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Medicine celebrates 100 years

Loma Linda University

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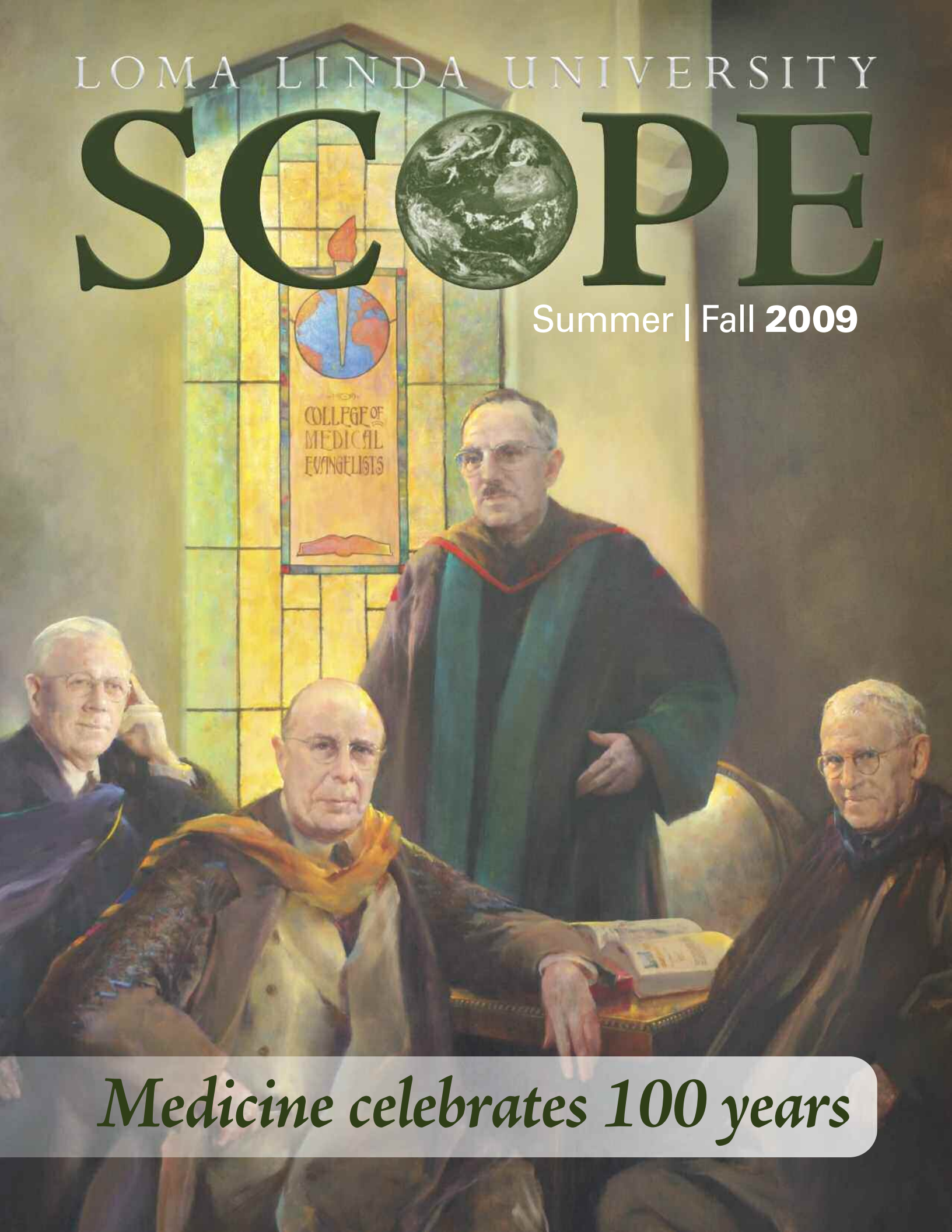
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SCOPE

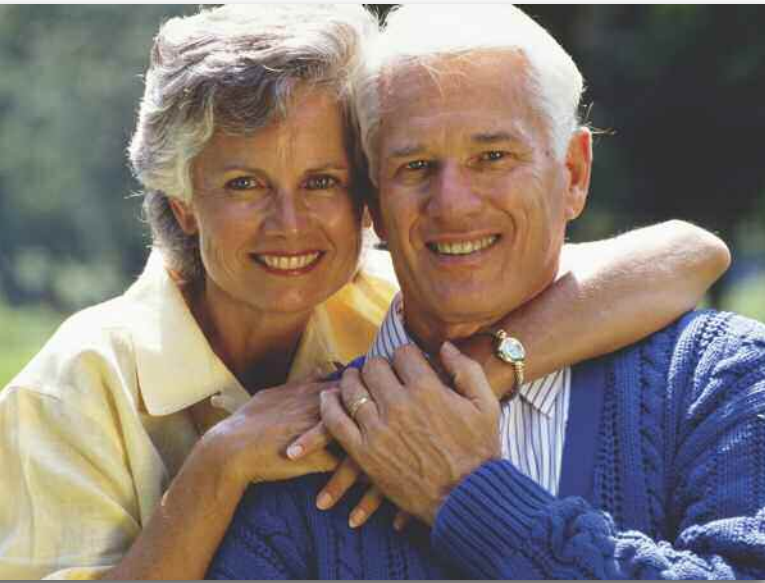
Summer | Fall **2009**



Medicine celebrates 100 years

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Front cover: In celebration of the Loma Linda University School of Medicine's 100th anniversary, the painting titled "Four Doctors of the College of Medical Evangelists" was created by artist and alumnus S. Wesley Kime Jr., MD (class of 1959-A). All four individuals pictured were on the faculty when the first class of 1914 graduated. They are (from left) George Thomason, MD; Percy T. Magan, MD; Daniel D. Comstock, MD; and Newton Evans, MD.

Back cover: Dr. Kime, a gifted portrait artist, has painted a number of well-known and esteemed School of Medicine past and present administrators, as well as faculty. The current collection is housed in the Del E. Webb Memorial Library on the second floor and is much more extensive than the paintings shared here. Portrayed are (top row, from left) Richard H. Hart, MD, DrPH, president of Loma Linda University (class of 1970); Brian S. Bull, MD, former School of Medicine dean and current faculty (class of 1961); Jeffrey D. Cao, MD, current School of Medicine faculty member (class of 1971); (second row, from left) Joan Coggin, MD, retired LLU administrator (class of 1953-A); portrait artist Dr. Kime; B. Lyn Behrens, MBBS, former dean of the School of Medicine and president emerita of Loma Linda University; (bottom row, from left) James M. Slater, MD, pioneer in the development of proton therapy at Loma Linda University (class of 1963); the late Carrol S. Small, MD, former member of the faculty (class of 1934); and H. Roger Hadley, MD, current dean of the School of Medicine (class of 1974).

SCOPE

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MSN graduates Marie Abemyil, Esaie Ngendahimana, and Jaunell Latty-Miller stand with diplomas earned in Africa. ▲

A world of promise

LLU graduates 1,224 in 2009 ... on campus and around the world

Graduation is a time of emerging promise. Loma Linda University dressed its California campus immaculately for the graduates and families that would come on the weekends of May 24 and June 14, 2009, for commencement programs, many celebrating the end of training and the beginning of application.

They celebrated in Africa, too. And in Canada, Russia, Saudi

Arabia, and Japan thanks to off-campus LLU affiliate programs extended to universities outside the United States.

The University's schools reach out internationally in two ways, says Richard Hart, MD, DrPH, president of LLU.

"A significant number of international students come to our campus for regular degrees, with 80 to 90 nations represented on campus at any given time," he says. "We also have cohort classes that

we offer off campus.” Sending resources and personnel abroad allows the accomplishment of obtaining a LLU professional degree to be felt worldwide. Each college hosting an LLU degree recognized their LLU graduates in their own local commencement ceremony.

Marie Abemyil, one of 17 students to complete LLU’s master of nursing program at Helderberg College in South Africa, chose to travel to LLU’s campus to graduate. She walked with the graduating nursing class of 2009 on the morning of June 14.

Though she studied in Africa, Ms. Abemyil considers LLU “her school” and said it just felt right to graduate here.

“In growing countries, we dream of arriving at LLU,” she says. “Mine came true through this program and the opportunity to be here for the graduation ceremony. It is simply amazing.”

Ms. Abemyil is chair of the department of nursing at an Adventist university in Africa. She says the program allowed her to reach a higher level of education than many in her area. It also lets her provide peers and students with more support.

“In my country, having a master’s degree is still amazing,” she says. “So far, I am the only person to reach this level of education in nursing in my area.” She adds, “I am a mentor for many students who want to follow my example.”

Two other MSN students from Africa, Jaunell Latty-Miller and Esaie Ngendahimana, also walked with Ms. Abemyil at LLU’s commencement.

Loma Linda awarded 1,224 degrees in its 2009 commencement ceremonies. Fifty-one were degrees for off-campus international programs.

The Schools of Dentistry, Medicine, and Pharmacy held commencement ceremonies on Sunday, May 24, with the School of Medicine celebrating its 100th year with a large floral display. The services were held on the Campus Mall.

Ceremonies for the Schools of Allied Health Professions, Nursing, Public Health, Religion, and Science and Technology were held on June 14 at Drayson Center.

Dr. Hart says the University has reached out globally to organizations abroad almost since its founding. “I would say we started in 1905 and became global in 1906 because there’s always been that push to connect with the world,” he offers.

The actual off-campus degree cohort idea first took off in the 1970s with a master’s in health administration in Hong Kong. A master’s degree in public health offered in Central America came the following decade.

LLU’s cohort or affiliate support now includes programs in Canada, Saudi Arabia, India, Thailand, Russia, Japan, South Africa, Kenya, Peru, and Chile, among others.

In some instances, an LLU degree is offered and sponsored on the campus of an institution outside the United States. In other situations, LLU provides resources and support for the degree program of a university abroad.

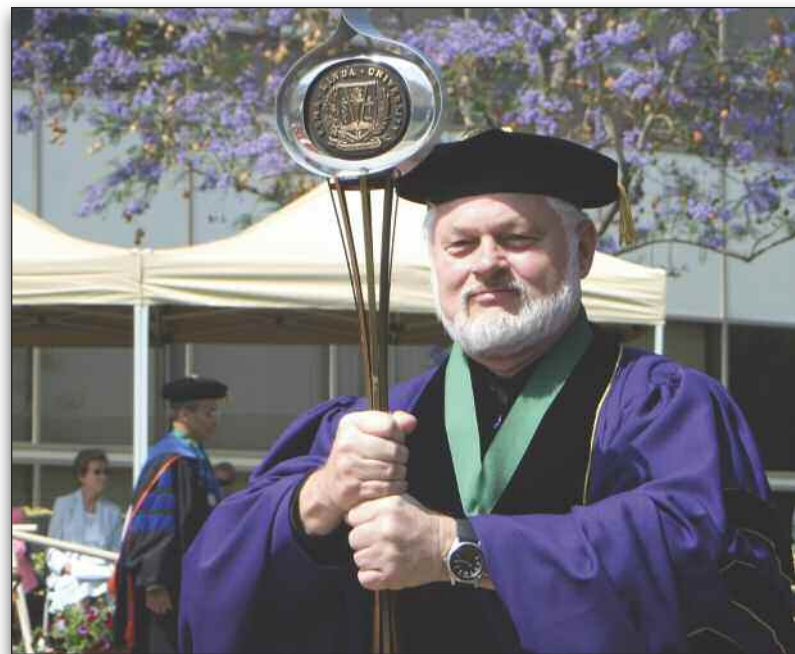
The result is a degree that’s more within reach of individuals in other countries. “We can do it out there for a fraction of the cost for them to come here,” says Dr. Hart.

International off-campus programs deliver a sense of community and networking for students from a large country or area who never would have met or worked together if they hadn’t enrolled in such a program.

It also strengthens institutions abroad by making it easy for students to stay in their home country while they study and once they graduate. “One of our commitments is to strengthen Church institutions out there,” reports Dr. Hart. “So bringing everybody here would leave the hospitals, and the colleges and universities of the world without the brain power they need.”

The programs train leaders within the Seventh-day Adventist Church as well as decision makers outside of it, Dr. Hart notes. “We invite some non-Church members to be part of these cohort programs. They become acquainted with the Church and then go back and take positions in the government. So we really are planting islands of support in key decision-making bodies.”

He went on to point out that LLU-trained administrators



Ronald L. Carter, PhD, provost, carries the University mace at School of Medicine commencement ceremonies. ▲

SCHOOL OF MEDICINE

May 24, 2009, 8:30 a.m.

GRADUATES: 174

SPEAKER: STEPHEN R. COVEY, *co-founder and vice chair, FranklinCovey, Inc.*

ADDRESS: Developing A Principle Centered Culture Through Moral-Authority Leadership and Complementary Teams

SCHOOL OF PHARMACY

May 24, 2009, 1:30 p.m.

GRADUATES: 55

SPEAKER: RONALD F. BORNE, *professor emeritus of medicinal chemistry, University of Mississippi*

ADDRESS: Now What—Count and Poorer Altruism?

SCHOOL OF DENTISTRY

May 24, 2009, 5:00 p.m.

GRADUATES: 206

SPEAKER: STEPHEN R. COVEY, *cofounder and vice chair, FranklinCovey, Inc.*

ADDRESS: Lead Your Life by A Compass, Not A Clock

SCHOOL OF SCIENCE AND TECHNOLOGY AND SCHOOL OF RELIGION

June 14, 2009, 8:00 a.m.

GRADUATES: 95

SPEAKER: LOWELL C. COOPER, *chair, Board of Trustees, Loma Linda University Adventist Health Sciences Center; general vice president, General Conference of Seventh-day Adventists*

ADDRESS: Things That Matter, Things That Don't



The School of Medicine celebrated 100 years with a colorful bed of flowers. ▲

in the ministry of health in Afghanistan and at Sir Run Run Shaw Hospital, a government-run facility in China, are both very friendly to the Church's health mission because they now understand what it's all about.

The University's on-campus international aspect also has important benefits, Dr. Hart notes. "It's important that we provide training for people all over the world, so we do that. It also incredibly strengthens the teaching on campus because you get so many different perspectives. It gives the U.S. citizen student a chance to interact with various religious groups and various cultural groups from all over the world. It's a huge benefit to those who come, as well as those who are from here."

With the opening of its new Centennial Complex building and its Global Gateway technology, the University hopes to broaden a third aspect of its international reach: online education and digital support for cohorts and affiliates. "You can never replace the human factor," explains Dr. Hart. "So it won't replace faculty the University sends abroad." But we can be pushing a lot more classes out all over the world with smart classrooms recording everything that happens and students dialing in from anywhere on their computer," he adds. "Technology is helping to expand our international influence cost effectively."

