great experience. Hopefully, I’ll have a lot more empathy for understanding patients whose backgrounds are very different from my own.”

Like Dr. Strnad, Dr. Hardesty Van Ginkel recently headed to New England to continue her education. She was accepted into the psychiatry residency program at Brown University in Providence, Rhode Island. If she bears a bit of resemblance to Dr. Marti Baum, it just might be because they’re mother and daughter.

For her part, Dr. Baum notes that the Healthy Neighbor-

hoods program, which has been entirely student-started and sustained for the past 10 years, includes eight separate projects:

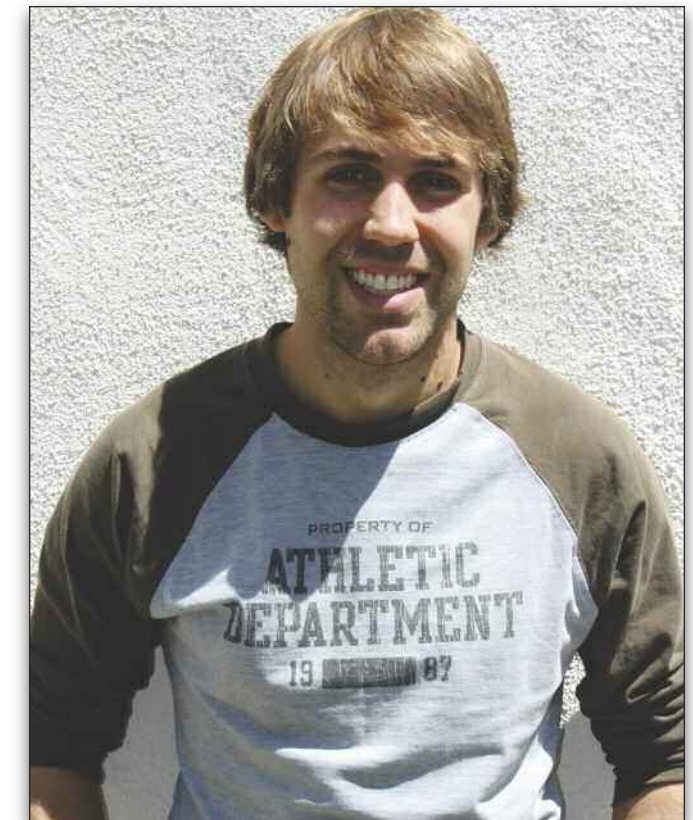
- ▶ Community Kids Connection (CKC)—a program started by J.C. Belliard, PhD, associate director for diversity at LLU, and his mother, to provide academic tutoring in English for Spanish-speaking children of the Inland Empire;
- ▶ Kids Rock—Sabbath afternoon programming oriented toward character-building, nature exploration, and singing for children;
- ▶ Community Parents Connection—an outreach to Inland Empire parents emphasizing English as a second language, computer skills, and health education;
- ▶ Students Teaching AIDS to Students (STATS)—a nationwide curriculum-driven program in which LLU students educate pupils from local high schools about the risks of HIV/AIDS and other sexually transmitted diseases;
- ▶ HOPE—a project providing one-on-one mentoring to pregnant girls and their boyfriends in San Bernardino schools;



“Why would a first- or second-year medical student volunteer want to spend an hour and a half to two hours per week tutoring a community kid?” asks Marti Baum, MD. Maybe it’s because of Dr. Baum’s contagious enthusiasm for community service. As director of the Healthy Neighborhoods program, Dr. Baum offers students a smorgasbord of community involvement projects designed to help children and adults in San Bernardino’s inner city. ◀◀

Healthy Communities, a city-by-city project, is sponsored by the San Bernardino County Department of Public Health. Dora Barilla, DrPH, MPH, director of community benefits at Loma Linda University Medical Center, played a key role in launching the program in the county. ◀

In his class president’s remarks at the 2010 LLUSM graduation service, Luke Strnad, MD, talked about the importance of giving back to the community. That’s exactly what he did during his medical education at LLU. During his first two years as a student at the School of Medicine, Dr. Strnad volunteered to help at-risk ninth grade boys in the Special Ops program. ▶



- ▶ Special Ops—a mentoring program that pairs male medical students with at-risk ninth-grade boys;
- ▶ CKC Music—a community orchestra and group music lessons for elementary through high school students; and
- ▶ Student Evening Clinic—a medical clinic on the campus of the SACHS-Norton campus in San Bernardino, serving the needs of very low-income and uninsured patients.

Healthy Communities was also started a number of years ago. According to Dora Barilla, DrPH, MPH, “The Healthy Communities movement isn’t about minor incremental change and improvements that only focus on programs, behavior, or attitudes; it is a paradigm shift that involves engaging communities in a vision

Ashlee Hardesty Van Ginkel, a graduate of Loma Linda University School of Medicine class of 2010, recently moved to Providence, Rhode Island, for a residency in psychiatry at Brown University. During her medical education at LLU, Dr. Hardesty Van Ginkel volunteered for two years in the Healthy Neighborhoods program. “It was great!” she beams. ▼

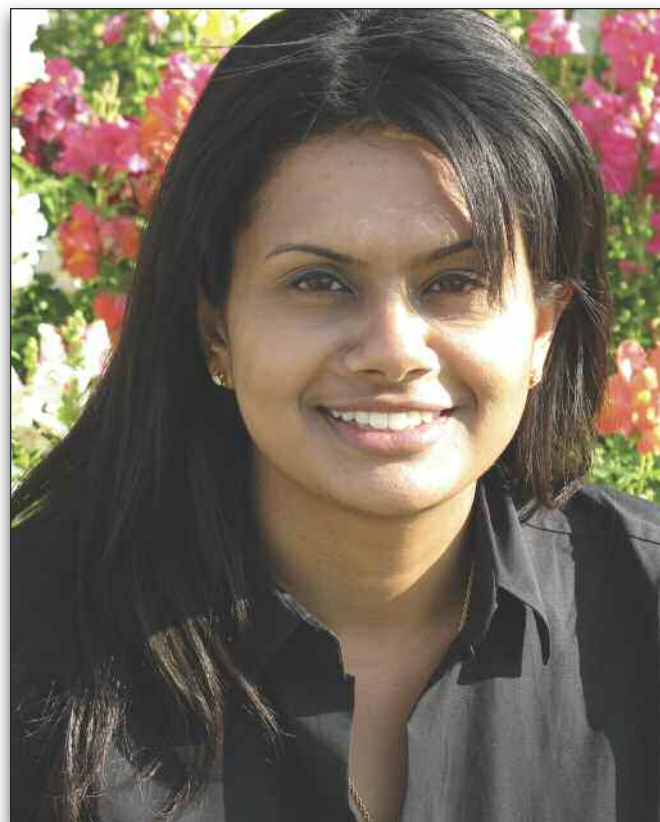


for a better and healthier future.” She continues, “This can’t be described in a detailed plan, but in a common passion for creating community where we all have a purpose and a sense of belonging.”

Dr. Barilla was an assistant professor in the LLU School of Public Health when she helped launch the program in San Bernardino County. “Healthy Communities is a city-by-city program,” she adds. “We work with leaders to help them improve the health of the city through multiple interventions.

“The program started in Chino and Fontana in cooperation with Randall Lewis, of Lewis Operating Companies,” Dr. Barilla describes. “We basically worked with the mayor to develop a vision for what Healthy Ontario should be, pulled together all the stakeholders, and provided them with the data, technical assistance, and the students. One of our first policy students is now the deputy director of Healthy Ontario.”

