Stem-cell research is on the cusp of transforming patient care through the development of personalized therapies for a wide range of diseases.

The mission of the new UCLA Children’s Discovery and Innovation Institute is to alleviate suffering and restore the promise of childhood as quickly and efficiently as possible.
This was going to be a no-holds-barred.related trip. We were heading to a meeting in Cleveland on March 27, 2013, aboard an American Airlines 767 to DallasFort Worth, where we would change planes. It was about an hour-and-a-half into the flight, crossing over eastern New Mexico, and we were working on our laptops, when there was a tremendous thud. We looked down at the floor next to us and into the face of a large man in his 60s who had collapsed in the aisle. He regained consciousness after a moment, and we asked if he had any illnesses or was taking medication; he told us he was diabetic, took insulin and had high blood pressure.

And then, he had a seizure. His breathing stopped and his pulse ceased. One moment he was talking to us, and the next he was blue. It was hard for us to believe this was happening, but in a situation like this, you just switch into autopilot. Neither of us had cycled a patient since our earliest years of clinical training, but now we had no choice.

A flight attendant brought oxygen and the plane’s automated external defibrillator (AED) unit, which also shows an EKG tracing. The pilot called over the loudspeaker, “Is there a doctor on the plane?” Two young men stepped forward: UCLA neurosurgery resident Dr. Brandon Evans and Brian Fisher, a three-year medical student at Texas Tech University. How lucky for us—and for the man we were attending—that they were among the 183 passengers on our flight. The four of us performed CPR. While we began attaching the AED and preparing the contents of the emergency kit so we could begin ventilating and start an IV, Dr. Evans took control of the patient’s head to manage his airway, and Brian began chest compressions. Here we were, strangers on a plane thrown together as a single-minded medical team with one goal—to save this man’s life.

The trace on the AED showed just electrical noise, confirming our worst fear; he was in V-fib. We performed another defibrillation-shock cycle. The plane was diverted to Lubbock, Texas, and began its descent, as the pilot and flight attendants reassured the passengers. We continued to work on him, as the plane headed for its landing, kneeling around him in the narrow aisle. Several more shocks were required as we descended. Amazingly, he stabilized as we circled to land. He opened his eyes and looked at us. “I’m sorry,” he said.

It was the gentlest landing we’d ever experienced, like glass. We pulled right up to the gate, and paramedics were on the plane as soon as the door opened. Brian, the medical student, also got off the plane; Lubbock was his final destination, so instead of having to change planes in Dallas, he had an unexpected direct flight. The passengers applauded him as he disembarked.

As the paramedics took our patient—Charles “Chip” Collison—off the plane, alive, we felt an overwhelming sense of humility and gratitude that we and our young colleagues, Brian Fisher and Charles “Chip” Collison.

Dr. Lynn Gordon is professor of obstetrics and gynecology and associate dean for academic diversity in the David Geffen School of Medicine at UCLA. Dr. Jonathan Braun is chair of pathology and laboratory medicine, and Dr. Jonathan Braun and Dr. Lynn Gordon have shared many less-meaningful flights in their 34 years of marriage.
Big data. You probably have heard this term, but what does it mean, and why should it matter to us in academic medicine? This omnipresent buzz phrase stands not only for the explosion of data generated by today’s computer-driven innovations like electronic health records, but also the potential for using this wealth of information to push the boundaries of our fourfold mission: research, teaching, patient care and community engagement.

UCLA, along with the other four University of California medical campuses, is collaborating to create one of the largest – if not the largest – health-data repositories in the world. Because of the size of our clinical enterprise, UCLA will be the biggest contributor to this knowledge bank. These enormous caches of data, relating to every individual we treat, will provide researchers with a breadth and depth of information for their studies that have been unheard of until now. This means that they will have an entire universe of data to mine for their research rather than a small sample.

For the clinician, it means being able to evaluate a patient’s clinical presentation or test results against a quarter-of-a-million patients with similar indicators, in order to make the best possible diagnosis and prescribe the optimal treatment plan.

In education, we will be revamping our curriculum and training our future doctors to incorporate big data into everything they do as physicians and creating a new category of specialists in health informatics.

Finally, our communities – locally, statewide and around the globe – will benefit because big data will enable us to collect and analyze information about large populations to provide more robust and sophisticated knowledge about persistent and knotty issues such as healthcare disparities, early detection of epidemics like avian flu, and more effective prevention and treatment of widespread conditions like asthma.

Our challenge is this: UCLA must be willing to move vigorously, to build partnerships with the developers of new technologies and care models, and to utilize the more than 3-million records in our own UCLA repository, as well as the 12-million patient records in the entire UC trove. With leadership and action, we can demonstrate to the public the enormous benefit for patients and communities from this research as it is shared to speed improvements in care.