Speaker highlights

Stephen R. Covey, PhD, MBA, vice chair of FranklinCovey, Inc., the largest management and leadership development organization in the world, spoke to graduates of the School of Medicine and School of Dentistry. Dr. Covey is an author, keynote speaker, teacher, consultant, television and radio guest, and executive mentor. He is the internationally renowned author of several bestsellers with sales exceeding one million copies each, including *The 7 Habits*

of *Highly Effective People*. He has been the recipient of numerous awards, but considers the National Fatherhood Initiative's Fatherhood Award (2003) to be the most important honor ever bestowed upon him.

Ronald F. Borne, PhD, contributor to approximately 80 papers in peer-reviewed and professional journals and several chapters in medical chemistry education books, addressed the 2009 graduating class of the School of Pharmacy. Within the past four decades, Dr. Borne served the University of Mississippi in several capacities, including chair of the department of medicinal chemistry; interim associate vice chancellor for research; and interim vice chancellor for research. Under his leadership, the growth of external funding on campus nearly quadrupled. He is currently a professor emeritus of medicinal chemistry.

Lowell C. Cooper, MDiv, MPH, general vice president for the General Conference of Seventh-day Adventists, spoke to the graduates of the Schools of Science and Technology and Religion. During 40 years of denominational service, Elder Cooper has served the Church in a number of capacities in several different divisions. After serving as secretary of the Southern Asia Division for four years (1990-1994) he returned to the United States after being appointed an associate secretary of the General Conference. In 1998, he was elected to the position he currently holds as general vice president of the General Conference.

Carla Gober, PhD, director of the Center for Spiritual Life & Wholeness at Loma Linda University, spoke to graduates of the School of Nursing. Dr. Gober has worked as a marriage and fam-

Stephen R. Covey, PhD, MBA, cofounder and vice chair of FranklinCovey, Inc., delivers the keynote address to the School of Dentistry class of 2009. ▼



SCHOOL OF NURSING

June 14, 2009, 10:30 a.m.

GRADUATES: 216

SPEAKER: CARLA GOBER, director, Center for Spiritual Life & Wholeness, Loma Linda University

ADDRESS: The Paradox of Easy Choices

SCHOOL OF ALLIED HEALTH PROFESSIONS—PHYSICAL THERAPY

June 14, 2009, 1:00 p.m.

GRADUATES: 171

SPEAKER: RONALD H. MATAYA, assistant professor, department of global health, School of Public Health, Loma Linda University

ADDRESS: Loving Others

SCHOOL OF ALLIED HEALTH PROFESSIONS—OTHER PROFESSIONS

June 14, 2009, 3:30 p.m.

GRADUATES: 211

SPEAKER: RONALD H. MATAYA, assistant professor, department of global health, School of Public Health, Loma Linda University

ADDRESS: Loving Others

SCHOOL OF PUBLIC HEALTH

June 14, 2009, 6:00 p.m.

GRADUATES: 156

SPEAKER: LINDA C. DEGUTIS, director, Yale Center for Public Health Preparedness; associate professor of surgery and public health, and research director, section of emergency medicine, School of Medicine, Yale University

ADDRESS: Creating The Future of Public Health



Mariah Arellanes celebrates with guests after graduating with her master of science in marital and family therapy from the School of Science and Technology. ▲

ily counselor, specialist in spiritual care and grief therapy, and health educator. She helped develop the hospital-based multidisciplinary grief programs that currently exist at Loma Linda University Medical Center. Hundreds of professionals have been trained in these programs to deal sensitively with a wide range of grief reactions.

Ronald H. Mataya, MD, assistant professor in the department of global health at Loma Linda University's School of Public Health, addressed the School of Allied Health Professions graduates. In addition to consulting internationally with USAID, the Global Fund, the World Bank, and ADRA, Dr. Mataya volunteers every summer at Blantyre Adventist Hospital, Blantyre, Malawi. He continues to hold a teaching faculty appointment at the University of Malawi and is currently an investigator for a large research study on maternal and perinatal morbidity and mortality.

Linda C. Degutis, DrPH, director of the Yale Center for Public Health Preparedness, spoke to the LLU School of Public Health graduates. She also serves as a professor and research director at Yale University. Dr. Degutis' research interests have focused on concerns related to alcohol, injury, and substance abuse—with special attention to clinical interventions and policy issues. Her findings have been widely disseminated through

not only more than 100 publications, but also educational tools and products, as well as videos.

University honorees

The **University Alumnus of the Year** award was bestowed upon **Howard V. Gimbel, MD, MPH**, executive medical director and founder of the Gimbel Eye Centre in Alberta, Canada, for his major contributions to this health sciences community, the Seventh-day Adventist Church, and the world.

The **Distinguished University Service Award** was given to **Stephen Ashwal, MD**, chief of pediatric neurology in the departments of pediatrics and neurology at the Loma Linda University School of Medicine, for his commitment to the academic community and significant professional contributions.

Richard W. Weismeyer, MA, director of University relations, Loma Linda University, was presented with the **Distinguished University Service Award** for his years of quiet but steady leadership and constant demonstration of Christian service, and for both his heralded and unsung contributions to the academic community.

Finis Ewing Wiggins Jr., MD, retired physician, received the **Distinguished Humanitarian Award** for his unflinching commitment and dedication to LLU, and for his support of its historic mission.

The **Doctor of Humanitarian Service Degree** was awarded to **Patrick J. Morris, JD**, mayor of the city of San Bernardino, for his unwavering commitment to justice and advocacy for those unable to speak for themselves.



Linda Degutis, DrPH, delivers the commencement address for the School of Public Health ceremony. ▲

School honorees

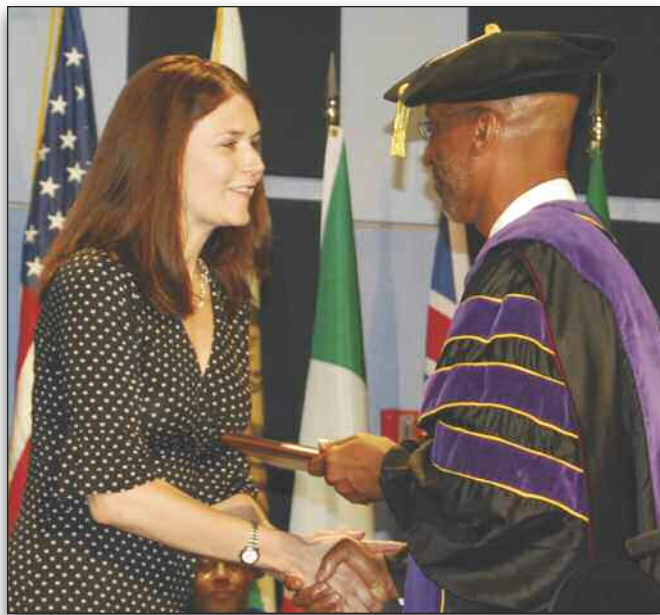
The **School Distinguished Service Award from the School of Medicine** was given to **Murray E. Brandstater, MBBS, PhD**, chair and professor of the school's department of physical medicine and rehabilitation, for more than four decades dedicated to pursuing excellence in the science of medicine.

The **School Distinguished Service Award from the School of Dentistry** was received by **Steven G. Morrow, DDS, MS**, professor in the school's department of endodontics and director of patient care services and clinical quality assurance, for his more than three decades of creative and noteworthy service to his alma mater.

The **School Distinguished Research Award from the School of Dentistry** was presented to **Yiming Li, PhD, DDS, MSD**, director of the school's Center for Dental Research, for his outstanding scholarship, illuminating teaching, and significant contributions to the profession of dentistry.

W. William Hughes, PhD, dean of the School of Pharmacy, was presented with the **School Alumnus of the Year from the School of Science and Technology** for his work in integrating distance learning technologies for off-campus affiliations.

Mary Esther Moline PhD, DrPH, chair of the school's department of counseling and family sciences, received the **School Distinguished Service Award from the School of Science and Technology** for approximately three decades of contribution to the advancement of theory, research, and clinical practice in counseling and family sciences.



Sarah Mayer (left) receives the SAHP Distinguished Alumna Award from Craig Jackson, JD, MSW, dean. ▲



Michelle Meegie Kim, PharmD, salutes classmates, family, and friends at the School of Pharmacy commencement ceremonies. ▲

Receiving the **School Alumna of the Year from the School of Allied Health Professions** was **Sarah Mayer**, volunteer missionary and physician assistant in Baja California, Mexico, for her Christian service and missions work.

School Alumnus of the Year from the School of Allied Health Professions was awarded to **Charles B. Spearman, MS**, assistant professor of cardiopulmonary sciences at the School, for the credibility, respect, and distinguished reputation as a world resource and leader he has brought to the University.

The **School Distinguished Faculty Award from the School of Allied Health Professions** was received by **Heather Gallew-Javaherian, MS**, director of the School's online doctor of occupational therapy program, for her contributions to the department of occupational therapy and the School.

School Alumnus of the Year from the School of Public Health was **Koklian Lim, MPH**, medical group administrator for the Southern California Permanente Medical Group at Riverside Medical Center, for his integral and influential leadership and innovation within the Southern California region.

School Distinguished Service Award from the School of Public Health was presented to **Naomi Modeste, DrPH**, chair and professor of the School's department of health promotion and education, for her unswerving commitment to excellence, and her unselfish service in public health. SCOPE



SRRSH celebrates 15 years

Anniversary highlights unique relationship with Loma Linda University

The unique international partnership between Loma Linda University (LLU) and Sir Run Run Shaw Hospital (SRRSH) rose to the forefront as Chinese government officials and health care leaders invited global health experts to celebrate the hospital's 15th anniversary in Hangzhou, China, on April 28 and 29, 2009.

During a strategic planning forum convened to outline plans for meeting the future health care needs of China's burgeoning urban populations, health leaders from Australia, Canada, China, France, Germany, India, and the United States listened as LLU was extolled for its pioneering role in helping SRRSH develop from a brand new facility with a young staff—characterized by openness to Western health care ideas and methods of delivery—into one of the premier hospitals of Asia in just 15 years. It was, as many of the speakers pointed out, nothing less than remarkable.

Perhaps no one stated that appreciation quite so succinctly as He Chao, MD, the energetic and visionary president of SRRSH,

who noted that the hospital could not have attained its favored status without the support of LLU.

"With the 15-year development of our hospital, we continue to grow and mature," Dr. He noted. "We have a Chinese saying: 'When you drink water, think of its source.' I think our hospital's achievements could not have happened without the support of Loma Linda University. Here, I want to express my appreciation."

Other speakers—including officials of the Chinese government, business leaders, and representatives of Zhejiang University, parent organization of SRRSH—commended the California educational institution for helping the hospital attain such remarkable progress in a very limited period of time.

For his part, Daniel Giang, MD, vice president for medical administration at LLU Medical Center, attributed the success that SRRSH has enjoyed to its focus on "caring for patients as individuals with respect and honor." Dr. Giang called the hospital "a model for a new paradigm of health care in China."

The 15th Anniversary Celebration Gala took place on the evening of April 29, 2009. The evening's entertainment was entirely made up of SRRSH employees and featured colorful costumes, music, and dance, as well as presentations of tribute and thanks. ◀

How it all started

The story of how LLU became involved with SRRSH is a fascinating tale of a Hong Kong philanthropist's appreciation for Adventist health care, and his relentless determination to establish a first-class hospital in his native land.

Decades before the 15th anniversary of SRRSH, Hong Kong movie mogul Sir Run Run Shaw contacted Neal C. Wilson, then president of the General Conference of Seventh-day Adventists, with his dream of building a modern hospital to serve the people of his native Zhejiang Province. Sir Run Run Shaw and members of his family had been impressed by the care they had received years earlier from compassionate Adventist medical pioneers like Harry Miller, MD.

Church officials were cautious at first, but after the denomination's 1986 annual council in Rio de Janeiro, they agreed to support the endeavor by providing vision and funding designed to help the proposed new hospital achieve the desired outcome of providing a core health ministry in postmodern China. Health care seemed to offer an unprecedented opportunity to let the Adventist light shine in a country that excluded other options for outreach.

The agreement between LLU and the government of Zhejiang Province called for the University to lend its expertise in planning, construction oversight, and operational management for a period of five years after the new facility opened. In addition to administration, LLU targeted medicine, nursing, respiratory therapy, pharmacy, laboratory science, dentistry, and medical records. It also helped SRRSH obtain a United States Agency for International Development (USAID) grant to purchase much-needed equipment and technology. The agreement called for a gradual handover of responsibility to Chinese leaders once the new hospital was fully operational.

In the mid-1980s, Sir Run Run Shaw was aware that the quality of hospital care in his native land needed a boost. At that time, Chinese hospitals were considered to be 30 or 40 years behind their American counterparts. When the hospital opened in April of 1994, leaders and staff were optimistic that with the involvement and support of LLU, SRRSH would serve as an educational center and role model for other Chinese hospitals.

Their optimism was rewarded. Today, the 1,200-bed hospi-

tal that bears Sir Run Run Shaw's name oversees the education and training of thousands of Chinese health professionals, and, as recent accreditation by the Joint Commission International attests, SRRSH standards of care are among the finest in the world.

The rising tide has lifted other boats as well. James Wu, MPH, president of the Chinese Union Mission of Seventh-day Adventists, and member of the supervisory board of SRRSH, observes that the mission and reputation of the Church have been enhanced. "We really appreciate what LLU has done in China through SRRSH and the China project. The Chinese Union Mission is recognized because of this community outreach."

Mentorship exchange

The mentorship exchange program between Loma Linda University and Sir Run Run Shaw Hospital is a strong component of the partnership's success. Under the auspices of the Global Health Institute (GHI) at LLU, selected health professionals from Afghanistan, Ghana, Mongolia, Nigeria, Thailand, and other countries, in addition to China, are invited to the United States for intensive mentorship study programs in their respective specialties. LLU personnel also travel overseas when their expertise is needed.