For Jolly Mannanal, MPH, a 2008 health policy graduate of Loma Linda University School of Public Health, community outreach is more than just a buzzword. As deputy director for the Healthy Ontario Initiative, Ms. Mannanal oversees a network of partnerships working together to elevate the health of one of Southern California’s fastest-growing cities. ▼



Community Kids Connection (CKC) Music students play their instruments during last year’s Christmas party. CKC Music started in October 2008 and has assisted more than 60 students in learning stringed instruments. ▲

The former student turned deputy director Dr. Barilla mentions is Jolly Mannanal, MPH, a 2008 health policy graduate of the School of Public Health. “One of our proudest accomplishments at the Healthy Ontario Initiative is our HAPPY (Health Access Partnership Project for Youth) pilot,” Ms. Mannanal says. “It is a truly beautiful example of the power of partnership.

“Without the involvement of our project partners,” she continues—invoking the names of Kids Come First Community Clinic, San Antonio Community Hospital, Kaiser Permanente,

Loma Linda University Children’s Hospital, the City of Ontario, and other partner organizations—“uninsured children living in Ontario would be hard-pressed to find the preventive and specialty care they need.”

In “Planning Strategically for Community Health,” a colorful 24-page brochure produced by the initiative, mayor Paul S. Leon observes that “Ontario has grown to be an economic leader in Southern California and as such is committed to making the critical link between health and long-term economic growth.”



BY JAMES PONDER

With eyes facing the camera and ears acutely tuned to the sounds of a village pig rummaging in the bushes a few feet away, James and Sarah Appel take a moment to relax from their responsibilities in Bere, Tchad. The couple met at Bere Adventist Hospital where Dr. Appel served as medical director. While there, he met Sarah Anderson, a registered nurse from Denmark. In a real-life Hollywood ending, the couple fell in love and got married. ◀



Deferred mission appointment service isn't just for singles. Seth Lukens, MD, an LLUSM graduate who recently completed a family practice residency at Hanford Community Medical Center in California, is taking his entire family—wife Yemina, daughter Havah Sarah, and infant son Noah Seth—to Maluti, in Lesotho. ▲

Deferred mission appointment program

Steering young physicians and their families toward mission service

You can tell by their faces that Loma Linda University graduates serving the people of the world through the deferred mission appointee (DMA) program of the Seventh-day Adventist Church are enjoying themselves.

Whether it's Bill and Trixy Colwell grinning from ear-to-ear in front of Buea Adventist Hospital in Cameroon, Mark and LeEtta Sandoval enjoying a day at the beach with their kids in Trinidad, or James and Sarah Appel relaxing at sunset in Tchad while a huge pig rummages in the bushes 15 feet away, these LLU graduates are getting firsthand exposure to nuances of the international scene that the average American never sees. And because they're participants in the DMA program, the bill for their entire medical or dental school tuition will be fully paid by the conclusion of the DMA service in approximately 10 years.

"That's considerably less time than it takes the average LLU graduate to pay off his or her education," notes retired pastor Don Roth, on-campus representative of the General Conference (GC) of Seventh-day Adventists and director of the DMA program. "I've talked to some graduates who are still paying 15 years later."

The DMA program works like this: Sometime during their medical or dental education at LLU—perhaps at registration, perhaps in a chapel service—students learn about the program and decide to investigate. In many cases, it's directly hearing Pastor Roth, or talking with Karen Porter, his associate.

"I give a five-minute presentation at the new student orientation for the Schools of Medicine and Dentistry every year," Pastor Roth reports. "Plus, we have a brochure packet we give to prospective students, explaining about the program."

Maybe the opportunity to serve overseas excites their interest, or maybe it's the offer of free tuition; quite often, it's both. Regardless of initial motivation, students who are seriously interested are invited to apply. In talking with Pastor Roth, they learn how the program works.

"The student is fully responsible for his own bill," Pastor Roth explains, "but the moment they go overseas, we begin the process of amortizing the bill in set amounts each year. For medical school, it's \$25,000 per year. For dental, it's \$30,000. A term of service for a family is five years, with a one-month leave to the appointee's home every year. Right now, it takes approximately 10 years to amortize a student's entire tuition."

One of the things Pastor Roth tells prospective program participants is that not every medical specialty is needed in the mission field. "We're looking for doctors and dentists whose services are acutely needed overseas," he says. "Primary care physicians—family medicine practitioners, internists, pediatricians, general surgeons, and obstetrician/gynecologists—are always in demand. Some of the more esoteric specialties, however, are difficult, if not impossible, to place in a mission context."

Don Roth first became involved with the program as a trouble-shooter in the 1970s.

"Back when I was an associate secretary of the GC, we terminated the DMA program for a short time because it wasn't working as planned," he discloses. "But a colleague and I revised the policy in 1978, and it's been working fine ever since."

The way the program was structured in the pre-Roth era called for the GC to pay for a student's education while he or she was going to school in exchange for a promise to serve the church overseas after graduation. Unfortunately, it left the door open for a few individuals to default on their obligations and leave the church with the entire cost of their education.

"Someone decided to default on his commitment to serve overseas," Pastor Roth recalls. "There were actually 10 of them who refused to go after we paid for their medical school. One guy told us, 'I'm no longer a Seventh-day Adventist, so I don't have any obligation to you.' Thanks to the 1978 revision, however, nobody has defaulted since."

The DMA program is quite popular among LLU students. "Currently," Pastor Roth reports, "there are 60 people in the pipeline—either students in school, in a residency program, or a post-graduate fellowship. There have been people who have made mission service their entire career after working in the DMA program, but we have no statistics on that."

Although the DMA program has existed for more than 50 years, it wasn't always so popular with students.

"When I first came here 20 years ago," Pastor Roth remembers, "my competition initially came from the United States military, which offered medical students a living allowance stipend, as well as reimbursement for their medical school expenses. It took a couple years, but Gordon Hadley received several large donations from friends of the LLU School of Medicine, and set up a fund with about a quarter of a million dollars in it, and we finally got authorization for DMA students to receive a living allowance while they're here. It amounts to \$1,100 or \$1,200 a month, given to them by check every month. Of course, if they default on going overseas, they'll have to pay it back."

Pastor Roth is grateful for the high level of support the program continues to receive from university administration.

"One of the big factors in the current DMA program's success is Dr. Richard Hart himself," he says, referencing the energetic and mission-focused LLU president. "He is personally acquainted with all the Adventist hospitals in Africa. He knows the hospitals, keeps up with them, and knows what their needs are. It's amazing to me that he is able to administer this university and stay involved in missions as much as he does."

"Another big part of our success here is Karen Porter," Pastor Roth continues. "She and her husband served overseas 14 years in Sri Lanka, Russia, and the Middle East. I had the privilege of recruiting them for overseas service while I was at the GC."

And although he'd never say it, the very youthful, 83-year-old Pastor Roth is himself a driving force behind the DMA program's success. At last year's alumni banquet, he was recognized by the LLU School of Medicine Alumni Association for outstanding service to the students of Loma Linda University.

But perhaps the biggest single reason for the program's long-term success is the fact that it continues to meet the needs of medical students, the underserved people of the world, and the Adventist Church.

"During the 16 years I have been dean of students in the School of Medicine," notes Henry Lamberton, PsyD, "I've had the privilege of getting to know students who enroll in medical school with the specific goal of preparing for a life of medical missionary work. Watching them retain this commitment, and being able to stay with them as they finish their education and go into overseas service, has been one of the most rewarding aspects of my job."

Global service scholarship

Opening a world of possibilities for Loma Linda University students

An endowment fund initiated in 2008 allows graduates of Loma Linda University to get a taste of international outreach through the global service scholarship (GSS) program. According to Christi Carlton, MPH, program coordinator for outgoing staff and volunteers at the LLU Global Health Institute (GHI), the scholarship allows alumni to serve overseas in volunteer positions while receiving educational loan payment assistance.

"This program is available to LLU students—except those in the Schools of Medicine or Dentistry," she explains. She notes that dental hygiene students are the exception to the exception. "They are eligible for the scholarship program, even though they are students of the School of Dentistry."

Ms. Carlton goes on to explain that the reason medical and dental students are excluded is because they're eligible for the deferred mission appointment program offered by the Seventh-day Adventist Church.