I have no doubt we can meet this challenge. The David Geffen School of Medicine at UCLA and UCLA Health have an abundance of talented individuals who not only have the skills to handle the technical aspects of this brave new world, but also the overarching commitment to heal humankind.

A. Eugene Washington, MD, MSc
Vice Chancellor, UCLA Health Sciences
Dean, David Geffen School of Medicine at UCLA
Gerald S. Levey, MD, Endowed Chair
The Woman Who Heard Too Much

Imagine if every noise your body made echoed loudly in your brain. For nine months, Karrie Aitken, 46, couldn’t tolerate any sound, including her own voice. Each word vibrated in her head like she was trapped inside a barrel. Munching on chips was deafening. But hearing her heartbeat was the worst.

“My heart pounded like a drum in my ear 24/7,” described the Chatsworth mother of three. “It drowned out music, television and a roomful of people talking. I had to take anxiety pills to fall asleep; the noise never went away.” Aitken’s bizarre auditory symptoms were accompanied by hearing loss, ear pain, poor balance, vertigo and nausea. Multiple trips to the ER and various physicians proved fruitless. Doctors advised her to get a hearing aid and see a psychiatrist and blamed her symptoms on sinusitis and anxiety attacks.

Depression consumed Aitken’s life; she lost 40 pounds and cried constantly. Finally, she was examined at Ronald Reagan UCLA Medical Center by head and neck surgeon Quinton Gopen, MD (RES ’04). He told her, “I know what you have.” Aitken suffered from a rare disease called semicircular canal dehiscence syndrome (SCDS), caused by a tiny hole in one of the three canals inside her left ear. A CT scan revealed that the bone separating the superior canal from the brain had thinned, opening a small pore between the two areas that broadcast sounds from Aitken’s body directly into her inner ear.

Dr. Gopen partnered with UCLA neurosurgeon Isaac Yang, MD ’04, to open Aitken’s skull, push the brain out of the way and plug the miniscule hole in her ear canal. When Aitken awoke, the loud echoes of her heartbeat and voice had vanished. Her hearing is good as new, and she has regained her appetite and enthusiasm for life.

According to Dr. Gopen, Aitken’s frustrating journey toward diagnosis isn’t unusual. SCDS wasn’t identified until 1998 – a recent enough discovery that it’s just beginning to be added to textbooks and taught in medical school. As a result, Dr. Gopen says, most physicians are not familiar with the rare syndrome, which affects an estimated 1 percent of the population.

Drs. Yang and Gopen recently published the first overview on SCDS in the Journal of Neurological Surgery. Their goal is to educate their colleagues, so other patients don’t have to suffer from Aitken’s ordeal, and to share the best way to uncover the ear-canal hole – typically the width of three human hairs.

To view a video about Karrie Aitkin and her condition, go to: uclahealth.org/scds
The results of a major, multicenter clinical trial to determine the best treatment for younger patients who have strokes that are potentially due to a hole in the upper chambers of the heart have provided suggestive, but not definitive, evidence of the benefit of a new heart hole-closure device. The trial sought to determine which was the best treatment to prevent further strokes: a combination of closing the hole with a “button” device and anti-clotting medicines or anti-clotting medicines alone.

UCLA was one of the 69 performance sites for the study, called the Recurrent Stroke Comparing PFO Closure to Established Current Standard of Care Treatment (RESPECT). Over eight years, the study enrolled 980 patients between the ages of 18 and 60 (average age 46). All had experienced a stroke of unknown origin and had a hole in the wall of their heart known as a patent foramen ovale or, or PFO. Nearly half had large strokes as their qualifying stroke event. In up to 10 percent of strokes in the U.S., a PFO is the only identified potential cause.

 Patients were followed for an average of two-and-a-half years. In the main analysis, patients assigned to receive the button device showed a trend toward having fewer recurrent strokes than those receiving standard care with anti-clotting medications (9 percent versus 16 percent), but the difference did not meet statistical tests for being definite. Further analyses conducted in the subset of patients who adhered to their assigned treatments provided additional evidence that the device was beneficial.

Closure-device therapy may be a useful strategy for selected patients with a history of cryptogenic stroke and PFO – a population that is generally younger than the average stroke patient and otherwise facing a lifetime of potentially riskier medications, the UCLA researchers said. The authors said that closing the hole in the heart also has been studied as possibly helping with other health issues, such as migraines.

Jeffrey Saver, MD, director of the UCLA Stroke Center, was one of four national principal investigators of the study. Jonathan Tobis, MD, director of interventional cardiology, was the RESPECT lead cardiology investigator at the UCLA site.


Using a closure device like the Amplatzer PFO occluder may benefit younger patients who have a stroke due to a hole in the upper chambers of their heart.