Benefits of the exchange program far exceed the major objective of sharing LLU's expertise in medicine, nursing, and the



Pan Konghan, MD, critical care unit intensivist, joins other physicians and nurses for morning rounds in the critical care unit at Sir Run Run Shaw Hospital (SRRSH) in Hangzhou, China. Loma Linda University maintains a long-term affiliation with the hospital and with Zhejiang University. The affiliation has achieved several outstanding results, including the fact that SRRSH is the first public hospital in China to receive Joint Commission International accreditation. ▲



Daniel Giang, MD, vice president for medical administration at Loma Linda University Medical Center (second from left), addresses delegates to the strategic planning forum at the 15th anniversary of Sir Run Run Shaw Hospital (SRRSH), on Wednesday, April 29, 2009, in Hangzhou, China. In his remarks, Dr. Giang praised the cooperation between LLU and SRRSH in crafting “a new paradigm of health care in China.” ▲

health professions. During the mentorship program, friendships are formed, prejudices disarmed, and continents are bridged as international visitors not only hone their professional knowledge and observe interdisciplinary teamwork in action, but also get to know the people of the United States. They are extremely appreciative of the hospitality and kindness shown them.

Of course, it works both ways. When Americans visit China, their preconceived opinions are similarly permanently altered. Time after time, they return home praising the economic prosperity, phenomenal architecture, and cultural sophistication of Chinese urban centers, and gushing with enthusiasm for the warmth, openness, and friendliness of her people. Many American health professionals say they learned far more from the Chinese than they felt they were able to teach or share.

In this age of conflicts born of cultural misunderstandings, programs that draw people together make inestimable contributions to the stability of the world.

Religion in China

Chinese citizens currently enjoy higher levels of personal and religious freedom than they have in decades. After years of suppressing expressions of faith, the Chinese government—under the direction of a new generation of younger, more progressive leaders—acknowledges that when practiced within confines established by the state, religion contributes significantly to the harmony of society. In other words, members of religious organizations are free to worship—so long as they follow these guidelines. Increased religious freedom is benefiting the Seventh-day Adventist Church in China, whose membership continues to grow.

The most visible symbol of this new freedom is a large gold cross looming above the Hangzhou skyline from the non-denominational Chong Yi Church. Last year, American evangelist Franklin

Graham preached to a crowd of 12,000 there, and the U.S. Embassy in Beijing called the development “a positive path forward.”

Mr. Graham’s appearance marks a wider cultural interchange that is obvious everywhere in urban China. From Rolls Royce dealerships and Starbucks coffee stores in major cities, to joint ventures in health care and education, signs point to a cultural exchange of epic proportion in these early years of the 21st century.

Even though this new tolerance doesn’t open the door to traditional evangelism, it allows organizations like LLU to bless and benefit the people of China for years into the future, and posits a model for Adventist health outreach in countries where cultural and ideological conditions preclude other approaches.

While innovative, the model is hardly new: Jesus Christ pioneered the concept of ministering to the health and medical needs of people during His public ministry to the world two millennia ago.

SRRSH thanks its employees

The climax of the 15th anniversary festivities occurred the evening of Wednesday, April 29, 2009, when Sir Run Run Shaw Hospital chartered the imposing, 1,800-seat Hangzhou Opera House to thank employees and their family members for working so hard to make the first decade and a half of the hospital’s existence such a success.

The 15th Anniversary Gala, as the event was called, brought a non-stop extravaganza of color, sound, and pageantry to the huge auditorium, and reminded attendees of the importance of the monumental health care enterprise to which they individually and collectively contribute.

Like the success of Sir Run Run Shaw Hospital, the gala was a team effort that showcased the talents of hundreds of hospital employees. Against a dazzling backdrop of sophisticated computer graphics, entire departments of the hospital took to the stage in



He Chao, MD (right), president of Sir Run Run Shaw Hospital, discusses construction plans with a construction official at the site of the new 1,200-bed Xiasha Hospital in Hangzhou, China. Carolyn Thompson, RN (left), a Loma Linda University Adventist Health Sciences Center councilor, and Jan Zumwalt, RN, MS, MBA (next to Dr. He), as associate director of the Global Health Institute at LLU, donned hard hats for the April 29, 2009, visit. Although details are not precisely spelled out at this time, Sir Run Run Shaw Hospital is expected to assist the new facility in numerous ways. ▲

gorgeous costumes and lavish productions choreographed by a professional director hired for the occasion. The performers might be doctors, nurses, lab technicians, or secretaries by day, but that night, they transformed into dazzling entertainers.

For their part, members of the LLU delegation participated in the gala by presenting Dr. He and the SRRSH staff a commemorative award marking the occasion and saluting China's visionary efforts to meet the health care needs of its citizens.

Despite the size of the auditorium, there was hardly an empty seat in the house.

Taking Chinese health care to new levels

Words and pictures can scarcely describe the phenomenal rise of Sir Run Run Shaw Hospital, nor the love and commitment of the countless thousands who nurtured its founder's dream to life. But for two days in April, the world took notice of this remarkable institution, and saluted the global partnership that brought it together in such a small slice of time.

Looking back, officials of both SRRSH and LLU rejoice in the very mutual and far-reaching benefits of their 15-year partnership. Working together, they have introduced the concepts and practices of patient-centered care to Chinese hospitals, elevated the quality and safety of that care to the highest international standards, and opened the door for a long-term continuing partnership between the leaders and people of China and Adventist health ministry.



The impressive facade of Sir Run Run Shaw Hospital can be seen from miles around. The institution has become an important model of Western medicine in China. ▲

In the words of the Honorable Pan Guoqiang, secretary of the Chinese Communist Party for SRRSH, the 15th anniversary not only provided an opportunity for celebration, but also an affirmation of what can yet be accomplished.

"At the moment of Sir Run Run Shaw Hospital's 15th anniversary celebration," Mr. Pan observed, "it is my honor to thank Loma Linda University for its long involvement and support. I believe, with the effort of us all, we will continue to strengthen our collaboration, and continue to have fruitful results." **SCOPE**

SRRSH employees acknowledge the applause following their performances at the gala. ▼



China diary

BY JAMES PONDER

It's a warm April night. Along with six of our Chinese friends, Bing Frazier and I are trekking through a moonlit forest on the shores of West Lake in Hangzhou, China, at 11:00 p.m.

We're having a great time, but our bus leaves tomorrow morning at 5:30 for Shanghai. I should be packing for our trip, but I can always blame Bing later....

It started innocently enough when Bing, who works as an international program coordinator for on-site observers at the Loma Linda University Global Health Institute, invited me to join her and our friends—David Song Guanghui, MD; Frank Fan Hui, PharmD; Jeffrey Sun Weijun, MD; Jessie Wang Yajuan, RN; Ringdy Weiling Hu, MD; and Sandy Xiang Weilan, RN—at a teahouse beside the lake for a farewell soiree. “It won't take long,” she insisted. “We can pack later.”

Yeah, right! I'll be lucky to get four hours of sleep tonight.

Bing and I are in China as part of the Loma Linda University delegation to the 15th anniversary celebrations for Sir Run Run Shaw Hospital. Right now, our friends are leading us along a meandering trail at the intersection of woods and water. Off to the left, an ancient red temple pokes through the trees. Across the way, a 700-year-old pagoda reflects a colorful glow on the surface of the lake.

It's unbelievably beautiful out here!

China looks amazing even when you're 229 feet off the ground. That's what I discover when Bing and I join Sandy Xiang Weilan, RN, a nurse manager at SRRSH, and our chauffeur, Mr. Ma (“Chairman Ma” to me), for a tour of Hengdian World Studios. As guests of Ding Yi Feng, MD, the personal physician of the president of the organization, and Bill Du, the director of the president's office. The four of us are enjoying a wonderful, behind-the-scenes tour of the world's largest film studio/entertainment complex. Don't ask me how she pulled this off; Bing has connections.

Everything goes fine until Bill announces I'll be the first to ride the studio's new helium balloon. Although neither he nor Dr. Deng have ridden it, Bill insists it's an honor for me to be the test pilot. Swallowing my fear of heights, I run to the balloon, strap myself in, and lift off before my better judgment can object.

In this contraption, the rider hangs suspended from a swing-set seat with sturdy restraint belts. It's quite safe, but it doesn't provide the psychological protection of a floor under your feet. It's just you, the balloon, and the clear blue sky. “Don't worry,” Bill yells from the ground, “if it breaks loose, you'll float all the way to America!”

I'm doing fine until I rise to 100 feet above the ground. All of a sudden, I notice that the three people holding the tethers don't

look so big and strong. On the ground, they seemed powerful enough, but way up here, they appear no larger than two feet tall! Could they really hold this thing in a strong wind?

At 229 feet, the question becomes more than rhetorical as a strong wind slams into the balloon. Scared half-silly, I devise a plan of escape. There's a small lake directly beneath me. If the balloon escapes their grasp, I'll jump into the water and hope it breaks my fall, but not my neck. Anything's better than running out of oxygen at 40,000 feet!

“Pow!” Another gust yanks the ropes with a loud, sharp snap.

“YOU CAN BRING ME DOWN,” I yell to the people on the ground.

I wasn't prepared to like Hengdian. When Bing first suggested we spend the day at an amusement park, I was skeptical. I wanted to see the real China, not some caricature thereof. Before long, how-

Author James Ponder snapped this photo moments before Bing Frazier and Sandy Xiang Weilan, RN, were lofted 229 feet into the air. ▼





Members of the Loma Linda University and international delegations to the 15th anniversary celebration at Sir Run Run Shaw Hospital (SRRSH) in Hangzhou, China, pause for a moment of comic relief during a trip to one of China's newest national parks. The excursion was hosted by He Chao, MD, SRRSH administrator, and Pan Guoqiang, secretary of the Chinese Communist Party for SRRSH, the day after the ceremonies concluded. Despite their most valiant efforts, the team couldn't find any Thousand Island Dressing in Thousand Island Lake. ▲

ever, I began to enjoy Hengdian immensely. The place digs deep into the historic and cultural heritage of China, and what I find particularly fascinating are life-sized reproductions of important buildings, districts, and cities from China's colorful past.

My favorite is the Qing Dynasty Emperor's Palace. Its massive dark walls, fierce bronze dragons, and imposing architecture transport me to an age when royalty ruled with magisterial severity. Is this how Daniel felt in the courts of Nebuchadnezzar?

As I start down the stairs, a quartet of warlords in Qing Dynasty regalia rides across the compound on Mongolian horses. Hengdian is winning me over. For a guy who usually dislikes theme parks, I'm surprised how much I'm enjoying this place. I'd like to bring my granddaughter here when she gets a few years older.

The trip isn't all fun and games. There are meetings to attend, rehearsals to document, site visits to cover, and enough briefings to fill the week with 14- to 18-hour days.

Early Monday morning, Bing marches me over to the 21st

Colorful sun parasols outside a Hengdian World Studios attraction display the Chinese love of color and whimsy. ▼



floor of the main tower at Sir Run Run Shaw Hospital, and tells me to photograph everything in sight. I spend the next three days documenting patient care areas and clinics, VIP treatment areas, members of the board, and the Loma Linda and international delegations. I burn through more than 7,000 images during 10 days in China. I'm not complaining, but my shutter finger is sore.

Everywhere we go in China, I discover that her people are among the friendliest on the face of the earth. When I ask one of them, a hospital employee named Emma, what motivates them to be so nice, she answers unexpectedly in the first person.

"Well," she says, without the slightest affectation, "I just try to treat everybody like members of my own family."

Everyone in Hangzhou says "shee-shee." They spell it "xie-xie," but pronounce it "shee-shee." It's Mandarin for "thank you." I hear "shee-shee" a lot tonight as we conclude our nocturnal trek around the lake.

I also hear the sibilant sounds of shoes scraping the surface of the white stone path. "Shuh-shuh" and "shee-shee." The noises intermingle in my mind, floating into focus as an auditory caption for everything I like best about the second-most-populous nation in the world.

If China is going to play as significant a role in the 21st century as many observers predict, it might be because of the kindness and courtesy of her people. Like shee-shee warriors trekking in the light of the moon, the citizens of China are on the march to make friends of everyone they meet.

It seems to be working. Suddenly, I can't even hold a grudge against Bing anymore for dragging me out here in the middle of the night. This has turned into one of the most unforgettable adventures of my life! **SCOPE**



LLU SCHOOL OF MEDICINE

"embracing the vision"

centennial
celebration

OCT 28 - 31, 2009

www.llu.edu/medicine

The School of Medicine turns 100

Join the School as it celebrate its 100th birthday

Members of the centennial planning committee of the Loma Linda University School of Medicine (LLUSM) cordially invite you to Centennial Celebration, a four-day convocation of seminars, music, worship, and thanksgiving honoring the school's 100th anniversary. The theme for the centennial—which is set for Wednesday, October 28, through Saturday, October 31, 2009—is “Embracing the Vision.”

From its founding as part of the College of Medical Evangelists in 1909, the School of Medicine has been an integral part of the life of the campus. H. Roger Hadley, MD, dean of the School, says its focus on mission has never lagged.

“Since its inception,” Dean Hadley writes, “Loma Linda University School of Medicine has endeavored to remain true to its medical mission. Of the school's more than 9,500 graduates to date, approximately 736 have served overseas for at least a year with 25 currently serving overseas. In an age of technology and affluence, our medical students are signing up in record numbers to serve the underserved at home and abroad. Mission electives are an integral part of the training of our students as they go out into the global classroom.”

According to Richard H. Hart, MD, DrPH, president and CEO of Loma Linda University, the LLU School of Medicine is unique because of its integration of timeless Christian healing principles into the practice of contemporary medicine.

“Our School of Medicine has a remarkable history,” notes Dr. Hart, “balancing clearly between the worlds of faith and science. From that base, it has sent graduates across the globe, providing countless patients with our unique understanding of faith and healing. Millions have been blessed, both from direct contact, and also from the many institutions and other professionals impacted by our graduates.”

Dean Hadley agrees. “The mission upon which the School of Medicine was founded is still the mission upon which it operates 100 years later,” he observes. “Loma Linda is one of only five reli-

giously based medical schools in the United States, and the only one that actively incorporates spirituality and wholeness into its curriculum. The principles of the school—the importance of health and lifestyle, spirituality in patient care, global health outreach, and service to others—have been validated by much research.”