Any alumnus of Loma Linda University who graduated within the past decade can apply to the GSS program. Current students are asked to make their application during their final year at



LLU; the application deadline is the first Friday in December.

The way the program works is simple. Students who wish to apply fill out a questionnaire with information about themselves, their spouse (if married), their education, professional goals, previous overseas service (if any), location where they'd like to serve, personality characteristics, and financial situation.

The form is evaluated by the General Conference representative's office and by GHI. The two organizations consider whether the candidate's qualifications fit the needs in the location he or she selected, or in a similar place.

After a match has been found between an applicant's preferred location and an Adventist facility in need of someone with the applicant's qualifications, the applicant submits to a panel interview to further focus individual qualifications in light of the needs of the overseas facility. Ms. Carlton reports that applications are accepted in the fall quarter of each academic year and assessed during the winter quarter. Up to three scholarships per year are awarded during the spring quarter.

Once accepted into the scholarship program, the candidate finishes his or her educational program at LLU—continuing to pay for it as before acceptance—and makes plans to serve overseas at the beginning of the specified term, which may last anywhere from six months to three years.

"Our global service scholarship program allows graduates from six of our professional schools to enjoy the privileges of working abroad after graduation by covering their educational debt payments," explains Richard H. Hart, MD, DrPH, president of Loma Linda University. "This follows the pattern the deferred mission appointment program has provided our medical and dental students for years."

Dr. Hart continues, "The period after graduation is the most flexible and allows young graduates to develop global expertise before settling into their careers. This international service confirms a

Erin Abston, RDH, a 2008 graduate of the dental hygiene program in the LLU School of Dentistry, assists in a dental procedure at Antananarivo Adventist Dental Clinic in Antananarivo, Madagascar. Ms. Abston served there as part of the global service scholarship program at Loma Linda University. ◀



Nathan Lindsay, MPH, a 2010 graduate of the LLU School of Public Health and recipient of a global service scholarship, enjoys a relaxing moment with Emily Clotaire, administrator of Hopital Adventiste d'Haiti. Mr. Lindsay has visited Haiti twice in the past, and began a one-year commitment in June 2010 to serve as assistant administrator of the facility. ▲

commitment to the world's needs and provides valuable cross-cultural understanding for the rest of their lives."

Within the current program, the candidate is authorized to receive educational loan payment assistance of up to \$1,000 per month. The exact amount each candidate receives is based on an assessment of individual debt and related financial factors.

"Right now," Ms. Carlton observes, "we don't have the funds to amortize their whole education. The way the plan is structured now, they're only allowed to serve overseas for a maximum of three years at a pre-set amount. I think eventually we'd like to have it work more like the deferred mission appointee program, but at this time, we still need to build up the endowment fund that supports the GSS."

Ms. Carlton points out that monies for the GSS endowment fund come from donations from the various schools of LLU as well as subsidies from the Seventh-day Adventist Church.

"If anyone would like to make a difference in the world by sending a recent LLU graduate to the mission field, they should get in touch," Ms. Carlton says.

"Right now, we have six people who have actually been awarded a scholarship," she adds. "Two of them have already served their term of duty and returned. Three are overseas as we speak, and one more is scheduled to leave Loma Linda this month or next."

The two GSS participants who have already finished their terms of duty are Erin Abston and Deanna Harriss. Ms. Abston, a 2008 graduate of the dental hygiene program in the LLU School of Dentistry, went to Madagascar where she assisted in a wide variety of procedures at Antananarivo Adventist Dental Clinic.

Ms. Harriss, a 2007 graduate of the same program, traveled



Tina Pruna, MPH, a 2009 School of Public Health graduate, improvises an interaction with a youthful patient at Valley of the Angels Hospital near Tegucigalpa, Honduras. Ms. Pruna is there as a participant in the global service scholarship program. She plans to return in March 2011. ▲

to the island of St. Vincent in the Caribbean where she served at the St. Vincent Adventist Dental Clinic.

Claudine Caballero Stevenson, MPH, a 2005 LLU dental hygiene graduate and 2007 School of Public Health graduate, is currently serving at Sir Run Run Shaw Hospital Dental Clinic in Hangzhou, Zhejiang Province, China.

Tina Pruna, MPH, a 2009 School of Public Health graduate, is assisting in the development of public health programs at Valley of the Angels Hospital near Tegucigalpa, Honduras. Her term of duty expires in March 2011.

LaRae Papendick, MPH, a 2008 School of Public Health graduate, flew to Senegal in July 2009 with her husband, Boaz, also a 2008 School of Public Health alumnus. Although Boaz isn't part of the GSS program, he and LaRae are developing a health worker training program in that African nation. The couple's 3-year-old son, Bashir, accompanied his parents.

Nathan Lindsay, MPH, a 2010 graduate of the School of Public Health, has visited Hopital Adventiste d'Haiti twice in the past. He recently boarded a plane to Port-au-Prince, Haiti, to begin serving a one-year commitment as assistant administrator of the hospital.

"But that's not all," Ms. Carlton says. "We've got two or three more completing the application process right now."

"We're very excited about this program," she concludes. "Albert Einstein said, 'Only a life lived for others is a life worthwhile,' and serving in the GSS is definitely a way to demonstrate our commitment to the lives of others."

Individuals interested in learning more about the global service scholarship program are invited to go online at <www.llu.edu/central/sims/deferred.page> or call the office of the General Conference representative at (909) 558-4563.



A passion for service

LLU affiliate SACHS–Norton celebrates its 15-year anniversary

A Catholic church tucked in deep among San Bernardino neighborhoods just five miles from Loma Linda University was the original site of the LLU-affiliated Social Action Community Health System (SACHS). The mission of SACHS was to provide health care and other services to the underserved in the local San Bernardino County. Original meetings of SACHS supporters trace back to the 1960s, but it wasn't until 1995 that SACHS found its own independent facility, thanks to

the search effort of previous dean of LLU School of Public Health Richard H. Hart, MD, DrPH, now president of Loma Linda University and its various entities.

Dr. Hart seized the opportunity for LLU to purchase a clinical space that had been part of Norton Air Force Base, and this site opened in October 1995, almost 15 years ago, as SACHS–Norton. Kenneth Hart, MD, served as the first director of this 50,000-square-foot facility. At the time, he only had one

Cathy Tan, MD, checks the heartbeat of less-than-2-week-old Victoria Alvarez in the pediatrics clinic at SACHS–Norton. ◀

coworker at SACHS–Norton in his front desk person, who would check patients in, run them back to do their vitals, see them to a patient room, run back to the front to take calls, and so forth.

Over the next few years, SACHS–Norton's clientele dramatically grew from around 1,600 patients in 1995 to around 37,000 patients in 2009. In 2010, services now include primary care, obstetrics/gynecology, pediatrics, dental, behavioral health (including marriage and family therapy, parenting apart classes, substance abuse therapy, and psychiatric counseling), physical therapy, speech therapy, occupational therapy, a WIC program (women, infants, and children), La Escuelita (adult English as a second language classes and community meeting spaces), the CAPS program (volunteer tutoring by LLU medical students), and two food pantries including the separately run Helping Hands Pantry.

Of its 50,000-square-foot space, SACHS–Norton currently occupies 43,000 square feet, with additional space in its two satellite locations at the SACHS–Arrowhead and SACHS–Frazee clinics. LLU students from nearly every health care discipline may be found participating in rotations in SACHS–Norton's various departments on any given day. A walk through the SACHS–Norton facility reminds the visitor of the facility's sheer size, stretching on past doorway after doorway.

Following SACHS–Norton's abundant success, Nancy Young, CEO of SACHS, shares how the last 18 months have been the most difficult of her nearly 10-year tenure at SACHS. "We've always had our struggles and challenges," reflects Ms. Young, "but over this past year and a half, we almost daily have patients come to us who were insured last month, but have lost their jobs since."