Photo: Courtesy of St. Jude Medical

UCLA Earns Healthcare Equality Index Distinction

UCLA Health has been recognized as a Core Four Leader in LGBT Healthcare Equality for 2013 by the Human Rights Campaign. UCLA applied for the distinction as a demonstration of its commitment to the goals of human rights, education, outreach and better understanding of lesbian, gay, bisexual and transgender (LGBT) people in the community and within its health system. The recognition is based on responses to the campaign’s Healthcare Equality Index (HEI).

“We decided to participate in the 2013 HEI survey to gain more knowledge through the sharing of best healthcare practices and policies for LGBT patients and to express our commitment to equal care for all patients, in keeping with our mission of healing humankind one patient at a time,” says David T. Feinberg, MD, MBA, president of UCLA Health.

A key mission of the HEI is to encourage healthcare institutions to embrace the campaign’s foundational Core Four principles of patient non-discrimination, equal visitation for LGBT patients and their visitors, employment non-discrimination and training for staff in LGBT patient-centered care.

UCLA met all four core criteria to achieve the status of Leader in LGBT Healthcare Equality 2013.

“UCLA Health is committed to providing quality care to all of our patients, and we believe that the HEI is a unique resource for healthcare organizations to use as a guidepost in providing equitable, inclusive care to lesbian, gay, bisexual and transgender patients,” Dr. Feinberg says.

The HEI survey asks an institution to respond to such questions as whether or not its patient non-discrimination policy or bill of rights includes such terms as sexual orientation and gender identity; whether or not its visitation policy explicitly grants equal visitation to LGBT patients and their visitors; whether or not its employee non-discrimination policy includes such terms as sexual orientation and gender identity; and whether or not its staff receives training in LGBT patient-centered care.

LGBT patients are able to access and search the report generated after completion of the survey to learn which institutions have participated in the HEI and which have been designated as Equality Leaders.
As the Biological Clock Winds Down

A study by researchers at UCLA and in Japan suggests a way to predict when a woman will have her final menstrual period. The findings could help women and physicians gauge the onset of menopause-related bone loss, which generally begins a year prior to the last period. The researchers used women’s ages, menstrual bleeding patterns and measurements of hormone levels to estimate the amount of time until they were likely to reach menopause, says the study’s lead author, Gail Greendale, MD, professor of medicine in the Division of Geriatrics.

Women who are approaching menopause often ask their healthcare providers when they will be done with their periods, but the information is sometimes more telling than women realize, Dr. Greendale says. “Being able to estimate when the final menstrual period will take place has taken on importance beyond just helping women gauge when they will stop having periods. We know that potentially deleterious physiological developments, such as the onset of bone loss and an increase in cardiovascular risk factors, precede the final menses by at least a year.”

The researchers used data collected annually for up to 11 years on 554 women, including Caucasians, African Americans, Hispanics and women of Chinese and Japanese descent, participating in the multi-site, multi-ethnic Study of Women’s Health Across the Nation. At enrollment, the women were between the ages of 42 to 53, had an intact uterus and at least one ovary, were not using medications affecting ovarian function and had experienced at least one menstrual period in the prior three months.

The researchers measured levels of estradiol (E2), a hormone produced by the ovaries, and follicle stimulating hormone (FSH), which comes from the pituitary gland and triggers the production of eggs. FSH starts increasing and E2 starts decreasing about two years prior to the final menstrual period, or about a year before bone loss and cardiovascular risk factors rise.

The study found that the levels of the two hormones could be used to estimate whether or not women were within two years of beginning their final menstrual period, within one year or beyond their final period. The study had some limitations, including its modest sample size. In addition, hormone levels were sampled once a year, and more frequent sampling might have allowed the researchers to more precisely estimate each woman’s place on the timeline.

New Institute Fosters Unified Approach to Curing Pediatric Diseases

The newly launched UCLA Children’s Discovery and Innovation Institute brings together pediatric physician-scientists and faculty experts from a variety of fields across the UCLA campus to drive multidisciplinary research collaborations focused on children’s health and disease. The goal is to speed the translation of groundbreaking pediatric research findings into clinical practice—locally, nationally and globally.

“We are expanding our well-developed foundation to build a dynamic, interdisciplinary support system for our pediatric physician-scientists that fosters new avenues for innovation,” says Sherin Devaskar, MD, physician-in-chief of Mattel Children’s Hospital UCLA, assistant vice chancellor for children’s health and holder of the Mattel Executive Endowed Chair in the UCLA Department of Pediatrics. “This new paradigm will lead to advancements that can improve the health of children faster and more efficiently.”

The institute will pioneer advancements in pediatric medicine in four key research areas: the brain and behavior; nutrition and metabolism; cancer; and inflammation, infection and immunity. Efforts in each area will focus on prevention, screening and treatment, as well as providing training opportunities for the next generation of pediatricians and mentorship programs that enable younger physicians and scientists to...
A Key to Happiness?