Ellen White will appear as guest of honor at the National Auxiliary's fall luncheon at 11:00 a.m. on Thursday, October 29, 2009. The luncheon will be held outdoors near the Heritage Cottages and Nichol Hall. Ellen White passed away in 1915, but will appear, nonetheless, in the person of dramatist Rita Hoshino. Ms. Hoshino's impersonations of Ellen White have delighted audiences with the warmth, wit, and candor she brings to the depiction of “the Lord's messenger,” as Mrs. White often called herself. Richard A. Schaefer, official LLU historian, will offer little-known glimpses into the early history of the institution. ▲

Banners like this will greet returning alumni and friends of the LLU School of Medicine, who will be on hand to share in the celebration of the 100th anniversary of the LLU School of Medicine in October. ◀

How do you celebrate a legacy of 100 years of outstanding service to humanity? By inviting alumni, students, faculty, and friends of the school to come back and witness firsthand that the mission on which it was founded in 1909 is the vision that guides the school today. Here's a day-by-day calendar of what to expect:

Wednesday, October 28, 2009

Henry Lamberton, PsyD, associate dean for student affairs, will host a special Centennial Celebration chapel service for University students and faculty at 11:00 a.m. in the University Church. The program, which will feature a special 100th anniversary state of the school report by Dean Hadley, will precede lunch on the lawn at noon. The complimentary repast—complete with Centennial



Journalist and TV personality Lisa Ling will discuss “A hurting world,” during a special presentation at 7:00 p.m. on Thursday, October 29, 2009, in the University Church. Ms. Ling, whose sister Laura was recently released by North Korea thanks to the interventions of former President Bill Clinton, is best known for her role as co-host of ABC’s “The View,” host of National Geographic “Explorer,” and special correspondent for “The Oprah Winfrey Show.” According to H. Roger Hadley, MD, dean of the School of Medicine, Ms. Ling’s presentation “will serve as an inspirational reminder of our mission to serve the underserved.” ▲

cupcakes, provided for the occasion by members of the National Auxiliary—is courtesy of the LLU student affairs office. A live jazz band will accentuate the festive mood.

A dinner for emeritus faculty of the School of Medicine at 5:30 p.m. will give friends and former colleagues a chance to reminisce and receive recognition for their years of support and service to the school. The feast, which will be held in Wong Kerlee International Conference Center, is by invitation only.

Thursday, October 29, 2009

Ellen White will appear as guest of honor at the National Auxiliary’s fall luncheon at 11:00 a.m. The luncheon will be held outdoors near the Heritage Cottages and Nichol Hall, not far from



Atheist-turned-Christian-apologist Lee Strobel will speak at 7:00 p.m. on Friday, October 30, 2009, in the University Church as part of the LLU School of Medicine’s Centennial Celebration. Mr. Strobel has authored nearly 20 books, including the highly acclaimed *The Case for Christ*, as well as *The Case for Faith* and *The Case for a Creator*. The former legal editor of *The Chicago Tribune* is a captivating speaker who challenges audiences to examine the underpinnings of their beliefs and convictions in light of the biblical message that Jesus Christ is the Son of God. He has also produced numerous videos on the Christian faith. ▲

where the original Loma Linda Sanitarium was located. Ellen White passed away in 1915, but will appear, albeit in the person of dramatist Rita Hoshino. Ms. Hoshino's impersonations of Ellen White have delighted audiences for the warmth, wit, and candor she brings to the depiction of "the Lord's messenger," as Mrs. White often called herself. Richard A. Schaefer, official historian of LLU, and president of the Loma Linda Chamber of Commerce, will share the program with Ms. Hoshino to offer little-known glimpses into the early history of the institution.

Tours of several campus facilities—including the new 150,000-square-foot Centennial Complex, Heart & Surgical Hospital, Behavioral Medicine Center, and the Rehabilitation, Orthopedic, and Neurosciences Institute (RONI) at East Campus—will

be available from 2:00 to 5:00 p.m. The tours are free, but advance reservations are required. Contact the dean's office at (909) 558-8633, or go online at <www.llu.edu/medicine> for reservations.

"A hurting world" is the theme award-winning journalist and TV personality Lisa Ling will discuss at 7:00 p.m. in a special Centennial Celebration appearance at the University Church. Ms. Ling, whose sister Laura was recently released by North Korea thanks to the interventions of former President Bill Clinton, will discuss her career as a reporter in such geopolitical hot spots as Afghanistan and Iraq, where she covered the war on terror, and Ghana and Colombia, where she reported on child trafficking and the drug war, respectively. She is best known for her role as co-host of ABC's "The View," and currently serves as host of National Geographic



The King's Brass, an innovative ensemble providing "the best in sacred brass music," will perform at 7:00 p.m. on Friday, October 30, 2009, in the University Church. Founded by Tim Zimmerman (seated on the white stool), the group has performed an average of 100 concerts per year for more than 20 years. Featuring three trumpets, three trombones, a tuba, keyboards and percussion, the musical aggregation has released eight recordings. Playing a wide variety of music from Gabrieli to hymn classics, from Händel to jazz spirituals, from Christmas carols to patriotic marches, The King's Brass lifts hearts and spirits in praise. ▲

“Explorer,” and special correspondent for “The Oprah Winfrey Show” and CNN. Ms. Ling’s appearance was arranged by alumnus Basil Vasantachart, MD, a member of the class of ’79-B. According to Dean Hadley, Ms. Ling’s speech “will serve as an inspirational reminder of our mission to serve the underserved.”

Friday, October 30, 2009

Local authors Wilber Alexander, PhD, and Ellsworth Wareham, MD, will join other contributors to the new book *Morning Rounds* at a 7:00 a.m. continental breakfast and book signing in the Centennial Complex. Students, alumni, faculty, and friends of the school contributed anecdotes to the book, which was published in 2008.

LLU President Richard Hart will preside over a continuing education program highlighting the importance of lifestyle medicine and global health to the mission and outreach of the School. The presentation is scheduled from 9:00 a.m. to 4:00 p.m. in the Centennial Complex.

In addition to Dr. Hart, presenters will include Patrick Reynolds; Harold Koenig, MD, MHSc; David Kessler, MD; Eric Frykman, MD, MPH, MBA; and Robert Gallo, MD.

Mr. Reynolds, whose grandfather founded the R.J. Reynolds Tobacco Company, became an outspoken opponent of smoking after losing several members of his family to emphysema and lung cancer. He was the first industry insider to speak out about the dangers of tobacco.

Dr. Koenig, founding co-director of the Duke University Center for Spirituality, Theology, and Health, has testified before the United States Congress on spirituality and public health, and published close to 350 peer-reviewed articles on mental health, geriatrics, and religion.

Dr. Kessler, author of *The End of Overeating*, is an American pediatrician, lawyer, and former Food & Drug Administration commissioner who is an outspoken critic of the American diet and the role that consumption of sugar, fat, and salt plays in the national obesity epidemic.

Dr. Frykman, who holds degrees from LLU in biochemistry, medicine, and public health, serves the Riverside Community Health Agency as director, public health officer, and chief of disease control and prevention. He has a strong interest in international health, and has worked in Bangladesh, Macedonia, Mexico, and Russia.

Dr. Gallo, director of the Institute for Human Virology at the University of Maryland, is best known as the co-discoverer of the retrovirus that causes HIV and AIDS. He says America’s inner cities need an emergency plan for handling the AIDS crisis similar

to the one the Bush Administration created for Africa.

Friday evening vespers, which will convene at 7:00 p.m. in the University Church, will feature atheist-turned-Christian-apologist Lee Strobel and The King’s Brass, under the baton of conductor Tim Zimmerman. Mr. Strobel has written nearly 20 books including the highly acclaimed *The Case for Christ*, *The Case for Faith*, and *The Case for a Creator*. The former legal editor of *The Chicago Tribune* is a captivating and compelling speaker who challenges audiences worldwide to examine the underpinnings of their beliefs and convictions in light of the biblical message that Jesus Christ is the Son of God.

Mr. Zimmerman, who received his graduate degree from Peabody Conservatory at Johns Hopkins University, and members of The King’s Brass provide innovative worship for young and old through “the best in sacred brass music.” The ensemble consists of three trumpets, three trombones, a tuba, keyboards, and percussion.

Sabbath, October 31, 2009

A particularly compelling feature of the Centennial Celebration will occur during a presentation of “Morning Rounds Live” in the Sabbath school program at 10:00 a.m. in the Loma Linda University Church. It’s the story of Wynn De Boever, a 49-year-old woman from Vancouver, British Columbia, whose life was saved at age 14 when Ellsworth Wareham, MD, and members of the Loma Linda University Overseas Heart Surgery Team flew to Saigon to perform a series of life-saving open heart procedures. The story of how her 15-year-old son contacted Dean Hadley by e-mail in 2008 to ask if he might know who the American doctors were who saved his mother’s life, and how Drs. Wareham and Hadley flew to Vancouver to meet the De Boever family, is so touching and amazing you won’t want to miss it. The class of ’76 Men’s Chorus, conducted by alumnus Ron Cafferky, MD, of Portland, Oregon, will provide musical inspiration.

Randy Roberts, DMin, senior pastor of Loma Linda University Church, will speak at both the 8:30 and 11:15 a.m. worship services. His message, titled “Embracing the Vision,” will discuss how the LLU School of Medicine seeks to continue the specific healing ministry in which Jesus was involved during his life. The Centennial Choir, conducted by alumnus H. Vincent Mitzelfelt, MD, from the class of 1960, will highlight Dr. Roberts’ message. Dr. Mitzelfelt has served as guest conductor for the Los Angeles Philharmonic Orchestra, the Las Vegas Pops Symphony, the Readers Digest Orchestra, the Los Angeles County Museum Chamber Orchestra, and the Los Angeles Brass Society. He organized the Camerata Orchestra of Los Angeles, and served as music director of the Camerata of Los Angeles. All members of the Centennial

Celebration Choir are School of Medicine students or alumni.

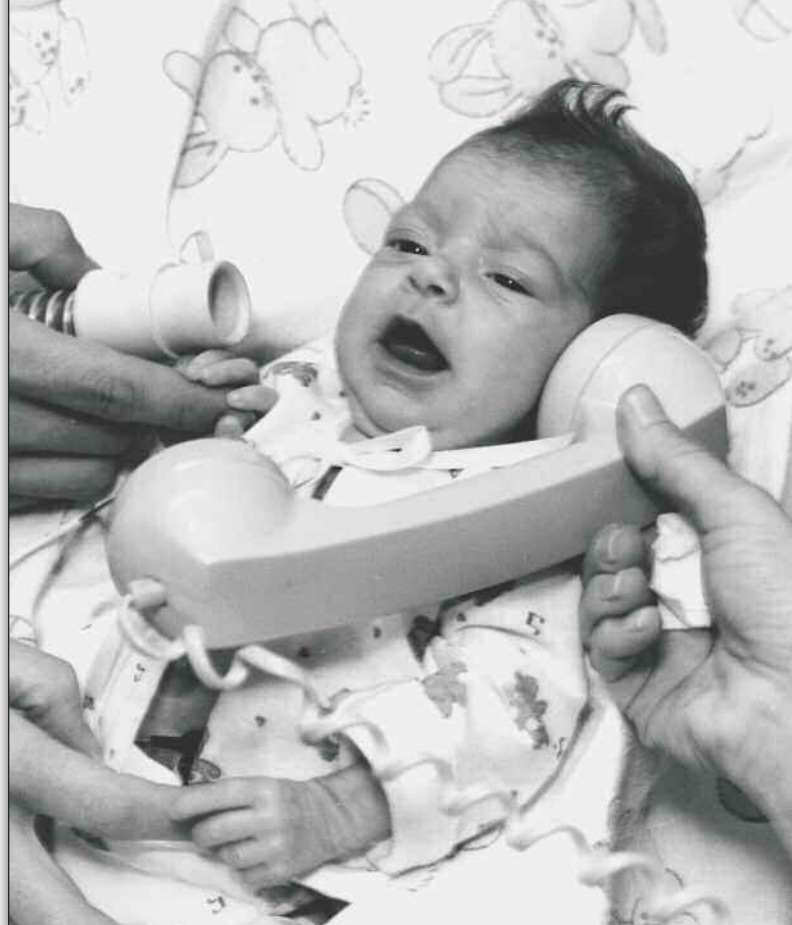
The mother of “Baby Fae” will return to Loma Linda for an emotional reunion with Leonard L. Bailey, MD, chief surgeon of Loma Linda University Children’s Hospital (LLUCH), and other members of the team that performed the world’s first newborn cross-species heart transplant in 1984. The event, which will take place at 4:00 p.m. at the University Church, will include the premiere screening of the film “Stephanie’s Heart” (Baby Fae’s real name) by LLU filmmaker Mike Wolcott, MS, and film producer Larry Kidder, MA. The film tells the tragic, yet hopeful story of her life and death through the eyes of her mother.

The decision to install a baboon’s heart into a human baby was controversial at the time. But after consulting with a broad spectrum of medical experts—including transplant surgeons, cardiologists, ethicists, and immunologists—Dr. Bailey and his team decided to go ahead with the procedure since “Baby Fae,” who was born with hypoplastic left heart syndrome, would have died without it.

“Baby Fae’s daring surgery was a landmark case,” notes LLU historian Richard A. Schaefer. “It has become a reference point in the public’s awareness of hypoplastic left-heart syndrome and the serious efforts being made to save doomed babies. It became the cornerstone of a successful, international, infant-to-infant heart transplant program begun in Loma Linda about a year later. Baby Fae struck a uniquely human chord in people: the capacity to hope, and to cheer those who take great risks to help one little person.” Despite the fact that “Baby Fae” succumbed 21 days after the operation, thousands of young people owe their lives to infant heart transplantation procedures that were developed at LLUCH in the aftermath of her operation.

The final event of the Centennial Celebration will be a special gala fundraiser for the Centennial Tuition Fund. This fund has been established to ensure the success of the School of Medicine during its second hundred years. The fund will be self-perpetuating, providing the opportunity for all qualified applicants to participate in the school and its unique values of whole-person care, global partnership, and clinical excellence. Because the Centennial Fund will allow the School of Medicine to offer tuition rates similar to most state schools, the cost of medical education will be less daunting for applicants selecting LLU as their school of choice.

Keynote speaker for the gala will be Olympic decathlon gold medal winner Bryan Clay, who took the gold at the 2008 Games of the XXIX Olympiad, also known as the Summer Olympics, in Beijing, China. Mr. Clay, who is a devout Christian, attributes his considerable success to keeping the three top priorities of his life—God, family, and career, in that order—in balance.



A highlight of the School of Medicine’s centennial celebration will be an interview of Teresa Beauclair, mother of “Baby Fae” (pictured here in 1984), and Leonard L. Bailey, MD, chief surgeon of Loma Linda University Children’s Hospital (LLUCH), who performed the world’s first and only newborn cross-species heart transplant, using a baboon heart. The interview, which will take place on Saturday, October 31, 2009, at 4:00 p.m. in the University Church, will be followed by a special screening of a shortened version of the documentary “Stephanie’s Heart” (Baby Fae’s actual name was Stephanie), and special appearances by heart transplant kids who were given a second chance at life because of Baby Fae’s historic surgery. ▲

A powerful legacy and enduring commitment

Ultimately, the story of Loma Linda University School of Medicine is retold in the countless lives that have been restored through 100 years of commitment to continuing the healing ministry of Jesus Christ.