In the past, the SACHS management team would take turns paying for individual patients' care in order to not turn people away, but recently the need has become so great that SACHS has developed a Blessings Fund to help these patients.

"We have a cost center number for the Blessings Fund, and 100 percent of what is donated goes into the fund and straight to providing primary care services to those in need," explains Ms. Young.

Ms. Young notes that, when SACHS team members go out into the community, they find that people are looking for funds like the Blessings Fund, because they rightfully want to know that their money is going specifically to uninsured individuals. "There are no administrative costs withdrawn from Blessings Fund donations," adds Ms. Young. "If you were to hand me a \$10 bill today, that \$10

bill goes directly towards a patient's care."

Currently, SACHS representatives visit events throughout San Bernardino and beyond to share what SACHS offers, but Ms. Young remembers that when she first came here, she was surprised by how few people in the Loma Linda community were even aware of SACHS. "I really made it a point to get the word out about SACHS in the Loma Linda community, because the people who are in our Loma Linda family are some of the most incredible people," reflects Ms. Young.

Through the years, employees and students across the university and medical center have provided tremendous assistance to SACHS. "We have many friends in general counsel and medical staffing, as well as several other departments throughout Loma Linda," notes Ms. Young. "Some make a point to stop by regularly with cars loaded full of groceries for our dried foods pantry."

Before coming to SACHS, Ms. Young had never worked in an Adventist setting. She was raised Irish Protestant and has had a lifelong passion for service, so she was thrilled to work for LLU and find herself in a mission-oriented community.

"I was amazed when I came here 10 years ago," Ms. Young shares. "Adventists tend to be extremely mission-hearted, and it's wonderful to see how this trait is ingrained through the Adventist family. I tried to encourage this type of energy in my own family, and both of my children chose LLU School of Medicine."

"And my grandchildren," continues Ms. Young, "I always keep saying to them, 'Who did you help today? How did you make a difference today?' They're teeny-tiny, but that's really what has to happen to cultivate that commitment to service. This commitment is scriptural; it's every part of who we are."

Through SACHS' commitment to service, it has become the safety net for primary care in San Bernardino County. On a daily basis, SACHS receives referrals from emergency rooms at surrounding hospitals, and it ultimately aims to meet patients at the primary care level so that patients avoid the astronomical costs of an emergency room visit.

These costs are avoided through SACHS eligibility coordinators (ECs). SACHS–Norton staffs a crew of ECs where typical medical practices would have a receptionist. However, this group is responsible for more than checking in patients. ECs are the first people patients speak to when they contact SACHS, and they must be fluent in the various qualifications and guidelines for programs offering health care funds for the uninsured.

If a patient enters SACHS without insurance, an EC checks if this patient qualifies for Medi-Cal health care coverage through the state of California, which the patient would receive that day, the rest of the month, and the next month. Meanwhile, Medi-Cal



Ken Hart, MD (right), first director of SACHS–Norton when it opened in 1995, and Mike Caruso, MD, consult with a Loma Linda University student doing a rotation at SACHS–Norton; students from nearly every LLU health discipline complete rotations at SACHS–Norton. ▲

would send the patient an application for Medi-Cal coverage. For patients with Medi-Cal, a sliding-fee scale is applied to costs based on the patient's income level; a \$120 office visit could slide down to \$60, which would slide down to \$45 for follow-up appointments.

"As you can imagine, with this much Medi-Cal work and work with the underserved, there is a huge loss margin in the SACHS budget," notes Ms. Young. "So we are in the process of applying to change SACHS into a federally qualified health center, or an FQHC." This transition would result in the federal government providing subsequent compensation for any Medi-Cal or Medicare work done at SACHS. This federal support would allow a much-needed expansion of SACHS services in order to provide for the large uninsured population in San Bernardino County.

"We plan to submit our application this July or August. It will be a while before we hear back, and we are prayerful," informs Ms. Young. "We feel very blessed to serve so many individuals in our community. This is our passion—and we're good at it."

SACHS–Arrowhead satellite

Off the freeway through narrow residential lanes, SACHS–Arrowhead is located on a small commercial strip in the heart of a San Bernardino neighborhood. Cars are a little more beat-up here and lawns overgrown—not as green.

Entering the SACHS–Arrowhead clinic, the lobby is divided in two. One side has sleek cushioned chairs and a lamp with its base still covered in cellophane; the other side has rows of aged beige plastic chairs with metal arm rests.

Yadira Corona, medical assistant (MA), steps out from the front office. "How do you like the wood floor?" she asks. "As you can see, we're in the middle of remodeling. The patients like it. It makes you kind of feel like you're getting better treatment, you know."

SACHS–Arrowhead opened within a year of SACHS–Norton back in 1996. Currently, it sees about 30 patients per day with Anita Adorador, DNP, as the single provider along with two MAs. At SACHS–Arrowhead, primary care as well as obstet-

rics/gynecology services are provided for all age groups by an entirely bilingual staff.

After a busy morning, Dr. Adorador leaves the clinic to attend her sick son at home, so Ms. Corona shares about her boss, "Our provider really goes out of her way to help patients. She's sometimes on the phone for an hour just trying to investigate and talk to specialists so that a patient can receive better care."

Mornings tend to be the busiest time at SACHS–Arrowhead. The clinic is open four days a week starting at 7:00 a.m. This time was chosen due to safety measures taken in this San Bernardino community. Patients simply don't show up near sunset. "Like around October when it's already dark by 4:00 p.m., we don't really have any patients come in the afternoon," explains Ms. Corona.

Appointments at SACHS–Arrowhead are primarily walk-ins. When there were scheduled appointments, about 70 percent of these were "no-shows." Patients sometimes call in just before walking over to the clinic, which works especially well with sick children.

"It's kind of funny," Ms. Corona adds. "When they get here, they often see someone they know. We'll be seeing the mom, the dad, the kid, the friend, the sister-in-law—everybody. They'll call out, 'Hey! You're here?!'"

Ms. Corona concludes, "As long as they know we're here, and they feel better with their family and friends coming here, it's great."

SACHS–Frazee satellite

Yasmin Chene, MPA-C, in a patient room at the back of the SACHS–Frazee clinic, pointed out a window to a small church. On the side of the church, there was a sign reading Community Center and a man piling up weeds into a USPS bin.

"That church," Ms. Chene began, "is the Catholic church where the original SACHS was based. This was years ago when Dr. Richard Hart was a resident. They would hold clinics there during the week when there weren't church services. It's interesting how things have changed; back then, there was not as much privacy—only curtains set up as patient rooms."

Later on, in 2004 the City of San Bernardino remembered SACHS and asked the organization to offer services in the current building of the SACHS–Frazee clinic. The building had been given to the city by the federal government, and in turn, the city gave the building to SACHS so long as health care services were provided.

The Catholic church behind Frazee had since been turned into a city community center where clothing and food are distributed. "It's kind of nice having this center next door, especially since we know they like us and invited us back here," shares Ms. Chene.

Similar to Dr. Ken Hart almost 15 years ago at SACHS–Norton, Ms. Chene served as the first director of Frazee with one

assistant. While only having office hours two days each week, the two provided care to around 40 patients per month. Six years later, that same assistant, Rosa Lazaro, MA, continues to work with Ms. Chene. The staff has grown and is still entirely bilingual, and SACHS–Frazee now sees approximately 200 patients per month during those same two days per week.

Ms. Chene also serves as an LLU faculty member, and other LLU faculty physician assistants (PAs) have joined her as providers at Frazee. Overall, the PA program at LLU has been very supportive of the clinic.

"The PA program sends providers and student volunteers to Frazee," states Ms. Chene. "Frazee has become a major part of the community service for the program."

Like SACHS–Arrowhead, SACHS–Frazee has its own small lab, and many immunizations are kept in stock for a children's vaccination program. "We have a person who comes to Frazee just to work for that program," adds Ms. Chene. "That's one of our strengths here, serving the children."