The neurochemical changes underlying human emotions and social behavior are largely unknown. Now though, for the first time in humans, UCLA scientists have measured the release of a specific peptide, a neurotransmitter called hypocretin, that greatly increased when subjects were happy but decreased when they were sad.

The finding suggests that boosting hypocretin could elevate both mood and alertness in humans, thus laying the foundation for possible future treatments of psychiatric disorders like depression by targeting measurable abnormalities in brain chemistry. In addition, the study measured for the first time the release of another peptide, this one called melanin concentrating hormone, or MCH. Researchers found that its release was minimal in waking but greatly increased during sleep, suggesting a key role for this peptide in making humans sleepy.

“The work explains the sleepiness of narcolepsy, as well as the depression that frequently accompanies this disorder,” says Jerome Siegel, PhD, director of the Center for Sleep Research at UCLA’s Jane and Terry Semel Institute for Neuroscience and Human Behavior at UCLA. “The findings also suggest that hypocretin deficiency may underlie depression from other causes.”

For the study, the researchers obtained their data on both hypocretin and MCH directly from the brains of eight patients who were being treated at Ronald Reagan UCLA Medical Center for intractable epilepsy. The patients had been implanted with intracranial depth electrodes to identify seizure foci for potential surgical treatment. The location of electrodes was based solely on clinical criteria. The researchers, with the patients’ consent, used these same electrodes to “piggyback” their research. A membrane similar to that used for kidney dialysis and a very sensitive radioimmunoassay procedure were used to measure the release of hypocretin and MCH.

The patients were recorded while they watched television; engaged in social interactions such as talking to physicians, nursing staff or family; ate; underwent various clinical manipulations; and experienced sleep-wake transitions. Notes of activities were made throughout the study every 15 minutes in synchrony with a 15-minute microdialysis sample collection by a researcher in the patients’ rooms.

The subjects rated their moods and attitudes on a questionnaire, which was administered every hour during waking. The researchers found that hypocretin levels were not linked to arousal in general but were maximized during positive emotions, anger, social interactions and awakening. In contrast, MCH levels were maximal during sleep onset and minimal during social interactions.

“These results suggest a previously unappreciated emotional specificity in the activation of arousal and sleep in humans,” Dr. Siegel says. “The findings suggest that abnormalities in the pattern of activation of these systems may contribute to a number of psychiatric disorders.”

Dr. Siegel noted that hypocretin antagonists are now being developed by several drug companies for use as sleeping pills. The current work suggests that these drugs will alter mood as well as sleep tendency.

“Human Hypocretin and Melanin-concentrating Hormone Levels Are Linked to Emotion and Social Interaction,” *Nature Communications*, March 5, 2013

learn from UCLA’s cadre of experts.

Children are not “small adults,” pediatricians stress, and they experience illnesses and treatments differently than adults. The UCLA Children’s Discovery and Innovation Institute is well-positioned to collaborate with a wide variety of researchers across campus who have expertise not only in science and health but also in the unique challenges young people face.

“Interdisciplinary research as envisioned by the institute is fundamental to the discoveries that pave the way to major improvements in health,” says A. Eugene Washington, MD, MSc, dean of the David Geffen School of Medicine at UCLA and vice chancellor for health sciences. “Having access to a variety of specialists and experts with different points of view can be invaluable in nurturing innovations that can ultimately benefit children around the world.”

For more information on the UCLA Children’s Discovery and Innovation Institute, go to: uclahealth.org/cdii

The new UCLA Children’s Discovery and Innovation Institute will become a magnet for leading pediatric physicians to share ideas.

Photo: Michelle Totaes
Working to Identify Cognitive Decline Early

UCLA researchers have used a brain-imaging tool and stroke-risk assessment to identify signs of cognitive decline early on in individuals who don’t yet show symptoms of dementia. The connection between stroke risk and cognitive decline has been well-established by previous research. Individuals with higher stroke risk, as measured by factors like high blood pressure, have traditionally performed worse on tests of memory, attention and abstract reasoning.

The current study demonstrated that not only stroke risk, but also the burden of plaques and tangles, as measured by a brain scan, may influence cognitive decline. The imaging tool used in the study was developed at UCLA and reveals early evidence of amyloid beta “plaques” and neurofibrillary tau “tangles” in the brain – the hallmarks of Alzheimer’s disease.

The study demonstrates that taking both stroke risk and the burden of plaques and tangles into account may offer a more powerful assessment of factors determining how people are doing now and will do in the future, says David Merrill, MD, PhD, assistant clinical professor of psychiatry and biobehavioral sciences at the Jane and Terry Semel Institute for Neuroscience and Human Behavior at UCLA.

This study is one of the first to examine both stroke risk and plaque and tangle levels in the brain in relation to cognitive decline before dementia has even set in, Dr. Merrill says.

According to the researchers, the UCLA brain-imaging tool could prove useful in tracking cognitive decline over time and offer additional insight when used with other assessment tools.