Donna Hadley, volunteer coordinator for the Centennial Celebration, expresses the sentiments of the entire school when she says, “We invite all friends of Loma Linda University School of Medicine to participate in this meaningful celebration. Our desire is that all who attend will be re-energized to return to their communities with a passion to ‘embrace the vision’ of this extraordinary medical school, and extend its vision ‘to make man whole,’ both at home and abroad.” **SCOPE**



Cancer Center provides hope and healing

A new center creates a warm atmosphere for those battling cancer

Food will bring doom!" says the warning, boldly written in red crayon in a child's handwriting. "Do not eat anything! Do not drink anything," say more notes. And words on one message, captured in green marker, proclaim: "Hulk Mommy, do not hug 'til 3:00 p.m." A safety pin that fastened the last note to a child's T-shirt remains at the top of the sheet of paper, which is still wrinkled from the afternoon hug.

Drs. Karen and Jim Moynihan treasure these notes, written by their children Johannah, Katie, and Sami during the family's journey with Karen's cancer.

As she settles into a lounge chair in the LLU Cancer Center's infusion suite, Karen's nurse offers her a blanket, which she accepts. Her bright blue eyes sparkle as she sees Jim, her husband. A pediatric emergency room physician, Dr. Moynihan has just finished working the night shift. He is carrying travel books—gifts from colleagues—for her to read before their upcoming trip to Greece. As the nurse adjusts Karen's IV, Jim pulls a chair close to her as he

has many times, and they begin to tell their story.

"The kid's notes are written in comic book style," he explains. "We used superhero characters like the Incredible Hulk to help our children, all under the age of 10, understand what was happening to mommy. There were times she would be given radioactive medication before a test; we all had to wait until it was safe to give her a hug."

He adds, "Using the story of the Hulk character, they were empowered and were able to participate in the story."

It was to be expected that Karen Moynihan, PhD, a half-time professor at Claremont Colleges, Keck Graduate Institute (the newest of the Claremont Colleges), and a full-time wife and mother, might feel tired sometimes. But in 2008, she didn't feel well—it was a nondescript kind of feeling but she knew something wasn't right. She remembers, "I thought I might have irritable bowel syndrome, so I changed my diet to see if it would help."

Karen had planned to have a colonoscopy when she turned

The Loma Linda University Cancer Center's treatment area features an infusion suite with 16 lounge chairs and two beds. Patients and staff select the best setting for a patient on any given day. The treatment area reflects a peaceful setting using clinically proven design measures, including exposure to sunlight, calming views of nature, positive visual distractions, appropriate lighting levels, and radiant heat panels. ◀

50—many years in the future. “It was Dr. Michael Walter who saved my life,” she says. He performed a sigmoidoscopy at the first visit, which revealed a 5 centimeter mass. As he gave the Moynihans the results of the test, she says, “I could tell by his face that I would not have wanted to have his job that day.” They would learn that Karen’s colon cancer had progressed to stage 4, and had spread to her liver and two lymph nodes.

With a PhD degree in chemistry, Karen works in a field helping to develop new drugs; her husband is a physician. And yet after her diagnosis, the Moynihans found themselves searching for answers. LLU Cancer Center specialists provided information about all available treatment options while answering the Moynihans’ questions. “Throughout our experience at Loma Linda,” he says,

“we’ve been assured that we are choosing the best route, both for Karen [as a person] and for Karen as a wife and mother of young children. And each time we [the Moynihans and Karen’s doctors] arrived at the same treatment plan.”

“It isn’t an easy road,” says Mark Reeves, MD, director of the Cancer Center. “Our patients follow a challenging treatment course.” According to Dr. Reeves, every day medical, surgical, and radiation oncologists, researchers, and other specialists work together to treat the most complicated cases. Robotic surgery and proton therapy, two of the most advanced and precise methods of treating cancer, are among the tools Cancer Center physicians draw upon to fight cancer cells as they appear. “A new biospecimen lab,” he says, “and access to the most current clinical trials available are making it possible for Cancer Center specialists to create highly customized and effective treatment.”

“I am currently receiving the standard-of-care chemotherapy regimen during my treatment here,” says Karen. “And progress is being made so quickly that the standard of care changes constantly.”

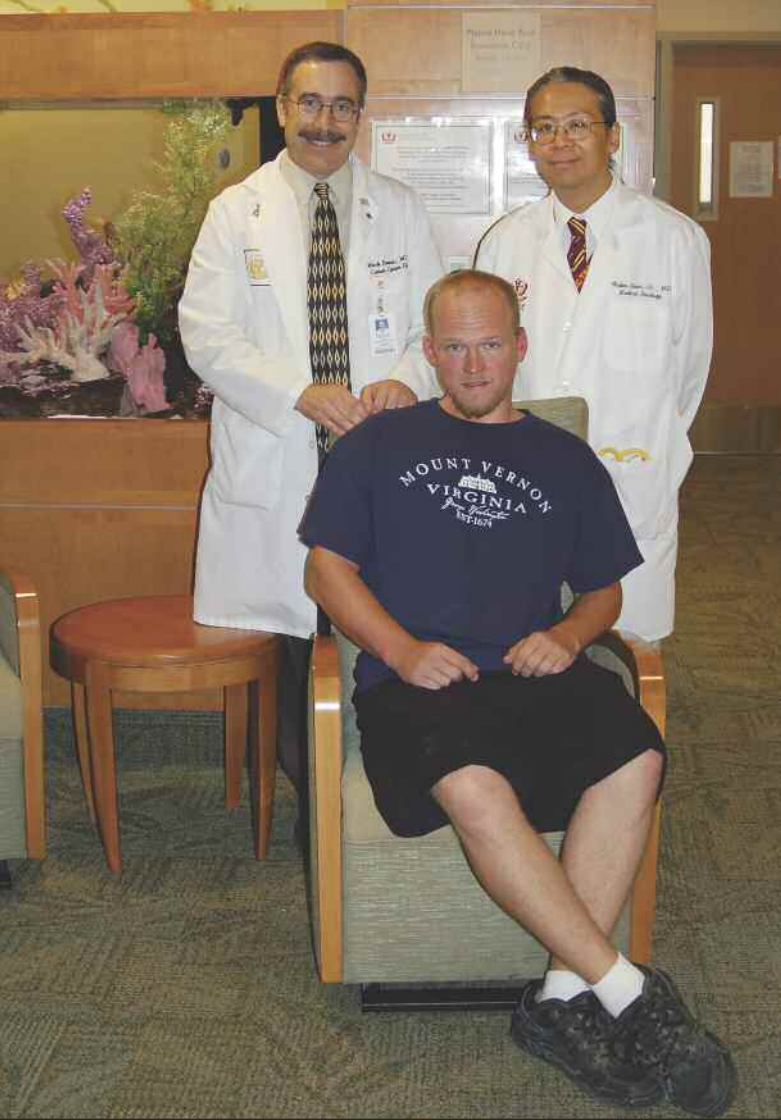
William Young’s story

Words that describe Bill Young include hard worker, solid,

Photo by Woytski Photography



The Moynihan family—(from left) Katie, Karen, Jim, Sami, and Johannah—are grateful for the care Karen received at the LLU Cancer Center. ▲



Bill Young, front and center, is flanked by two of his physicians at the LLU Cancer Center—Mark Reeves, MD, director, and Walter Quan Ja, MD, oncologist. ▲

down to earth, outdoorsman, recreational bowler. And cancer survivor. Cancer entered Bill's life when he discovered a small lump on the side of his neck that grew to the size of a golf ball in two months.

"It wasn't painful," he remembers, "but after my doctor received test results, I was referred to a specialist, and then to LLUMC." Bill would learn that his cancer had progressed to stage 5, nearly stage 6. "It surprised me," he says, "because I have no family history of cancer."

After the mass in his neck was removed, cancer attacked Bill's body several times over the next year and a half (it appeared in his heel, his armpit, and abdomen, among others). Each time, his physicians fought back.

"Patients with diagnoses similar to Bill's," says Dr. Reeves, "typically live less than six months. Our cancer center is one of a select few in the nation to offer these types of specialized therapies for melanoma. And we do everything possible to ensure our patients' quality of life. Many of our patients receive powerful treatment for their cancer here during the day, and then are able to return home,

instead of needing to be hospitalized."

Bill began his treatment at LLUMC before the Cancer Center opened in February 2008, and appreciates the new center's spacious and peaceful atmosphere. "It's much better than before," he says. "Before there weren't as many treatment areas, and now the waiting times are much shorter." His most recent tests show that he is cancer free, and Bill recently visited the center to celebrate with the many friends he made there.

What is Bill's advice to others? "Family is important. And don't give up hope." He hasn't. He has returned to his job installing fire sprinklers in office buildings and condominiums, and is once again spending time perfecting one of his favorite hobbies, bowling.

Sherri Fields' story

Sherri Fields was a busy mom—homeschooling her sons, Dillon and Wyatt, and active in her church—when she first noticed a lump in her breast.

She chose to receive her treatment at Loma Linda University Medical Center. During her treatment, Sherri entered a clinical trial that drastically shrank the tumor, which had grown from 3 centimeters to 14 centimeters. Her battle with cancer included surgery, chemotherapy, and radiation therapy.

"No one should go through cancer alone," she says firmly. Sherri was amazed when loads of laundry would disappear from her home, only to reappear washed and folded by members of her church family.

The Fields gather during the holiday season for a family photo. Sherri (in red) is surrounded by her husband, Mark (left), and children (from left) Dillon, Wyatt, and Samantha. ▼





Sherri Fields received special support from her sons, Wyatt (left) and Dillon, who had their hair cut short to match their mother's on the day this photo was taken. ▲

To keep loved ones and friends apprised of her condition, Sherri began a blog. Her entries read like poetry: "The hair is gone!" begins a poignant entry that captures her feelings the day her sons, Dillon and Wyatt, shaved their heads to show their support of their mom. More recent entries celebrate the end of her chemotherapy and capture her feelings after her mastectomy.

"God still creates miracles," was written on the day blood tests

were in the normal range. And on June 28, 2009, at 8:30 p.m. she typed the heading, "It's official, I'm cancer free!" Throughout the year, Sherri's family and friends had responded to her blog posts, adding personal notes and words of encouragement.

Under the message that tests had revealed that she was cancer free appears the notation: "Woohoo! Praise the Lord!"

And every one of her physicians and caregivers agrees. **SCOPE**

Scope is going digital (one issue per year)

Beginning this school year (2009–2010), one issue of SCOPE will only be available via e-mail.

If you would like to receive this issue, e-mail us at <scope@llu.edu> and request your electronic version when it is published.



Sowing seeds of love

Students from eight Adventist institutions work together in Malawi

Students from eight Seventh-day Adventist North American colleges and universities participated in a two-week mission trip to Malawi. Working under the guidance of Loma Linda University Students for International Mission Service (SIMS), students from the eight institutions left for Blantyre during the week of June 21 en route to three primary mission projects at Malamulo Hospital and several locations throughout the country.

“The idea for an interschool mission trip began with the college and university student association officers meeting at an Adventist Intercollegiate Association meeting held in 2008,” says Emelly Ross Spencer, MPH, director of the Loma Linda University SIMS program.

Initiated as the “Malawi Project” on the Loma Linda campus by senior School of Medicine student Aimie Apigian, Loma Linda University students and employees and community residents contributed nearly \$40,000 toward an \$80,000 goal to fund various projects at Malamulo Hospital in eastern Africa. Hope for Humanity, the Seventh-day Adventist ingathering arm of the Church, matched the student-raised funds on a dollar-for-dollar basis. Some schools such as Canadian University College contributed funds towards the project even though they were unable to send any students.

After Loma Linda student representatives gave a presentation at the annual Adventist Intercollegiate Association meeting, the Mission at Malamulo project was unanimously adopted as an Adventist mission project for college and university students.

“The primary goal of the mission project—as with all of our projects—is to offer students an opportunity to strengthen and apply Christ-centered values such as compassion and humility in an international setting while providing a tangible benefit to the host site. Typically, most of our students come back with a deeper commitment to long-term mission service, whether locally or internationally,” Ms. Ross Spencer says.

LLU School of Pharmacy students Larry Rutebuka and Danielle Davis take inventory of the pharmaceutical supplies at Malamulo Seventh-day Adventist Hospital. ◀

Richard H. Hart, MD, DrPH, president of Loma Linda University and its various entities, concurs with Ms. Ross Spencer’s assessment.

“A plus to intercampus projects is the cross fertilization between students from the various campuses,” Dr. Hart notes. “Another plus is that projects like this expose Adventist students to mission service.”

Malawi was an obvious choice for a joint mission project, according to Dr. Hart. Adventist Health International (AHI), based at Loma Linda, has been active at Malamulo Hospital for the past three and a half years in management-related projects. Through AHI’s involvement at Malamulo, a number of mission projects were identified.

“Students had to raise most of their transportation expenses themselves,” says Claudio Japas, a School of Public Health student and student coordinator for the project. “Approximately \$3,000 was needed to be raised by each of the 21 students participating in the project. Some of the Adventist institutions were able to help the students with a small stipend.”

After arriving in Blantyre, the students were divided into three groups. One group traveled to Malamulo, one to Lakeview, and a third group to Mzuzu. Students from each of the participating institutions were represented in each group.

“Each of the locations had evangelism and maintenance components,” Mr. Japas says. “The Malamulo group had a health component because of its proximity to the mission hospital.”

A typical day for the students began at 6:30 a.m. with breakfast and worship. Following worship, the students headed out to their respective work assignments, which included maintenance and repair projects. At noon, the students broke for lunch and then resumed morning activities until approximately 4:00 p.m., when they returned to their guest houses for clean up and relaxation. At 6:00 p.m., students on each site led evangelistic meetings for the local residents.

At Malamulo Hospital, where many Loma Linda students were assigned, group members also engaged in health care activities. A School of Dentistry student assisted at a satellite dental clinic near the hospital. In addition, students from Loma Linda’s School of Medicine and School of Pharmacy

worked in the hospital facilities. Other Loma Linda students and students from several other North American institutions participated in a restoration project of the men's residence hall at Malamulo Hospital. Students, working with residence hall men, made needed repairs throughout the building and painted the entire complex.

A one-week evangelistic series was held during the mission endeavor. "This was one of the most refreshing and inspirational times of the whole trip," Mr. Japas says.