"We're the newest addition to SACHS, and we are just small, only two trailers joined," notes Ms. Chene. "But we have been certainly blessed by the patients we see and the support Loma Linda and other donors provide us. These are what keep us going."

To contribute to the SACHS Blessings Fund, please contact Nancy Young at (909) 382-7190 or <nyoung@llu.edu>.

Nancy Young, CEO of SACHS, stands in the SACHS–Norton pediatrics waiting room that was renovated entirely through donor support. ▼



Loma Linda University Behavioral Health Institute celebrates grand opening



The falling ribbon signifies that Loma Linda University's new Behavioral Health Institute is now officially open. Grand opening ceremonies for the 46,000-square-foot facility were held on Thursday, April 8, 2010. Taking part in the ribbon-cutting ceremony are (from left) William Murdoch, MD; Richard Hart, MD, DrPH; B. Lyn Behrens, MBBS; Ruthita Fike, MA; Jill Pollock, RN, MFT (partially visible); Mark Reeves, MD; and Beverly Buckles, DSW, LCSW. The facility will bring together a number of mental health disciplines, combining academics, research, and clinical practice.



Robert Frost, MBA (left), director of the LLU Foundation, talks with another attendee outside the new facility.



The entry staircase to the new LLU Behavioral Health Institute greets visitors. The new facility is located just east of the LLU Behavioral Medicine Center. *By James Ponder*



The Loma Linda mission group lived on this boat for a week while traveling down the Rio Negro of the Amazon rainforest.

LLU students travel to the Amazon

By Patricia Thio

It is one of the most captivating destinations on earth. The Amazon jungle represents more than half of the planet's remaining rainforests and is home to the largest collection of living plant and animal species in the world. People also inhabit the area. Approximately 350 indigenous and ethnic groups dwell in the Amazon basin, living off agriculture and wildlife.

"I don't want to live in the city," says Antenor Anicassio, a resident of the Amazon community of Sobrado. He has heard stories from the city of 13-year-old boys robbing people and taking drugs. "God forbid that my child be in that situation. That would be very sad," says the father of seven. "That's why I'm here. I want to educate them and teach them how to work."

The Anicassio family lives a simple life, surrounded by nature, while growing many different types of agricultural crops. In addition, Mr. Anicassio is a river guide, leading tour groups through the rainforest.

However, living in this small village can take a toll on the

family. Mr. Anicassio has been suffering from stomach pain and a fever for the past few days, making it very difficult to work on his plantation. It's a two-hour boat ride to the nearest doctor and, even worse, it costs 25 Brazilian reais in diesel—equal to about US\$15, more than they can afford unless it's an emergency.

"It's easy to sit back and say sorry," says Fabio Maia, director of LLU Student Activities, who helps plan the Amazon mission trips. "But when you see that you can actually make a difference, it's impossible to just sit back and not do something. That's why we're here—to try to make a difference in their lives."

Loma Linda University ventures into the waters of the Amazon about twice a year. During the trip, team members live on a boat, traveling down the river as they stop at a different village each day to set up health clinics. For many people living in these small communities, it's the only time they see a doctor.

"The project developed by Loma Linda University is particularly dear to me," states Consul General José Alfredo Graca Lima, of Brazil. "It is directed to a part of the country that is in need. People there are still living in difficult situations without necessary resources. In many cases, the public authorities are not in a position to help, so this help from abroad is very important and crucial to these communities."

Fortunately for the Anicassio family, LLU visited Sobrado to set up a health clinic. It had been a year since a "health boat" last visited this community. The LLU physician gave Mr. Anicassio health advice along with medication—Tums and Ibuprofen.

In the evenings, the LLU team will often present a health program to the villages. "What we really specified was the importance of cleanliness and hygiene," shares Sharlene Gozalians, a public health student, "to reduce the number of infectious diseases or risk factors that will cause bigger problems in the end."

On this last trip, LLU focused its public health efforts by building an eco-friendly latrine in Igarape Acu. Through the heat, rain, and mud, the students worked to make the project a success for the community.

"I'd like to thank Loma Linda for everything," says Francisco da Silva, the community president at Igarape Acu.

Beyond health care, the mission group members also held children's programs where they told Bible stories, played games, offered face painting, and a number of other activities.

A few days later, the team revisited Sobrado, where Mr. Anicassio had been treated, following up to see how he was doing. Apparently the Tums and Ibuprofen were all he needed.

"For us to see a doctor, it's very difficult," explains Mr. Anicassio. "So for us, it's really good that you're here. It's God who sent you here for us."

Walter's Children's Charity Classic raises \$200,000 for pediatric ophthalmology

By Nancy Yuen

Community members, corporations, and friends of Loma Linda University Children's Hospital enthusiastically responded to the theme of the 14th Annual Walter's Children's Charity Classic, "Helping children see the future."

The event, held on November 4, 2009, at Victoria Club, in Riverside, resulted in a \$200,000 donation benefiting pediatric ophthalmology at Children's Hospital.

As a result, children with retinal dystrophies will soon be able to receive sophisticated electrodiagnostic ophthalmology testing with the purchase of an electroretinogram (ERG) machine. The ERG machine will be the first of its kind in the Inland Empire; pediatric patients requiring testing with this specialized equipment now travel to Los Angeles, and wait up to six months for an appointment.

"We are thrilled," says Zareh Sarrafian, MBA, administrator, Children's Hospital, "to be able to purchase an ERG machine, providing vital care to children in our region."

"The generous gift from Walter's Children's Charity Classic," he continues, "will make a significant difference in their health and will help hasten their treatment."

Over the past 14 years, Walter's Children's Charity Classic has raised more than \$2.6 million for Children's Hospital.

These funds have supported cardiac intensive care and the neonatal intensive care units, the pediatric intensive care unit, the child abuse protection and child abuse prevention centers, the emergency department, the craniofacial specialty team center, hematology and oncology, acute care, pediatric diabetes center, and the extra corporeal membrane oxygenation (ECMO) program.

This year, Walter's Children's Charity Classic organizers Cathy and Steve Kienle received the 2009 Shirley N. Pettis Award from the Loma Linda University Children's Hospital Foundation for their commitment to improving the lives of children in the Inland Empire.

Their commitment to hosting an annual event benefiting Children's Hospital inspired the creation of the Children's Hospital Champions for Children program. The number of corporate champions has grown to 16, each hosting an annual fundraising event benefiting Children's Hospital with a gift of \$5,000 or more.

Plans are underway for the 15th Annual Walter's Children's Charity Classic, which will be held on November 1, 2010.



Steve (left) and Cathy Kienle (right) receive a plaque recognizing the donation in support of pediatric ophthalmology made possible through the 14th Annual Walter's Children's Charity Classic, while Jennifer Dunbar, MD, assistant professor of ophthalmology (center) looks on.

Sir Run Run Shaw Hospital receives second Joint Commission International accreditation

By James Ponder

The Global Health Institute (GHI) at Loma Linda University (LLU) is happy to report that a letter from Joint Commission International (JCI) contained some very good news for Sir Run Run Shaw Hospital (SRRSH), in Hangzhou, the People's Republic of China: its application for a three-year accreditation renewal was approved on December 23, 2009. The hospital first received JCI accreditation in 2006.

"We're so proud of our colleagues in China," says Jan Zumwalt, RN, MBA, associate director at GHI. "All the hard work put into the accreditation process by administrators and staff at SRRSH and LLU has come to a very positive conclusion. We're very happy to be a part of this!"

In announcing the successful culmination of the triennial accreditation process, Ann K. Jacobson, executive director of JCI, offered congratulations to He Chao, MD, president of SRRSH, and "all the other leaders and staff of Sir Run Run Shaw Hospital in achieving this recognition of your commitment to provide quality care on an ongoing basis."