For the study, the team assessed 75 people who were healthy or had mild cognitive impairment, a risk factor for the future development of Alzheimer’s. The average age of the participants was 63.

The individuals underwent neuropsychological testing and physical assessments to calculate their stroke risk using the Framingham Stroke Risk Profile, which examines age, gender, smoking status, systolic blood pressure, diabetes, atrial fibrillation, use of blood pressure medications and other factors.

In addition, each participant was injected with a chemical marker called FDDNP, which binds to deposits of amyloid beta plaques and neurofibrillary tau tangles in the brain. The researchers then used positron emission tomography (PET) to image the brains of the subjects – a method that enabled them to pinpoint where these abnormal proteins accumulate. The study found that greater stroke risk was significantly related to lower performance in several cognitive areas, including language, attention, information-processing speed, memory, visual-spatial functioning (e.g., ability to read a map), problem-solving and verbal reasoning.

Heart-failure Medications Highly Cost Effective

A UCLA study shows that heart-failure medications recommended by national guidelines are highly cost effective in saving lives and may also provide savings to the healthcare system. This study is one of the first to analyze the incremental cost-effectiveness of heart-failure medications and taking into account the latest information, including the lower costs of generic medications. Researchers found that the combination of these medical therapies demonstrated the greatest gains in quality-adjusted life years for heart-failure patients.

“We found that the use of one or more of these key medications in combination was associated with significant health gains, while at the same time being cost-effective or providing a cost savings,” says Gregg Fonarow, MD ’87 (RES ’93), the Eliot Corday Professor of Cardiovascular Medicine and Science and director of the Ahmanson-UCLA Cardiomyopathy Center.

The study focused on patients with mild-to-moderate chronic heart failure who had weakening function in the left ventricle. With the heart’s diminishing function, fluid can build up in the lungs, so most patients take a diuretic. The research team used an advanced statistical model to assess the specific incremental and cumulative health- and cost-benefit contributions of three medications, compared with diuretics alone, in the treatment of heart-failure patients. The medications studied included angiotensin-converting...
A Bacterial Wolf in Viral Sheep’s Clothing

A winter outbreak of tuberculosis (TB) in Los Angeles’ skid row may have exposed up to 4,500 individuals to the bacterium that causes the deadly disease. The outbreak occurred at a time when homeless individuals are driven to crowded shelters, when influenza is peaking and when people’s vitamin D levels, typically boosted by sunlight exposure, are low.

In a new UCLA study, researchers, led by Robert L. Modlin, MD, chief of dermatology, demonstrate that certain bacteria can pretend to be viruses when infecting humans, allowing them to hijack the body’s immune response so that they can hide inside our cells. The findings may also help explain how viral infections like the flu make us more susceptible to subsequent bacterial infections such as pneumonia.

When bacteria pretend to be viruses, the immune system launches an attack with a protein, interferon-beta, that is designed to fight viruses and also blocks the action of interferon-gamma, to the advantage of bacteria. Further, if a real virus were to trigger interferon-beta, it would divert the attention of the immune response, preventing an attack on the bacterial invader. This may explain why flu can lead to a more serious bacteria-based infection like pneumonia.

The team examined the mechanisms by which interferon-beta protein suppresses the interferon-gamma defense response to bacterial infections. As a model, they studied leprosy, which is caused by a bacteria related to TB. The scientists first compared the genetic expression of the virus-fighting interferon-beta protein and the bacteria-fighting interferon-gamma protein in skin lesions from leprosy patients. They found that interferon-gamma was expressed in patients with the milder form of the disease and that interferon-beta was increased in those with the more serious, progressive form of leprosy. The researchers then compared the genes triggered by interferon-beta in these leprosy skin lesions with those found by two other groups of investigators in the blood of TB patients. There was a significant overlap; interferon-beta genes were more frequent in both the skin lesions of leprosy patients with extensive disease and in the blood of TB patients with more severe disease.

The new findings may indicate why, in winter, residents of skid row are at added risk for TB. Because of colder nighttime temperatures, indigent homeless people tend to stay in shelters, where they live closely with others, facilitating the spread of influenza. The body’s immune system could then be diverted by the flu virus to produce interferon-beta, blocking an effective immune response to the TB bacteria. And the drop in vitamin D levels due to decreased sunlight during winter months could further diminish the ability of individuals’ immune systems to kill the TB bacteria.

Researchers found that treatment with one or a combination of these medications was associated with lower costs and higher quality of life when compared to treatment with a diuretic alone. The greatest gain was achieved when all three guideline-directed medications were provided. The team found that the incremental cost-effectiveness ratio of adding each medication was less than $1,500 per each quality-adjusted life year for patients. In some scenarios, the medications were actually cost-saving, where heart-failure patients’ lives were prolonged at lower costs to the healthcare system.