Each evangelistic meeting began with a health lecture pertinent to the local needs. Topics included presentations on water purification, malaria prevention, sanitation, exercise, cancer, AIDS, and natural remedies.

At Malamulo Hospital, the spiritual emphasis during the evangelistic meeting was presented by an Atlantic Union College student.

"Most of the attendees at the evangelistic meetings were students enrolled in the various academic programs offered at the Malamulo secondary school and College of Health Sciences.

"At the conclusion of the week-long series, 62 precious souls were baptized and presented their lives to Christ," Lisa Barcelo, a Walla Walla University student, comments. "Young

and old renounced the old life and embraced the promise of heaven, and it inspired me to recommit myself to Christ."

"We were able to accomplish a lot during our stay," Mr. Japas says, "but there is still a lot more work that needs to be done. But regardless of the work accomplished, it was the life changes made in each of the participants that counts."

What is in the future for intercollegiate cooperation on mission projects? Next summer, the Adventist Intercollegiate Association plans a mission project to Honduras under the direction of Hope for Humanity.

"We are very pleased with the outcome of this first multi-campus trip and look to the possibility of partnering with our sister campuses for similar projects in the future," says Ms. Rosspercer.

Students and staff from Atlantic Union College (five), Montemorelos University (two), Loma Linda University (nine), Southern Adventist University (one), Union College (four), and Walla Walla University (four) participated in the summer project. Andrews University and La Sierra University each sent one student to participate in a media project to produce an awareness piece to be used to help raise funds for similar student-run projects. **SCOPE**

Malamulo Seventh-day Adventist Hospital, Malawi, served as home for students from a number of Adventist colleges and universities during a June 2009 mission trip. ▼





LLU School of Public Health student Claudio Japas presents worship for Malamulo secondary school students prior to their morning classes. ▲

Views from the students ♦♦♦

Jenny Flider (Union College). This trip reminded me how much we all take for granted on a daily basis and how much simpler everything can be. This trip will impact my career by reminding me to always think outside the box and [to remember] that patience is the best virtue in medicine sometimes. The evangelistic meetings were a definite strength in that we all worked together to get everything done.

Lisa Barceló (Walla Walla University). It was honestly one of the most beautiful displays of service and endurance among college students I have witnessed in many years. Though the cash equivalent of our plane tickets may have arguably been “better” used to pay for needed supplies, those of use who went were assured that our presence did much to encourage both local Malawians within and without of the Church, as well as the long-term missionaries making their homes there. ... Professionally, the trip was also a blessing. It encouraged me to pursue maternal-child health, in the areas of obstetrics and gynecology. It also encouraged my love for foreign missions, as well as the mission field in my hometown.

Adrien Charles-Marcel (Universidad de Montemorelos). It has made a link between me and Malawi. I know people there now, and that has helped me on my way to better valuing people around the world. Thanks in part to the trip I am now considering going for a year to do mission service pretty soon.

Andrew Tetz (Andrews University). Any time that you subject yourself to an environment radically different to the one you’re used to, you’re going to learn something, and Malawi definitely did that for me. This trip definitely affected me and the way I see people. It helped take people out of their comfort zones, and with fewer familiar faces people bonded with one another more quickly than they would have on a single-campus trip. I personally learned a lot about schools I had never even really thought of before, and made friends with people that I probably never would have met otherwise. **SCOPE**



Investigators unveil new research

Projects advance understanding on everything from walnuts to cancer

Researchers at Loma Linda University are pushing the boundaries of knowledge about how the body and mind work, and how they can work better. The projects vary from creating a new material that stops bleeding to discovering how a religious life promotes health and longevity.

Each year, the number of investigators at the University and Medical Center grows as new researchers join the faculty and as established faculty members devote more of their efforts to research, says Anthony Zuccarelli, PhD, associate vice president for research affairs. Altogether, institutional research expenditures totaled more than \$41 million in fiscal year 2008.

Loma Linda University is internationally known for some of its research. The investigators at the Center for Perinatal Biology have built a reputation for their studies of the developing fetus and newborn infant. The work indicates that prenatal conditions affect lifelong health. Additionally, physicians and scientists at the James M. Slater, MD, Proton Treatment and Research Center have earned

recognition for their studies on radiation. Not only do they develop and refine methods for cancer treatment, but they also pursue studies supported by NASA to better understand and ameliorate the effects on astronauts of prolonged time in space. The Adventist Health Study and infant heart transplant program, as well as the Musculoskeletal Disease Center at Jerry L. Pettis Memorial VA Medical Center (staffed by individuals including LLU faculty), are also internationally recognized.

The University is focusing increasing energy on areas where there is a critical mass of investigators who have related interests and expertise. However, there are many other areas where LLU may earn special recognition. These include the work of Penny Duerksen-Hughes, PhD, who is studying how the human papilloma virus (HPV) promotes cervical and head and neck cancer. Eba Hathout, MD, is investigating the transplantation of pancreatic islet cells as a treatment for type I diabetes. Yong Hua Zhu, MD, and Wolff M. Kirsch, MD, along with Chang Yang, PhD, of Nanjing University,

Johnny D. Figueroa, PhD, researches lipotoxicity. ◀

have developed a new hemostatic agent that can stop major bleeding within minutes. The FDA has approved it for topical application. Other scientists are devising new strategies to treat traumatic brain injuries and cancer.

Research became a recognized part of LLU's mission statement in 1993. The statement says that LLU seeks to further the healing and teaching ministry of Christ "to make man whole" through education, research, and health care.

"I don't think we can do the other parts of our mission well without research. You can't remain at the forefront of medical care without devoting resources to the development of new and improved ways to treat people," Dr. Zuccarelli says. "And that is equally true for creating a top-quality learning environment."

What follows is a look at several different LLU research projects.

Religion and health

Through the Adventist Health Studies, scientists at Loma Linda University have long examined how lifestyle and environmental factors influence health and lifespan. The results have shown that being a Seventh-day Adventist predicts greater longevity due to exercise, a vegetarian diet, not smoking, eating nuts, and a system of social support. When researchers factor out these characteristics and several other psychosocial variables, however, the facts reveal that yet another habit leads to longer life—church attendance.

With this in mind, a team of researchers from several LLU schools secured funding from the National Institute of Aging to examine how religious beliefs and practices influence morbidity and mortality. They began work in 2003 and have since completed the first stage of data collection in 2007.

The researchers have collected detailed data on religion and health from a random sample of 10,988 participants from the Adventist Health Study-2. Additionally, 508 of these individuals came to LLU clinics to provide more information through laboratory and functional tests including blood work, saliva and urine samples, biometrics, blood pressure, physical functioning, and memory function.

Principal investigator Jerry Lee, PhD, says that the team will examine the data to determine if there is a connection between religious practices and changes in physical and mental status, as well as mortality. How, for example, does an attitude of working together with God to solve problems affect health? Conversely, what might be the physiological effects of a belief that one has been abandoned by God?

"Driving enthusiasm for the project are serious gaps in our understanding," says Dr. Lee. "We wanted to understand the biological, psychological, and social pathways by which religious beliefs

and practices influence mental health, physical health, morbidity, and mortality for better or for worse."

The researchers do not have the answers to all their questions yet, but results so far have shown that both black and white Seventh-day Adventists have better perceived mental and physical health than do individuals in national samples. Interestingly, older Seventh-day Adventists (65 and above) report higher levels of mental health than national norms, while younger Church members are on par with the norms.

Dr. Lee and the other team members have written an article about the study that will soon be published in the *International Journal of Epidemiology*. Moreover, they have presented at least eight papers on this project at scientific conferences.

Center for Health Disparities and Molecular Medicine

The laboratories in the NIH-funded Center for Health Disparities and Molecular Medicine are busy with faculty, students, and postdoctoral fellows all seeking to discover ways to prevent and intervene in diseases that disproportionately affect disadvantaged segments of the population, be that people of a particular race, socioeconomic status, gender, or locale.

Center director Marino De León, PhD, says their ultimate goal is to determine how social and environmental factors—such as stress levels, job, a bad zip code, or limited access to health care—get under people's skin and result in disease.

Consider people of low socioeconomic status, a condition that is directly correlated to a high mortality rate. Their disadvantaged background leads to chronic stress, and stress can lead to a diet high in fat and sugar. Such a diet results in both lipotoxicity and an augmented state of cellular oxidative stress (ASCOS). Eventually, cancer and type II diabetes can develop. Because of this, Center researchers are examining lipotoxicity—when elevated fat levels in the blood and tissues cause harm. Specifically, the researchers are seeking to understand how high oxidative stress, caused by increased levels of free saturated fatty acids, is toxic to normal cells and increases the probability of getting sick.

One particular project at the center is investigating how saturated fatty acids kill nerve cells known as neurons and Schwann cells. Data generated at the Center has shown that saturated fatty acids cause this toxicity by regulating key genes and proteins in three cellular organelles: the endoplasmic reticulum, lysosomes, and mitochondria. Lipotoxicity activates genes associated with apoptosis, a self-destructive process that is often irreversible and results in cell death.

A positive discovery of this research is that polyunsaturated fatty acids such as DHA (docosahexaenoic acid, found in cold-water fatty fish) protect the same cells from lipotoxicity induced by saturated fatty acids such as palmitate (obtained from palm oil), says Dr.

De León, principal investigator of the project.

Using in vitro brain cells from rats, the researchers reached a milestone. They discovered that when nerve cells are pretreated for 12 hours with a polyunsaturated fatty acid prior to exposure to a saturated fatty acid (palmitic acid), apoptosis is averted. This has implications for advances in preventing and treating not only cancer and diabetes, but Alzheimer's disease and other neurodegenerative disorders.

The lipotoxicity project is also examining how lipids impact the neurodegeneration and repair of damaged neurons in the central nervous system. The data suggests that, in rats, a DHA-enriched diet may play a part in protecting neural cells and preventing further damage. Moreover, the results suggest that DHA supplementation may improve function after spinal cord injury. The researchers have published numerous papers on lipotoxicity.

Another project at the Center is focused on breast cancer. "Even though African-American women have a lower incidence of breast cancer as compared to Caucasian women, African-American women have a higher mortality rate," says Daisy De León, PhD, principal investigator.

A protein called insulin-like growth factor (IGF-2) stimulates the progression and metastasis of breast tumors. African-American women express significantly higher levels of IGF-2 in their cancerous breast cells. Furthermore, this protein is also present in the normal breast tissue of African-American women. The LLU research is showing that IGF-2 stimulates a signaling pathway in cells resulting in the activation of genes that promote growth, inhibit cell death, and protect the mitochondria, which are the organelles that generate much of the cell's energy.

The research could lead to ways to identify women at higher risk for breast cancer, as well as new treatments that block IGF-2 and make tumors more receptive to chemotherapy.

Walnuts and fish

School of Public Health nutrition professors published research this spring in *The American Journal of Clinical Nutrition* comparing the effects of walnuts and fatty fish in the fight against heart disease. The study demonstrates that in healthy individuals, walnuts lower cholesterol more than fish, while fatty fish lower triglycerides. Both can reduce the overall risk of coronary heart disease, with results appearing after only four weeks.

"The practical significance of the study is that eating an easy-to-incorporate amount of walnuts and fatty fish can cause meaningful decreases in blood cholesterol and triglyceride even in healthy individuals," says lead author and co-principal investigator Sujatha Rajaram, PhD.

The researchers found that incorporating approximately 1.5 ounces of walnuts (42 grams, a handful of whole nuts or about three

tablespoons of chopped nuts) into the daily diet lowered serum total cholesterol by 5.4 percent and LDL (bad) cholesterol by 9.3 percent compared to a control diet based on USDA recommendations.

They also found that a diet including two servings of fatty fish per week (roughly four ounces each) decreased triglyceride levels by 11.4 percent. Additionally, it increased HDL (good) cholesterol by 4 percent, but also slightly increased LDL (bad) cholesterol compared to the control diet. The fish used in this study was salmon.

Dr. Rajaram says, "Individuals should strive to include a plant source of omega-3 fat in their diet, like walnuts, and also a marine source of omega-3 fat. If fatty fish is not a preferred option for marine-derived omega-3 fat, other options include microalgae oil or DHA-enriched eggs."

Miriam Yvanovich and her husband, Anthony, were two of the study participants. "My husband and I still eat walnuts and salmon on a weekly basis because the effects of fish and walnut consumption on our health were so compellingly positive," she says.

More hearts for kids

Research done by physicians from Children's Hospital and the School of Medicine recently helped save a life here at Loma Linda. Surgeons gave a 4-year-old boy born with hypoplastic left heart syndrome a new heart that might previously have been rejected prior to their study. Nationwide, the research could lead to many more kids receiving a new heart every year. Published in June in *The Annals of Thoracic Surgery*, the study demonstrates that donor hearts physicians often reject can actually be used to great success.

Concerned that criteria for evaluating donor hearts were overly stringent, the team scrutinized databases from LLU and the United Network for Organ Sharing (UNOS) to see how well hearts that had previously been excluded performed after they were later reevaluated, accepted, and transplanted into infants, children, and adolescents.

The team divided the data into two categories: group A consisted of 84 transplant recipients who received hearts that had originally passed the screening criteria; group B represented 29 transplant recipients who received hearts that had originally been rejected based on criteria such as size or certain health conditions, but were transplanted anyway. Because of the delay with group B hearts, they were in cold ischemia—a process of artificially cooling the temperature of an organ while it awaits transplantation—an average of 100 minutes longer than group A hearts.

The researchers compared the outcomes of the two groups and found no statistically significant difference in results.

In the case of the 4-year-old, the question of how cold ischemia affects heart procedures moved from the purely academic to the urgent when chief surgeon at Children's Hospital Leonard Bailey, MD,



Shown above is a standard incision following open kidney removal surgery. ▲

and his colleagues recently received word that a donor heart had become available following a motor vehicle accident that took the life of a 5-year-old Pennsylvania child. The donor offer had been turned down by 36 other heart transplant centers before LLU was called.

Because the heart was so far away, the length of time it would be kept in the cold without a blood supply was a concern.

“Until recent years, four hours was thought to be the outlier for keeping the heart outside the body,” Dr. Bailey notes. “Recently, it has been pushed back to five.”

There were other complications as well. The donor had suffered massive head and chest trauma in the accident, yet the heart appeared normal. The recipient had already received several reconstructive operations.

“After a careful review of the facts, we accepted the heart,” Dr. Bailey recalls.

The team members recovered the donor patient’s heart, flew it back to Loma Linda, and prepared the recipient to receive it. Altogether, it had been in cold ischemia and without a blood supply for 10 hours and 24 minutes—more than twice as long as the norm.