In receiving the good news, Dr. He acknowledged that JCI accreditation is one of the most important quality indicators in the world of health care. However, he went on to challenge his staff and colleagues to keep moving forward.

That commitment to continual advancement is evident throughout the sprawling SRRSH campus. New best practices and evidence-based improvements are constantly bringing ad-

vances in patient care and services. The quest to continually improve was largely responsible for SRRSH becoming the first public hospital in China to receive JCI accreditation; it is also the motivation behind this latest survey success.

Four JCI surveyors—John Duffy, MD, physician team leader; Helen Cole, RN, MBA, clinical surveyor; Antonio Silva Perez, BE, MEE, facility surveyor; and Richard Sheehan, RN, MSN, nurse surveyor—were onsite at SRRSH from December 14 to 18, 2009.

At six and three months before the accreditation survey, experienced experts from Loma Linda University Medical Center, East Campus, and the LLU School of Medicine worked, by videoconference and in person, with their Chinese counterparts to ensure that every aspect of the SRRSH operation was excellent in all respects.

Daniel Giang, MD, vice president for medical administration at LLUMC, was in Hangzhou from July 2 to 23, 2009, helping the administration and medical staff identify the biggest areas of vulnerability during the then-upcoming JCI survey. Dr. Giang looked for potential concerns or problems related to physicians. According to Jan Zumwalt, his feedback was helpful to Virginia L. Mullen, RHIA, executive director of patient safety and reliability.

Ms. Mullen put together a mock survey team consisting of Mohammed Ghonim, PharmD, director of pharmacy services; Larry Feenstra, director of clinical engineering; and Joy Guy, MHA, clinical educator and staff developer.



It's thumbs up and big grins all around as members of the Sir Run Run Shaw Hospital (SRRSH) staff join colleagues from Loma Linda University and surveyors from the Joint Commission International (JCI) in celebrating their second successful survey by JCI. "All the hard work put into the accreditation process by administrators and staff at SRRSH and LLU has come to a very positive conclusion," says Jan Zumwalt, RN, MBA, associate director of the Global Health Institute.

Lifestyle and chronic disease discussed at Healthy People 2010

By Heather Reifsnyder

Loma Linda University School of Public Health hosted more than 550 guests March 9 and 10 for Healthy People 2010. This annual conference on lifestyle and chronic disease seeks to move forward the fight against the American health crisis caused by many more factors than inactivity and poor diet.

Thirty-eight speakers delved into lifestyle and chronic disease from diverse angles, raising ideas such as how technology can play a role in changing people's behavior, how health should be considered in every government policy from housing to economics, and the way in which families, neighborhoods, and schools should work together to influence childhood obesity. The information was thought-provoking, according to Maria Hardt, DrPH, an attendee who works at Redlands Community Hospital.

The two keynote addresses discussed the federal government's Healthy People 2020 objectives and the social determinants of health. The first was delivered by Jonathan Fielding, MD, MPH, MBA, MS, chair of the Secretary's Advisory Committee on National Health Promotion and Disease Prevention Objectives for 2020, and director and health officer at the Los Angeles County Department of Public Health. The second was delivered by Anthony B. Iton, MD, JD, MPH, senior vice president, Healthy Communities, The California Endowment, and

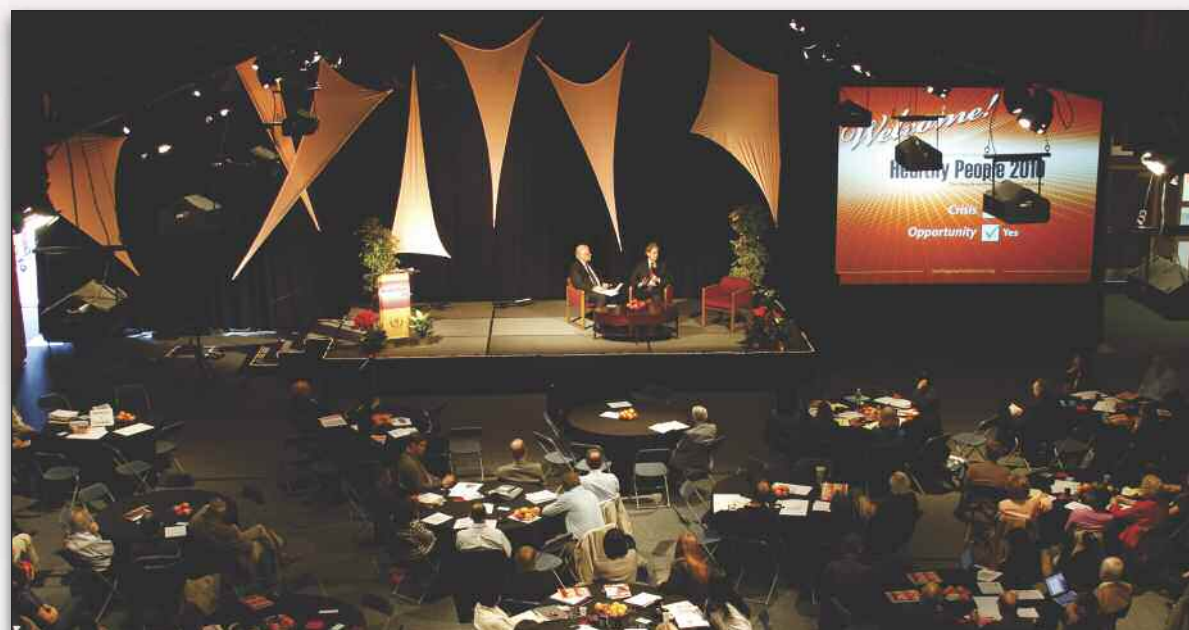
narrator of "Unnatural Causes," a documentary film series on inequality in health that aired on PBS.

"This is the right kind of conference," says Sheldon Greenfield, MD, of the University of California at Irvine about his reasons for speaking at the event, where he says people are interested in relevant topics and doing the right thing for patients.

During the conference, David Dyjack, DrPH, dean of the School of Public Health, presented the Loma Linda Award for the Promotion of Healthy Lifestyles to KCET—Los Angeles' PBS television station—in recognition of its educational programs promoting the best start in life for young children from 0 to 5. The programs are supported by community workshops for parents and caregivers. The award was established in 2009 and is given each year during Healthy People to recognize leadership and commitment toward making communities healthy and flourishing.

The conference is organized by Loma Linda University School of Public Health with the support of organizations including Kaiser Permanente, First 5 San Bernardino and Riverside, and presenting sponsor Loma Linda University Medical Center.

Following the Healthy People conference, on March 11, the School of Public Health's office of public health practice and workforce development put on a one-day workshop about community-based participatory research, in cooperation with the Association for Prevention Teaching and Research.



More than 550 people attended the conference to learn how to make communities healthier.



Twelve multi-ethnic disciples gather around Jesus in a painting titled "The Last Supper with Twelve Tribes" by California artist Hyatt Moore. The mural-sized image, which underscores the fact that people of all races and ethnicities are invited to the Kingdom of God, is on loan to the Del E. Webb Memorial Library on the campus of Loma Linda University. "God has created variety," Mr. Moore observes. "He loves all races. He has invited us all to the table."

Innovative mural in library lobby depicts Jesus in multi-ethnic context

By James Ponder

A life-sized mural by California artist Hyatt Moore, "The Last Supper with Twelve Tribes," is currently on display in the main lobby of the Del E. Webb Memorial Library on the campus of Loma Linda University. The painting was created for a conference on world missions, which was held in Vancouver, British Columbia, in 2000. It was designed as a visual reminder that the Kingdom of God is inclusive to people of all races.

"I almost titled it 'The Next Supper,'" Mr. Hyatt shares, "where every tribe on earth is invited."

At 20 feet wide by 4.5 feet high, the painting is basically life-sized. Mr. Moore says that in creating it, he employed the basic outline of "The Last Supper" by Leonardo Da Vinci, yet introduced an entirely new dimension to the work by painting the 12 disciples as representatives of 12 different tribes, randomly chosen from among the more than 6,000 language groups who live on Planet Earth.