For the study, cost-effective interventions were defined as those providing good value with a cost of less than $50,000 per quality-adjusted life year, which is the general standard, Dr. Fonarow says. Cost-saving interventions are those that not only extend life but also save money for the healthcare system. Such interventions are not only more effective but are less costly. Dr. Fonarow noted that the costs of not effectively taking these key medications would be higher, due to increased hospitalizations and the need for other interventions.
A UCLA team has, for the first time, used a technique normally employed to manage brain aneurysms to treat life-threatening irregular heart rhythms in two patients. This unique use of the method helped stop ventricular arrhythmias that originated in the septum, the thick muscle that separates the heart’s two ventricles. This area is virtually impossible to reach with conventional treatment.

Ventricular arrhythmia claims 400,000 lives annually and is one of the leading causes of death in the United States. These arrhythmias can usually be controlled by medications, by an implanted cardioverter defibrillator device that shocks the heart back into normal rhythm, or by a procedure called catheter ablation, which involves a targeted burn or the application of extreme cold to the area of the heart causing the irregular heart beat. However, none of these traditional treatments worked for the two patients featured in this report. They suffered from a severe form of arrhythmia called ventricular tachycardia, which causes a dangerous rapid heartbeat.

Instead, the UCLA team of cardiologists and interventional neuroradiologists used coil embolization, a minimally invasive method originally developed at UCLA and now commonly used around the world to treat brain aneurysms. “We have to think outside the box to help patients with severe arrhythmias located in hard-to-reach areas of the heart,” says Kalyanam Shivkumar, MD, PhD, director of the UCLA Cardiac Arrhythmia Center and a professor of medicine and radiological sciences at the David Geffen School of Medicine at UCLA. “We hope that this treatment will offer new hope for these heart patients, who previously had few options.”

The team used wires threaded through the arteries of the heart muscle to take images of the electrical system of each patient’s heart to pinpoint the exact origin of the arrhythmia and serve as a roadmap. The team then inserted a tiny catheter through a small incision in the groin, guided it to the heart and into the small arteries known as septal perforators, which supply blood to the area of the septum wall in which the arrhythmia originated. The doctors then threaded tiny, soft-metal coils into each targeted artery, cutting off the blood supply to the region where the arrhythmia originated and stopping it.

“We are seeing more cross-over into different medical specialties of these cutting-edge techniques that are able to target and navigate delicate areas in the body, such as the brain and heart,” says Gary Duckwiler, MD ‘83, professor of radiological sciences. “We look forward to future collaborations with cardiology.”
Voted Best in the West / 150 neighborhood offices

With a busy life, we give you one less thing to worry about. Great medical care is just around the corner with our extensive network of primary care and specialty clinics, plus our four renowned hospitals. Consistently ranked Best in the West by *U.S.News & World Report*, UCLA offers some of the nation’s best medicine right where you live.

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In the national dialogue on healthcare, much attention is paid to ensuring that patients receive the services they need in ways that both the individuals and society as a whole can afford. But another significant issue is drawing equal attention from the government, healthcare providers and patients alike: the quality of care that is delivered. It goes without saying that every patient wants to receive care that is reliably error-free and of the highest quality. But what does that mean? In his role as chief medical officer, J. Thomas Rosenthal, MD – he prefers to simply be called Tom – focuses his attention on quality and safety, which are top priorities for UCLA’s hospitals. He spoke with U Magazine contributing writer Dan Gordon.

How is quality care typically defined?

Dr. Rosenthal: Well, that’s the sixty-four-thousand-dollar question. If you go back 20 years, quality simply meant all of us doing our best. The presumption was that you trained people well, put them in good environments, made sure they were professional and highly motivated, and then you would get good results. That was quality.

When did that perspective change, and what instigated the shift in thinking?

Dr. Rosenthal: A pair of influential reports by the Institute of Medicine, released beginning in 1999, marked the turning point. Among other things, these reports, To Err is Human and Crossing the Quality Chasm, estimated that there were 100,000 preventable deaths each year in hospitals as a result of medical errors. Beyond the focus on poor care, there was recognition that being highly motivated to do our best was not enough. The complexity of modern medicine demands that we approach it in a more systematic way, and not doing so can cause preventable harm and death to patients. That was the basis for the beginning of the quality movement.

What has characterized that movement? Who is involved, and what are the goals?