Fortunately, the operation was a success, and, as Dr. Bailey reports, “the outcome is a healthy 4-year-old boy.”

Advances in urology

Knowing how traumatic a typical kidney removal is, and what kind of scar it leaves, Duane Baldwin, MD, was intrigued at a scientific meeting when he heard about a new minimally invasive technique that leaves virtually no trace behind. He came back to LLU, learned how to do it by performing the surgery on pigs, and later began offering the procedure to patients.

The technique involves making a hidden incision inside the belly button and inserting a special device with three ports through which surgeons place flexible instruments that they can guide to the kidney—which isn’t exactly close to the belly button. After grinding



Incision at four weeks following kidney removal surgery performed the new way through the belly button. The kidney taken out was the size of a football. ▲

up the kidney, surgeons remove it through the port.

When the kidney is removed for a donation, it obviously has to stay intact. However, surgeons are able to modify the new technique so that it still leaves much less scarring than a typical kidney donation surgery. By enlarging the belly button incision by a few centimeters, and with only one other five-millimeter (less than one-quarter inch) port, they are still able to take the kidney out.

“We’re always looking to push the boundaries of minimally invasive surgery,” says Dr. Baldwin.

Dr. Baldwin has also shown that during laparoscopic surgery, kidneys from pigs are able to tolerate up to two hours without blood flow. Prior to his study, it was believed that 30 minutes was the maximum safe period that the kidneys could tolerate no blood flow. These results must be confirmed in human patients.

Other research recently done in the department of urology, in conjunction with the department of radiology, reduces the risk of cancer to patients who need CT scans to diagnose kidney or ureteral stones. Up to one in 1,000 people who undergo a typical CT scan may later develop fatal cancer as a result, and some people with recurrent stones may receive several CT scans during the same year, dramatically increasing their risk.

By placing stones in a kidney and urinary tract, putting those organs into cadavers, and then running CT scans at differing radiation doses, the researchers were rewarded with good news. In a patient who is not obese, ureteral stones can still be accurately detected even at a CT scan of only 7.5 milliamperes seconds—a reduction in radiation of as much as 95 percent. Results of this study will be published in *The Journal of Urology*.

Using a similar model, the researchers found that physicians can still detect kidney stones greater than two millimeters at similar rates while reducing radiation by up to 70 percent. The results of this study have been accepted for publication in the journal *Radiology*. SCOPE

Loma Linda University ranks in top third of top 100 colleges for Hispanics in United States

According to the May 4, 2009, edition of *The Hispanic Outlook in Higher Education*, Loma Linda University ranks 26th overall among the top 100 colleges offering doctoral degree programs to Hispanics.

In addition to the University itself, three other LLU entities shared the honors among schools offering professional degrees to Hispanics: The School of Dentistry tied for 9th; the School of Pharmacy tied for 7th; and the School of Medicine ranks 15th among American medical schools.

University officials and students cite three reasons why LLU attained such a high ranking—location, recruitment, and role modeling.

“Loma Linda’s success in enrolling Hispanic students has been directly related to an aggressive pipeline program organized and nurtured by the School of Medicine’s ethnically diverse faculty,” says H. Roger Hadley, MD, dean of the School of Medicine. “These programs bring students as early as junior high and as late as graduate school on campus and introduce them to career options as a physician and/or research scientist.”

“Students around the country, including Hispanics, are eagerly looking for educational experiences that fully prepare them to serve in a society that is becoming increasingly more diverse and multicultural,” notes Marino De León, PhD, director of the Center for Health Disparities and Molecular Medicine.

Dr. De León reports that more than 80 countries are represented on campus, and at least 50 percent of LLU students are Hispanic, African American, Pacific Islander/Asian, or Native American.

“The University shows its commitment to sustain this rich, multicultural, diverse experience for our students by having an extensive array of pipeline programs funded through the National Institutes of Health,” he asserts.

The programs—which are focused on increasing diversity—have provided research training to more than 350 students. The programs not only benefit individual participants, but also serve as a magnet to attract other students interested in the type of educational experiences LLU offers, says Dr. De León.

Dr. De León says that although these pipeline programs have received significant extramural funding only for the last 10 years, a total of 61 past participants are either currently enrolled in doctoral studies here or at other universities, or have already graduated, and are currently serving as health professionals.

“Having a rich multicultural educational environment,” he concludes, “and high quality doctoral programs is in part re-



Andrea Arguello and Irena Cabrera (from left), students at the Loma Linda University School of Medicine (LLUSM), confer with H. Roger Hadley, MD, dean of the School. Ms. Arguello and Ms. Cabrera are scheduled to graduate with their MD degrees in 2011. According to *The Hispanic Outlook in Higher Education*, LLUSM ranks 15th among American medical schools. ▲

sponsible for the high success LLU has had in enrolling and graduating a significant number of students from diverse backgrounds, including Hispanics, with doctoral degrees.”

The need for Hispanic health professionals is great. “Because of the disparity between the ratio of Hispanic dentists to the Hispanic population, we welcome and encourage as many applicants as possible,” notes Fred Kasischke, DMin, associate dean for admissions and service learning at the School of Dentistry (LLUSD).

Isaac Penalba, a third-year dental student, also stresses the value of hands-on clinical training, and LLU’s emphasis on global mission. “Through my own experiences doing dental checkups for Latinos in Rialto, serving the disadvantaged in Compassion Clinic in San Bernardino, and reaching out to the poor in Nicaragua, I have learned how my status as a Latino minority is a gift that I can use to better serve the dental needs of my community, and not only change others, but be changed.”

“I love the sense of community, and the feeling of intimacy with the administrators, faculty, staff, and classmates,” Yamel Ramirez, another third-year student from the School of Dentistry, says. “As part of the LLUSD family, I am an equal. It doesn’t matter whether I’m a first-year or third-year student; what matters is that I am treated like a human being, and that brings with it a sense of belonging.”

LLU Heart & Surgical Hospital reaches important landmark

Loma Linda University Heart & Surgical Hospital (HSH) reached an important landmark on April 8, 2009, when D. Duane Baldwin, MD, urologist, started the 500th surgical procedure at the new hospital.

“We opened on January 7, 2009,” says Jesse Mock, MA, administrator of the new facility, “so we did 500 cases in just 90 days.”

The team of the new facility hasn’t been letting the grass grow underfoot. Getting the new hospital operational has been an enormous challenge, but Mr. Mock says the results have been extremely gratifying.

“We’re very excited about our first patient satisfaction survey,” he observes. “Out of 25 components on the survey, we’re basically at the 99th percentile on most of them. Our food service department scored at the 99th percentile. Our admitting process, laboratory, pharmacy—even cleanliness—all scored at the 99th percentile. The Gallup organization, which conducts the survey, told us this is remarkable.”

Mr. Mock attributes the high levels of patient satisfaction to the staff. “This really says a lot about our nursing and operating room staffs, as well as the quality of our ancillary and support departments,” he adds.

Now that things are up and running at the new hospital, Mr. Mock says the HSH team is constantly looking to increase the types of services it offers to the community.

“Reconstructive breast surgery began here in May,” he notes. “We’re also very excited about our internal designation as a test-bed, or pilot project facility, for patient safety and performance improvement initiatives throughout the LLUMC division. The pilot project kicked off in early May. In a system as large as ours, it’s challenging to implement and evaluate new processes quickly, but a stand-alone facility like the Heart & Surgical Hospital allows us to work on things that might be more challenging for some of the bigger facilities. Things like improving administrative/physician communications, leadership development, and team-building are just easier to manage on a smaller scale for testing and rapid evaluation.”

Mr. Mock says the team is “very excited about the test-bed designation. It’s not that the other hospitals in our system aren’t involved in process improvement initiatives, because they are.”

Speaking of the other LLUAHSC hospitals and their process improvement initiatives, Mr. Mock specifically mentions



The LLU Heart & Surgical Hospital completed 500 surgical procedures in its first 90 days. ▲

the Innovating Excellence program at LLU Medical Center and Children’s Hospital, as well as the Planetree Model of Care initiative at East Campus, Behavioral Medicine Center, and LLU Medical Center.

“I think the Heart & Surgical Hospital is Loma Linda’s opportunity for having a new, small facility where we can try some new recipes, put them in the oven, and see what works,” he reflects.

“We’re going to do this while keeping our patient satisfaction scores at a very high level.”

Mr. Mock is the first to admit that the high patient satisfaction levels result from a comprehensive, team-wide commitment to doing everything possible to make the hospital experience as beneficial to patients as possible, but he also reports that one particular new and recently implemented service is generating lots of enthusiasm among patients.

“We’ve implemented massage therapy for our inpatients 10 hours a week,” he notes. Not surprisingly, they like it a lot. “We’ve been getting rave reviews from our patients.”

In explaining his organization’s high scores, Mr. Mock points to the Care Pix selection tool that was used to identify a match between the value sets of prospective employees and those of the organization. “Care Pix has worked very well for us,” he notes.

“Overall, we’re very happy with the way things have gone,” he observes. “We’re looking forward to meeting the needs of the community for many years to come.”

Crowds cheer 'topping off' of new LLUMC–Murrieta

About 300 people turned out Thursday, May 21, 2009, to witness a milestone in the construction of the new \$211-million Loma Linda University Medical Center–Murrieta.

The crowd broke into applause as a crane hoisted an American flag- and Christmas tree-festooned beam up in the air to top off the medical center building that is now under construction.

The occasion also marked the approach to the halfway point in construction of the new 106-bed hospital, set for completion in late 2010 and with a projected opening date of early 2011.

“Loma Linda is recognized as a worldwide leader in providing health care,” Murrieta mayor Gary Thomasian said. “This means our community will have world-class medical service.”

Loma Linda University Medical Center and Physicians Group of Murrieta, LLC, a consortium of doctors from southwest Riverside County, are developing the medical campus.

“We continue to think this is one of the best things that Loma Linda is working on,” said Ruthita Fike, MA, CEO of LLUMC.

Loma Linda University Medical Center–Murrieta is located on 50 acres at the northeast corner of Antelope and Baxter roads. The medical center will provide access to world-class care to a fast-growing region encompassing the cities of Murrieta, Temecula, Lake Elsinore, Perris, Menifee, and surrounding communities.



A crowd watches Thursday, May 21, as a construction crane hoists the last piece of steel beam for the new Loma Linda University Medical Center–Murrieta. ▲



Sarah Mayer (back, left) started her own clinic in Santa Anita, Baja California, to serve patients like the ones in this photo. ▲

LLU alumna serves in Baja California

Sarah Mayer’s sense of mission and service are major reasons for receiving the School of Allied Health Professions Alumna of the Year award for 2009.

In 2005, Ms. Mayer graduated from the LLU physician assistant (PA) program and, following a brief time with a local otorhinolaryngology practice, felt called to pursue her goal of providing medical care for underserved populations.

In 2006, she joined the Social Action Community Health System—specifically at the SACHS–Frazee and SACHS–Norton clinics in San Bernardino, whose patient populations are primarily composed of low-income, non-insured families. Her fluency in Spanish was also put to good use, since a majority of the patients at both clinics are Hispanic.

In the spring of 2008, after much prayer and planning, she left with her husband and 2-year-old daughter for Baja California to serve as missionary volunteers at a Christian orphanage. Ms. Mayer currently provides medical care for more than 150 children and staff who reside there.

Realizing the dire need for health care in the local area, she opened a free community clinic in the village of Santa Anita later in the summer of 2008. She solicited help from hospitals, doctors, PAs, churches, and building contractors to turn a small, abandoned consultation room (which previously served as a veterinarian exam room) into a thriving clinic where she currently sees patients of all ages with medical problems varying from acute infections to hypertension and diabetes.

Ms. Mayer is grateful to have the opportunity to make a difference in her patients’ lives and share God’s love.

LLU educates black women about breast cancer clinical trials

In an effort to someday reduce breast cancer incidence and death among African-American females in the Inland Empire, the LLU School of Public Health put on a program to educate these women about participation in human clinical trials that seek to lessen cancer mortality.

“Clinical trials are crucial for the development of effective prevention, diagnoses, and treatment for cancer,” says Padma Tadi-Uppala, PhD, an LLU associate professor as well as principal investigator on the grant from Susan G. Komen for the Cure Inland Empire that made this educational outreach possible.

About 60 women attended the event, most of whom were African-American. They represented breast cancer patients, breast cancer survivors, women at high risk for breast cancer, patient advocates from six area breast cancer support groups, and others.

Breast cancer is more likely to kill an African-American woman than a woman of any other race due to later detection of



Two-time breast cancer survivor Charlotte Kilgore receives a stroke prevention test, administered by Devadas Moses, MD (left). Looking on is Margaret Sparks, MA (far right). Free health screenings were offered at the event. ▲

the disease in this population, according to the United States Department of Health and Human Services.

During the program Dr. Tadi-Uppala presented a version of the National Cancer Institute’s clinical trial education program tailored specifically to the needs of African-American women.

Only 3 to 5 percent of the more than 10 million American adults diagnosed with cancer participate in clinical trials. African-Americans and other minorities are the least likely to take part in trials, according to Dr. Tadi-Uppala.

16th annual Children’s Hospital Foundation Gala raises \$750,000 for LLUCH



The gala’s child ambassadors (from left, Nathan Iwakoskoshi, Giovanni Nelson, Miranda Roberts, and Jet Nelson), present a check for \$750,000 to Zareh Sarrafian, MBA, administrator, LLU Children’s Hospital. ▲

When more than 700 people arrived at the 16th annual Children’s Hospital Foundation Gala, held at the Riverside Convention Center on Sunday, April 5, 2009, they were greeted by crisply uniformed volunteers. Many paused to watch the first of several entertainers—a fire eater—as he extinguished torches in his mouth and exhaled immense breaths of fire.

His performance, at the entrance to the Convention Center, signaled guests that they would soon experience “Miracles in the Marketplace,” the theme for the 2009 Loma Linda University Children’s Hospital (LLUCH) Gala.

Zareh Sarrafian, MBA, administrator, LLUCH, emphasized the great need for health care services for children as more and more children’s hospital beds are lost throughout the state. He thanked attendees for their constant and continued support of LLU Children’s Hospital.

At the close of the program Leonard Bailey, MD, surgeon-in-chief, LLUCH, and Christi J. Bulot, Foundation Board chair, presented a check for \$750,000 to LLUCH.

Pharmacy students make a difference in Moreno Valley

More than 75 residents of Moreno Valley received valuable health information and medication counseling from 60 Loma Linda University School of Pharmacy students and seven faculty members during a four-hour health fair on Sunday, May 17, 2009.