Ironically, even though Mr. Hyatt is Caucasian, none of the subjects in the painting—including Christ—are white.

"All of the races that we are, all of the colors that we are," Mr. Hyatt observes, "are out of the palette that is Him. He has created after His image and all these colors are in Him."

Mr. Hyatt notes that viewer reaction to the painting has been very positive.

He tells of an African-American professional woman who remarked that for the first time in her life, she felt personally invited to the marriage supper in the Kingdom of God after seeing the painting.

"God has created variety," Mr. Hyatt continues. "He loves all races. He has invited us all to the table."

In representing the diversity of people living on earth, Mr. Moore selected representatives of indigenous groups from Africa, the Americas, Asia, the Middle East, and South Sea Islands. The medium is oil on canvas with acrylic under-painting.

More information on the life and work of painter Hyatt Moore—including a link for ordering reprints of "The Last Supper with the Twelve Tribes"—is available from his website at <www.hyattmoore.com>.

The painting will remain in the lobby of the library for an indefinite stay.

'The Adventists' makes West Coast premiere

The new documentary film "The Adventists" made its West Coast premiere on Friday, March 12, 2010, at the Loma Linda University Church.

Award-winning filmmaker Martin Doblmeier introduced the documentary and fielded questions following the screening.

"The Adventists" is a new one-hour documentary film on the Seventh-day Adventist denomination prepared for public

television. The film explores the history and contemporary story of a faith group whose members are among the healthiest and longest-living people on the planet.

The documentary aired on public television stations during the week of April 5, coinciding with both Easter and National Public Health Week.

Loma Linda University faculty and staff, as well as a number of Loma Linda residents, were prominently featured.

17th annual foundation gala raises \$675,000 for heart care at LLU Children's Hospital

By Nancy Yuen

As the group of 11 children made their way to the stage, a line, formed by red heart balloons they carried, floated above the banquet tables, easily seen by the more than 800 people in the audience at the Riverside Convention Center for the "Got Heart" 17th annual LLU Children's Hospital Foundation gala, held Saturday evening, February 27, 2010.

The room filled with applause and those who looked closer could read silkscreened words on the backs of the children's matching red T-shirts that revealed a miracle—"I left my heart at Loma Linda."

Onstage they took their places beside Leonard Bailey, MD, surgeon-in-chief, Children's Hospital, and Teresa Beauclair, mother of the infant known to the world as "Baby Fae."

Though the children had received new hearts and a new chance at life at Children's Hospital, the similarity ends there. For they are each unique, their young lives filled with family and friends and school, sports, and hobbies—each child with hopes and dreams of what he or she wants to be when grown up.

It was truly a historic moment, recognizing Dr. Bailey's pioneering work in the field of infant heart transplantation.

While still in his medical residency, Dr. Bailey had watched babies born with heart defects—otherwise healthy—die because a matching donor heart could not be found in time.

And in part because of the awareness brought about 25 years ago when he sewed the heart of a baboon into Teresa Beauclair's infant daughter, Baby Fae, babies have been added to national organ donor registries and hundreds of children have been given a second chance at life.

There were many memorable moments that took place during the 17th annual foundation gala, presented by the San Manuel Band of Mission Indians.

The gala was an evening of wonder and celebration, as many in the community joined to recognize the achievements of Dr. Bailey, who received the Got Heart! Award. Teresa Beauclair was presented with the Courage of Heart Award.

Steve and Cathy Kienle, whose enthusiastic commitment to host Walter's Children's Charity Classic golf tournament, an annual event benefiting Children's Hospital, provided inspira-



Leonard Bailey, MD, surgeon-in-chief, Children's Hospital (at podium), receives the Got Heart! Award. Joining him onstage are (from left): Zareh Sarrafian, MBA, Children's Hospital administrator; Christi J. Bulot, Children's Hospital Foundation board chair; Laine Weil, president, Big Hearts for Little Hearts Desert Guild; Teresa Beauclair, mother of Baby Fae; and 11 children who have received new hearts at Children's Hospital.

tion for the creation of the Children's Hospital Champions for Children program. During the gala, they received the Shirley N. Pettis Award for outstanding dedication and distinguished service to children.

The final award was given to Robert Erikson, a 35-year member of Kiwanis International and a retired educator. Mr. Erikson received the Hometown Hero Award for his passion and commitment to improving the lives of children. He was instrumental in establishing the Kiwanis Pediatric Emergency Medical Fellowship at Children's Hospital, a program that trains physicians who specialize in the care of acutely ill or injured children.

Attendees enthusiastically responded to an invitation to fund high-frequency jet ventilators, which have shown amazing benefits in the comfort and healing of some of the most critically ill patients at Children's Hospital.

During the evening's fund-an-item portion, pledges from dozens of attendees were given that will make it possible for Children's Hospital to purchase three of the \$32,000 ventilators.

The foundation gala, a major Children's Hospital fundraising event, raised \$675,000, which will be used for heart care and cardiac equipment. "The success of this gala in the midst of a slow economy," responded Children's Hospital administrator Zareh Sarrafian, MBA, "is a testament to the tremendous love and generosity of our supporters in the community."

Entertainer and singer Vikki Carr, a three-time Grammy

Award winner, was the musical guest for the evening. She graciously signed autographs, posed for pictures, and met many of her longtime fans after the gala.

Special thanks to the members of the 2010 foundation board gala committee: chair Dixie Watkins, Leigh Anderson, Susan Atkinson, Christi Bulot, Marcia Dunbar, Trixie Fargo, Janet Gless, Eloise Habekost, Sheila Hodgkin, Darice Lang, Diana Reves, Mellissa Rouhe, Nancy Varner, George Voigt, and Mary Ann Xavier.



Pediatric heart patients present a check for \$675,000 to Loma Linda University Children's Hospital, represented by Michael Kuhn, MD. The funds were raised during "Got Heart!" the 17th annual foundation gala presented by the San Manuel Band of Mission Indians.

Watch the full-length version of

Stephanie's Heart

at

babyfae.com

Center for Biodiversity and Conservation Studies to open

By Larry Kidder

Being a good steward of the earth is one area where religion and science can work together hand in hand toward a common positive goal.

William K. Hayes, PhD, professor of earth and biological science, Loma Linda University School of Science and Technology (SST), and his colleagues in the department of earth and biological sciences hope to bring science and religion together to promote a better understanding of the natural world and conservation efforts to save it.

They are developing the new Center for Biodiversity and Conservation Studies, which will be located in Griggs Hall and will involve faculty in the School of Science and Technology department of earth and biological sciences. Dr. Hayes will serve as director of the new center.

"We're excited about opening this new center in our school," says Beverly J. Buckles, DSW, dean of the School of Science and Technology, and professor of social work and social ecology. "The center will help create a new appreciation for our natural world and bolster support for saving our environment."

Dr. Hayes explains, "Scientific study is an important tool in understanding our planet so that we can take better care of all living organisms that share it." He adds, "Our center will provide a place for people of all ages to learn more about the natural world and how our actions as humans can disrupt fellow organisms."

Dr. Hayes and his fellow researchers in the department of earth and biological sciences each have their special areas of research interest, as well as laboratories to pursue those interests. A number of graduate students assist the faculty, as well as pursue research of their own.

"Our mission is to promote environmental awareness and

stewardship among Christians and other faith groups," Dr. Hayes continues. "We're planning to create an experiential facility where people of all ages can see various microbes, plants, and animals, learn about the natural world, and be introduced to conservation efforts and concepts."

The displays will begin with biodiversity in unicellular life forms and progress through complex life forms, arriving at mammals. Actual specimens will be on display, and graduate students will be on hand to explain and answer questions.

"We would like to see a family, for instance, spend an afternoon," Dr. Hayes describes. "The facility would also be an ideal destination for elementary and high school science classes."