Dr. Rosenthal: The first change in a hospital has to be the realization that the old system is insufficient. Then, an investment has to be made in people who can facilitate groups coming together to design processes of care that are more systematic, more reliable and more measurable. This is often referred to as creating a culture of safety. This is the job of everyone in medicine, but the responsibility of leading this effort is given to people like me who have the title chief medical officer and to people who have the title chief safety officer. The second element of the safety movement has been to better define quality by actual measures, to collect the data from hospitals and physicians and to report it publicly. A group of professionals across the country, as well as national organizations and professional societies, has been working diligently to define metrics, determine
how to collect the data and bring the data together in productive ways. A number of entities, notably the federal Center for Medicare and Medicaid Services and state governments, including California’s, have required that certain measures be publicly reported. The idea is to provide measurements that will not only be useful for patients as consumers, but also that hospitals and physician groups can use to improve performance. And the evidence is quite compelling that when doctors, nurses and healthcare organizations are provided with solid data about their performance, they will be more motivated to make the necessary changes that are required to improve.

What are some of the key areas that are measured, and what is UCLA doing to improve its own performance?

Dr. Rosenthal: We have several areas of priority including medication safety, prevention of hospital-acquired infections and improvement in communication and hand-offs. As an example of our approach to medication safety, we realized that UCLA’s hospitals give 6-million doses of medications to patients per year. That’s a lot of opportunities to make a mistake, so we institute automated processes and checks to take the element of human error out of the picture. Hospitals are also places where there is a risk of infection, and we institute steps to ensure that our patients aren’t exposed to that risk. Transitioning patients to a new medical team is another area where things can go wrong, so we have established communication protocols to be sure that all essential information is passed onto the new team. Many of our processes around structured communication and checklists are borrowed from NASA and the airline industry. For example, we now have a formal “time-out” before a surgery during which the plan is gone over, and each item on the list is checked off – things that must be done every time. We need 100-percent reliability, and to do that, nothing can be taken for granted. It’s not easy. It requires a substantial investment of resources to get from 90-percent reliability to 100-percent reliability. But that is now the expectation, and it’s entirely appropriate.
Obviously, safety is critical but it’s not the only thing to be considered. Beyond not making mistakes, how is quality assessed?

**Dr. Rosenthal:** Certain areas have been identified as representing the highest standard of care. For example, a facility should give every suspected heart-attack patient aspirin upon arrival. That’s important – everyone wants a highly reliable organization when it comes to healthcare. What patients care most about is whether or not they survive the heart attack. So the next level of measurements involves outcomes. This includes survival rates for conditions such as heart attack, congestive heart failure and stroke, taking into account patients’ risk factors. Transplant outcomes are also reported for each hospital.

Can outcomes for every type of case be accurately measured and monitored? Aren’t there conditions that don’t fall so clearly into a category?

**Dr. Rosenthal:** That’s right. Outcomes for some diseases are not as easily captured, and/or there is no national data. If you have prostate cancer, you would have to conduct a fairly sophisticated literature search to determine what treatment-complication rate is considered good, and even that’s problematic, because typically the only people who publish their results in peer-reviewed literature are those who have good outcomes. To help fill this void, we are in the process of engaging all of our departments in an effort to define what perfect care looks like. We say we’re UCLA, we believe we’re the best – and probably in many instances we are the best – but we have to demonstrate it and make sure we’re continuously finding ways to improve. Patients and their families expect their care to be perfect or as close to perfect as is humanly possible.

What are the components of perfect care that would cut across all departments and conditions?

**Dr. Rosenthal:** Safety is essential, but perfect care also involves explaining treatment options in a way that helps the patient make informed decisions; having the treatment carried out with the highest possible technical expertise, and with minimal or no complications; having it done efficiently, which means the patient doesn’t have to wait six months for a surgery or an hour-and-a-half every time he or she comes to the office; and treating the patient with compassion.

In other words, quality encompasses not just medical outcomes but also what patients think of the hospital experience?

**Dr. Rosenthal:** Absolutely. Clearly, when we talk about delivering perfect care, it’s what the patient believes is perfect that matters most. And patients expect to be treated with dignity and compassion. There are some experts who believe patient satisfaction is just about amenities that have little to do with outcomes and that it shouldn’t be considered in quality assessments. That’s not our view. We believe issues of emotional support and communication are deeply embedded in the ability to achieve high-quality medical outcomes. And because these are critical components of patients’ expectations of high-
quality medical care, we need to measure that and hold ourselves accountable in that area as well.

**UCLA Health’s patient-satisfaction ratings**

**What has changed?**

**Dr. Rosenthal:** Seven years ago, we introduced the CI-CARE program to create a standardized process for interactions with patients and families. Before that, many of us would receive feedback from patients and their families that went something like this: “I came to UCLA and you treated my life-threatening illness. I was going to die and now I have returned to a normal life … but I would never go back to UCLA for care or recommend UCLA to a friend or family member because you didn’t take into account my emotional needs or sufficiently communicate what was going on.” That was a powerful wake-up call – that you could save a patient’s life and yet he or she was left very unsatisfied. Patients expect more than just good technical outcomes. And now, thanks to CI-CARE, we have 8,000 employees who come to work each day with a desire and the professional requirement to go the extra mile in treating patients the way they would want their own family members treated.