The health fair, sponsored by Walmart and staffed by School of Pharmacy faculty and student pharmacists, represented the first time the School's professional student organizations collaborated to provide community service.

Residents received diagnostic testing for such diseases as osteoporosis, diabetes, and hypertension. They also received counseling for cholesterol, cough and cold, asthma, heartburn, and their existing medications. Each booth focused on a specific disease state and was managed by one of the student professional organizations. One faculty member was also assigned to each booth to mentor the student pharmacists.

One of the organizers, student pharmacist Larry Rutebuka, says, "The impact affected both the students and patients. The patients especially benefited from the booths that gave them hard numbers, such as blood sugar, bone density, or blood pressure. These numbers led directly into productive patient counseling sessions."

LaDonna Jones, PharmD, says, "Witnessing the collaboration of student organizations working together for a common goal is the epitome of what LLU strives to achieve."



Loma Linda University School of Pharmacy student Christina Hakl counsels a Moreno Valley resident at the May 17 health fair. ▲



Tracy Bock, RN, MBA, service line director of the metabolic and bariatric surgery program at LLU Heart & Surgical Hospital, and Stewart Rendon, MD, co-director of the program, say bariatric surgery opens doors to a healthier lifestyle for patients with a number of medical conditions. ▲

Metabolic and bariatric surgery program ready to open at LLU hospital

A new metabolic and bariatric surgery program at Loma Linda University Heart & Surgical Hospital is now opening doors to a healthier lifestyle for Inland Empire residents with a variety of medical conditions.

Stewart Rendon, MD, co-director of the program, says bariatric surgery has never been offered as a comprehensive service in any of the entities of LLUMC before. "This is a brand new program for Loma Linda," he insists. He notes that while the public perception of bariatric surgery is often limited to surgeries performed for cosmetic weight reduction, the full scope of bariatric surgery encompasses several different surgical procedures used to treat a number of medical conditions.

"It's not just about weight," says Dr. Rendon. "Our program, which features fellowship-trained surgeons, is helpful in the treatment of diabetes, sleep apnea, joint pain, hypertension, and other conditions associated with cardiovascular disease. In fact, bariatric surgery has been shown to resolve diabetes. The comprehensive benefits of this program go far beyond weight loss."

One of the ways the metabolic and bariatric surgery program achieves those goals is through comprehensive care. After surgery, patients will be followed up at LLU's Center for Health Promotion. Patients will be evaluated, educated, and supported not only by physicians, nurses, and nutritionists, but also by a psychologist to achieve lasting improvements to their health.



Loma Linda University Children's Hospital was announced as the first children's hospital in the nation to receive the coveted "Baby-Friendly" designation by Baby-Friendly USA. Pictured with members of the Children's Hospital staff are (far right) San Bernardino County fourth district supervisor Gary Ovitt and fifth district supervisor Josie Gonzales. ▲

LLUCH becomes the nation's first hospital to be awarded 'baby-friendly' designation

Loma Linda University Children's Hospital became the first children's hospital in the nation to be awarded the coveted "Baby-Friendly" designation from Baby-Friendly USA, the national authority of the Baby-Friendly Health Initiative in the United States.

The Baby-Friendly Hospital Initiative is a global program sponsored by the World Health Organization and the United Nations Children's Fund to encourage and recognize hospitals that offer an optimal level of care for lactation.

Carol Melcher, RNC, MPH, manager of the perinatal services network at LLUCH, notes that "because children's hospitals have neonatal intensive care units and other departments that require more specialized care, there is additional service that is needed for our physicians and nurses when educating newborn mothers. That is why it is such an honor for Loma Linda University Children's Hospital to be the first of its kind to receive the 'Baby-Friendly' designation."

The award was presented to a large and very enthusiastic delegation of LLUCH staff members in attendance at the 2009 annual key advisory luncheon of the perinatal services network.

During the awards ceremony, San Bernardino County district supervisor Gary Ovitt, who chairs the San Bernardino County Board of Supervisors, noted that the Inland Empire is now officially "the 'Baby-Friendliest' region of the United States." Along with Mr. Ovitt, fifth district supervisor Josie Gonzales, who chairs First 5 San Bernardino, was recognized as an honored guest. First 5 San Bernardino was created in December

1998 in order to realize the benefits of the California Children and Families First Act. The act created a program for the purpose of promoting, supporting, and improving the early development of children from the prenatal stage to 5 years of age and their families.

"Many studies," says Larry Gartner, MD, a founder of the American Academy of Breastfeeding, "have demonstrated the dangers of not breastfeeding." Among those dangers are increased risk of sudden infant death syndrome (SIDS), childhood cancer, and diabetes.

According to the Baby-Friendly Health Initiative, "more than one million infants worldwide die every year because they are not breastfed or are given other foods too early. Millions more live in poor health, contract preventable diseases, and battle malnutrition. Although the magnitude of this death and disease is far greater in the developing world, thousands of infants in the United States suffer the ill effects of an infant formula-feeding culture. A decreased risk of diarrhea, respiratory and ear infections, and allergic skin disorders are among the many benefits of breastfeeding to infants in the industrialized world."

The group also notes that "in the United States, these benefits could translate into millions of dollars of savings to our health care system through decreased hospitalizations and pediatric clinic visits. For diarrhea alone, approximately 200,000 U.S. children, most of whom are young infants, are hospitalized each year at a cost of more than half a billion dollars. Many of these cases of diarrhea could have been prevented with breastfeeding."

Loma Linda University students conduct health clinic in Cameroon

Nine students and two faculty members from Loma Linda University traveled to Cameroon during spring break this year to participate in a week-long health clinic at Buea Adventist Clinic and Hospital.

Buea Adventist Clinic and Hospital is operated by Adventist Health International (AHI), a non-government organization based in Loma Linda, California.

The student-led team worked closely with local church members, as well as with two visiting physicians and three visiting dentists.

“Travel to and from Cameroon went smoothly,” says Jan Nick, PhD, RNC, associate professor of nursing, School of Nursing. “The experience was uplifting, and we all came back praising God for the opportunity to go, work among the Cameroonians and learn from them, understand another culture, and heal the physical, social, and spiritual needs of the community just as Jesus did.”

The students responsible for community education included Nicolette LaRondelle, School of Allied Health Professions; Terry-Ann Dawes and Laura Foster, School of Medicine; Aiyana Davison, Melissa Lukman, and Maria Valencia, School of Nursing; and Kate Reinsma, Denise Hinds, and Tina Pruna, School of Public Health.

The physicians included Greg Shank, MD, an LLU graduate and medical director of Koza Adventist Hospital, an AHI hospital in a remote part of northern Cameroon. Accompanying Dr. Shank was his wife, Audrey Shank, MD, who is also a Loma Linda graduate.

Additionally, two visiting Cameroonian dentists and a dental assistant from Yaounde, the capital of Cameroon, were on site to provide free clinic services.

The local church and clinic staff provided logistics support for crowd movement—getting the patients in and out of the physician and dental clinics, or the student-led community education classes. The local staff also provided spiritual counseling and translation services as needed into French or pidgin.

On the final day of their stay, the LLU team visited a local orphanage and handed out toothbrushes, balloons, and toys.

“To say thank you to us, the children sang a special song, while one of the orphan children beat out the tempo on an African drum,” describes Dr. Nick. “It was a very moving experience.”



Denise Hinds, a School of Public Health student, leads out in a learning exercise with members of the Buea community. ▲

New LLU bachelor's graduates are top earners among colleges in survey

Graduates of Loma Linda University have the highest median starting salary among United States colleges ranked by PayScale.com. The rankings were released in July and reported on by *The New York Times*. The starting median salary (includes up to five years after graduation) for LLU bachelor's degree graduates is \$71,400.

The New York Times article attributes the No. 1 ranking to LLU's "strong programs" in allied health, nursing, and dental careers.

PayScale's rankings are based on self-reporting from 1.2

million individuals who disclosed their degrees and earnings. The figures are based only on graduates with a bachelor's degree who did not go on to earn any higher degree. Thus, professionals such as medical doctors or dentists are excluded from the survey.

Loma Linda University offers approximately 20 bachelor's degrees in fields ranging from geology to dental hygiene to clinical laboratory science.

LLU was followed in the rankings by Massachusetts Institute of Technology (MIT) at number two and Harvey Mudd College, in Claremont, at number three.

First Annual Believe and Walk for the Cure event raises \$200,000 for LLU Cancer Center

Annie Sellas, Cathy Stockton, and Nancy Varner, members of Inland Women Fighting Cancer, approached the office of philanthropy in early 2008 with plans to hold a fundraiser to benefit the LLU Cancer Center. Stater Bros. Charities agreed to co-sponsor the event, and before year's end, the First Annual Believe and Walk for the Cure became a reality.

According to Mark Reeves, MD, PhD, director of the LLU Cancer Center, the event fostered many good feelings in the community about the center and the care Loma Linda University is providing to families in the Inland Empire, and it funded research that will impact future treatment of the disease.



From left, Annie Sellas; Cathy Stockton; Jack Brown, president and CEO, Stater Bros. Markets; Nancy Varner; Susan Atkinson; and Sarah Cain, executive director, Stater Bros. Charities, present a check for \$200,000 to Loma Linda University Cancer Center. ▲

The office of philanthropy recently hosted a luncheon at Wong Kerlee International Conference Center to say thank you to event organizers and sponsors. During the luncheon, Stater Bros. Foundation presented a \$200,000 check to LLU Cancer Center.

PossAbilities member who lost legs to gang violence walks across stage to graduate

The odds were death. Antonio Steward innocently fell victim to gang violence by being shot nine times—even though he wasn't in a gang.

That night, August 26, 2006, was a nightmare for the then 17-year-old and his family. For 46 days he lay in a coma, wavering between life and death.

Since then, he has undergone 56 surgeries, including the amputation of both his legs above the knee. In September 2007, he took his first steps on prosthetics.

He continues physical therapy at Loma Linda University Medical Center—East Campus (LLUMCEC) to learn to walk again.

Now 20 years old, Antonio has been an active member in PossAbilities, a community outreach program developed by LLUMCEC, which offers support and activities to people who are disabled. In addition to competing in the PossAbilities triathlon and Redlands Bicycle Classic, he is also part of the PossAbilities speakers bureau, encouraging others with his story.

"I didn't like my situation; but then I just got over it," says Antonio. "I realized that I'm still here for a reason, and I have to figure out what that reason is now."

On June 10, 2009, "Miracle man walking," as he is known, walked across a stage to receive his high school diploma. Not only has he been hard at work in rehabilitation, but he has been

studying with his home school teacher for the past year and a half. Through his courage, strength, and bright-eyed smile, Antonio is accomplishing what few thought possible.

"No matter what happens, there is always good in bad situations—something good always comes out of it," he explains. "Just never give up."



Antonio Steward and his homeschool teacher, Lori Williams (left), celebrate after he walked across the stage to receive his high school diploma. ▲

'Loma Linda 360°' correspondent nominated for Emmy Award

Maranatha Hay, video production specialist for the office of University relations, was nominated for a 2009 Emmy Award. The National Academy of Television Arts & Sciences, Pacific Southwest Chapter, announced her nomination on April 30 for on-camera talent/reporter in "Security Dogs."

Through her personable storytelling skills and lively personality, Ms. Hay takes viewers on an adventure with the K-9 security department at Loma Linda University. Dressed in a bite suit, the then 22-year-old college intern helped the security dogs train by allowing the K-9s to attack her—a risky act if she didn't stand just the right way. Lt. John Marshall of the security department explained to her exactly how to stand. With one wrong move, the dog could accidentally bite her throat or rebite her in a spot where she wasn't protected by the suit.

"It was probably the scariest thing I've ever done," says Ms. Hay. "When you have 90 pounds of meat flying at you, you realize quickly that you can't just kick it away."

Ms. Hay graduated from Southern Adventist University in 2007 with a bachelor of science in broadcast journalism and a minor in English.

"Loma Linda 360°" is a broadcast show that takes viewers straight to the action of Loma Linda University and LLU Medical Center. It airs on five different channels including PBS affiliate KVCR and Loma Linda Broadcasting Network. The show can also be viewed on its website <www.llu.edu/360> and YouTube.



Emmy-nominated Maranatha Hay (right) and Lt. John Marshall pose with security dog Chase. ▲



The occupational therapy faculty and staff celebrate the department's 50th Anniversary with a commemorative photo. ▲

Occupational therapy department celebrates 50th anniversary

For 50 years, the occupational therapy department at Loma Linda University School of Allied Health Professions (SAHP) has taught its students to lead, heal, and serve so their patients can truly "live life to its fullest."

The field of occupational therapy was founded in 1917, but it wasn't until the 1940s that the rehabilitation movement hit full force. It was during this time that a young high school girl, stricken with polio as a baby, had dreams of becoming an occupational therapist. Not only that, but she wanted to start the first occupational therapy department in the Adventist educational system at Loma Linda University.

"Of course, that was a little bit far-fetched for a person only 18 years old," says Edwinna Marshall, founder and professor emerita, occupational therapy, SAHP, "but the Lord led me on the way."

Occupational therapy at Loma Linda University has grown considerably since then.

"In recent years, occupational therapy has broadened its scope of practice to meet the ever-changing needs of our society," says Christine Billock, PhD, associate professor of occupational therapy. "Paired with this idea that we can be involved preventatively is the idea that ours is a holistic profession. When we do our work, we address the mind, body, and spirit of all of our clients."

In its 50 years of existence, the occupational therapy department leaves a lasting impact on society by making it possible for others to follow the mission of "living life to its fullest."

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transforming lives

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CANCER INSTITUTE

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

Dentistry

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

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

Medicine

Medicine (MD)
Graduate program in the basic sciences
Anatomy (MS, PhD)
Biochemistry (MS, PhD)
Microbiology and molecular genetics (MS, PhD)
Pharmacology (PhD)
Physiology (MS, PhD)

Nursing

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

Pharmacy

Doctor of pharmacy (PharmD)

Public Health

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

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

Religion

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

Science and Technology

Biology (MS, PhD)
Case management (certificate)
Child life specialist (MS, certificate)
Clinical mediation (certificate)
Clinical social work (PhD)
Counseling (MS)
Criminal justice (MS)
Drug and alcohol counseling (certificate)
Earth science (PhD)
Environmental health and earth systems science (BS)
Family counseling (certificate)
Family life education (certificate)
Family studies (MA, PhD)
Forensic science (certificate)

Geology (BS, MS)
Gerontology (MS)
Marital and family therapy (MS✓, DMFT, PhD)
Natural sciences (MS)
Public administration (DPA)
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