Activities at the center will include original research and its publication in scientific journals, the preparation and broadcast of nature series, articles in Seventh-day Adventist Church publications, a dynamic and comprehensive website, formation of a natural science society (including a lecture series), field trips to local and international destinations, the support of conservation-related research, and fundraising.

"As the citizens of our planet become progressively more aware of the need to save our increasingly damaged biosphere, Christians need to pause and think about their role in the rapidly growing environmental movement," Dr. Hayes suggests. He continues, "A number of published studies demonstrate that Christians throughout the world express measurably less concern about environmental issues than the public at large."

Dr. Hayes and his colleagues hope to "shape the Adventist Church's mindset toward the environment through a high-visibility organization devoted to promoting environmental stewardship."

Support for such initiatives as the center has come from the Church's top leadership. In an article titled "Freedom to Care," published in the July 2008 issue of *Adventist World*, Jan Paulsen, DTh, president of the world Church, says, "Is the environment an 'Adventist issue?' Do we have something significant—something unique—to contribute to environmental care? I believe the answer is 'yes.' My hope is that we will move toward a fuller discussion of Adventism and environmental responsibility, and that we'll begin to develop an approach that is true to our values and consistent with our historic calling."

Dr. Hayes, director of the new Center for Biodiversity and Conservation Studies, handles a juvenile alligator that would be an ideal candidate to help emphasize the need to preserve habitats for the diverse organisms who share our planet with us. ◀



Lifestyle researchers look at the benefits of nuts and laughter

By Heather Reifsnyder

School of Public Health researchers have amassed the best statistics yet on the positive effects of eating nuts on blood lipids. By pooling data from 25 individual nut consumption studies conducted in seven countries with more than 500 subjects, investigators determined the most informative numbers to date on how nuts lower cholesterol and triglyceride levels. The results were published in the journal *Archives of Internal Medicine* on May 10, 2010.

Eating an average of 2.3 ounces of nuts daily (67 g, about 1/3 cup) produced the following healthful reductions: blood total cholesterol was lower by 5.1 percent, LDL (bad) cholesterol by 7.4 percent, the LDL/HDL cholesterol ratio by 8.3 percent, and the total cholesterol/HDL ratio by 5.6 percent. In people with higher than normal blood triglycerides—greater than 150 milligrams per deciliter—nut consumption reduced triglyceride levels by 10.2 percent.

"Results of this study provide the best evidence yet that eating nuts reduces LDL cholesterol and improves the blood lipids profile," says Joan Sabaté, MD, DrPH, of the School of Public Health, lead researcher on this study and one of the pioneers in nut research. "The findings from this analysis support those from epidemiological studies which have consistently shown that habitual nut consumption reduces the risk of heart disease."

He concludes, "Thus, a simple change of eating nuts regularly can make a big difference in people's health."

Those eating greater quantities of nuts experienced higher lipid reductions; however, people should not consume more than three ounces of nuts daily due to their high calorie-density.

The study looked at different types of nuts (walnuts, almonds, macadamias, peanuts, pecans, hazelnuts, and pistachios) and observed similar effects among them.

Lipid reductions were greater in individuals with high LDL cholesterol, low body mass index scores (lean people), and those consuming a Western diet.

The publication is authored by Dr. Sabaté, chair of the department of nutrition at Loma Linda University School of Public Health; Keiji Oda, MA, MPH, a biostatistician at the School of Public Health; and Emilio Ros, MD, PhD, a researcher in Spain. The department of nutrition has conducted

LLU researcher Lee Berk, DrPH, and two student collaborators from Azusa Pacific University, Laura Ludeman (left) and Harmony Danner, presented their research poster on laughter at Experimental Biology 2010. ▶

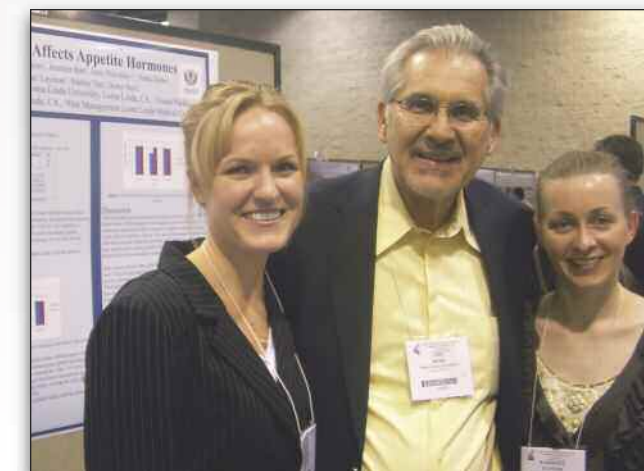
many controlled studies on the health effects of nut consumption since the early 1990s.

A second recent study suggests that people suffering from appetite loss may be helped by laughter in a similar way as exercise, according to researchers Lee Berk, DrPH, director of the molecular research lab and associate professor of physical therapy in LLU's School of Allied Health Professions; Jerrold Petrofsky, PhD, professor of physical therapy, School of Allied Health Professions; and Stanley Tan, MD, PhD, of OakCrest Health Research Institute.

They presented their research at the 2010 Experimental Biology conference, held April 24–28 in Anaheim, and it has since been reported by global news outlets such as CNN, WebMD, *Time*, the *Los Angeles Times*, the *Telegraph* (Great Britain), and the *Sydney Morning-Herald*. Additionally, Dr. Berk was a guest on National Public Radio's "Science Friday" program on April 30.

The findings are based on a study of 14 healthy individuals who volunteered to help examine the effects that eustress (mirthful laughter) and distress have on modulating the key hormones that are involved in controlling appetite homeostasis and balance. During the study, each subject was required to watch one 20-minute video at random that was either upsetting (distress) or humorous (eustress) in nature.

When the researchers compared the hormone levels pre- and post-viewing, they found that the volunteers who watched the distressing video showed no statistically significant change in their appetite hormone levels during the 20-minutes they spent watching the video. In contrast, the subjects who watched the humorous video had changes in blood pressure, leptin, and ghrelin levels. Specifically, levels of leptin decreased as the level of ghrelin increased, much like the acute effect of moderate physical exercise that is often associated with increased appetite.



Tom & Vi Zaparra Rehabilitation Pavilion celebrated in grand opening ceremonies



The elegant and spacious Tom & Vi Zaparra Rehabilitation Pavilion, which was officially opened on Tuesday May 25, 2010, has drawn comparisons to a beautiful resort or luxury home. It's designed inside and out to create a unique healing environment with aesthetics that emphasize the colors and textures of nature. Fresh air and light are also present in abundance to relieve stress and create an atmosphere of peace and goodwill.



The song 11-year-old Abbey Umali sang at the grand opening of the Zaparra Rehabilitation Pavilion isn't titled "The Ballad of Abbey and Michael," but perhaps it should be. Michael Jackson, MPH, senior vice president and administrator of Loma Linda University Medical Center East Campus, was profoundly moved by Miss Umali's charming vocalization and personality. "I think we should make Abbey the administrator of this whole place," Mr. Jackson laughed. Abbey is serving her third successive term as National Goodwill Ambassador for the Muscular Dystrophy Association. *By James Ponder*

University Councilors Student Pavilion opens



Naor Stoehr, MD, (left photo, on left) president emeritus of the Loma Linda University Councilors, and James Jesse, DDS, current president of the organization, cut the ribbon for the completely redesigned University Councilors Student Pavilion at the intersection of Anderson and Mound Streets in Loma Linda. The ribbon-cutting ceremony took place at the culmination of a reception hosted for the Councilors by Richard H. Hart, MD, DrPH, president of LLU, on Sunday, March 30, 2010. Since 1961, the University Councilors have advised and assisted the president, served as ambassadors of the university, and provided counsel, support, and leadership in the financing of LLU projects and initiatives. *By James Ponder*



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