**In what other ways does UCLA assess its own quality and work to make improvements?**

**Dr. Rosenthal:** We certainly measure ourselves against all of the nationally reported data to determine where we need to focus our improvement efforts. We have also set up an infrastructure that includes people who work with our healthcare professionals to collect data, present it and facilitate teams working together to improve quality. These teams are an important part of the continuous improvement process. They are represented by multiple disciplines – physicians, nurses, pharmacists and others – who are knowledgeable about a particular problem, and we help facilitate their efforts to collect and analyze data, hold meetings and carry out any action steps.

**How useful are the rankings of organizations that grade hospitals based on quality measures?**

**Dr. Rosenthal:** I don’t think they are entirely helpful. These rankings often are fraught with methodological problems, and if they are done badly, it can create misperceptions on the part of the public. There is a belief on the part of some of these rating entities that public embarrassment will change hospital and physician performance, whether the data is accurate or not. That’s probably true when the data is accurate. But when it’s not, hospitals and doctors end up spending a lot of time arguing over what went into the rankings – energy that should be spent on improvements.

So accountability and transparency are not problematic as long as the information is accurate and can be properly interpreted?

**Dr. Rosenthal:** Absolutely. Transparency is crucial. If people are coming to me as a surgeon, they should have access to as much information as possible about my experience and performance. But they should interpret that information carefully and talk to their doctor about it. Where there are accurate ways of measuring, we are completely in favor of that, and we have no problem being held accountable publicly. It’s our task as leaders to identify those areas where we’re not doing as well as we could and fix them. Meanwhile, we must continue to put processes in place that will work toward our goal of delivering perfect care – defined as safe, effective, compassionate and efficient. That’s what patients expect, and that’s our professional duty.

**“When we talk about delivering perfect care, it’s what the patient believes is perfect that matters most.”**
THE ELI & EDYTHE BROAD CENTER OF REGENERATIVE MEDICINE & STEM CELL RESEARCH AT UCLA IS ON THE CUSP OF TRANSFORMING PATIENT CARE THROUGH THE DEVELOPMENT OF PERSONALIZED STEM-CELL-BASED THERAPIES FOR A WIDE RANGE OF DISEASES.

BY KATHY SVITIL — PORTRAITS BY ANN JOHANSSON
Children born with severe combined immunodeficiency (SCID) – also known as “Bubble Boy” disease – have no functioning immune system and thus cannot fight off even the mildest of infections. If not treated, the disease is invariably fatal within the first year of life.

One common form of SCID is caused by a mutation in both copies, maternal and paternal, of the gene for an essential metabolic enzyme called adenosine deaminase (ADA). Regular injections of the enzyme can restore some immune function in these individuals, but the therapy is both expensive and far from a cure. For that, Donald Kohn, MD, is turning to stem cells.

Two decades ago, Dr. Kohn, then at Children’s Hospital Los Angeles, performed the world’s first gene therapy on newborns with ADA-deficient SCID. He and his colleagues isolated stem cells from the umbilical-cord blood of three newborns diagnosed with the disease before birth. Their cells were cultured with viral vectors, which transferred a normal copy of the ADA gene into the stem cells. The modified cells were then infused back into the babies to help restore their immune systems.

Last fall, Dr. Kohn, director of the UCLA Human Gene Medicine Program, reported the results of what he calls Version 2.0 of the therapy. In the first phase of the study, begun in 2001, four children with ADA-deficient SCID were infused with their own genetically modified bone marrow. The treatment, however, “really didn’t do anything,” he says. “It didn’t hurt them, but it didn’t help them, either.”

The next six patients, treated between 2005 and 2006, were given chemotherapy before getting back their bone marrow. This modification of the gene-therapy protocol mimics one first used with some success by a separate group of European researchers.

“The chemotherapy eliminates some of the patients’ residual bone marrow and makes space for the gene-corrected cell to go back,” Dr. Kohn explains. Indeed, half of this second group of children “have good immune recovery,” he says. The patients who benefitted the most were also the youngest – including a baby boy who was diagnosed with ADA-deficient SCID at 10 months old after significant illness and his younger sister, who was diagnosed shortly after birth. Both are now doing well.

The results suggest that the optimal time for the therapy is when children with ADA deficiency are
around 3-to-6 months of age. Dr. Kohn and his colleagues have just received FDA approval for Version 3.0 of their ADA gene-therapy protocol. The two-to-three-year, 10-patient trial will employ an improved gene-delivery virus that uses components of HIV, but which cannot transmit the disease, instead of the mouse-virus-based delivery used previously. “Because it is a human virus,” he says, “it gets into the bone-marrow stem cells more efficiently. That means we only have to have the cells in culture for one or two days instead of about week, better preserving the stem cells.”

Ultimately, Dr. Kohn hopes, the therapy will be approved as an orphan drug and made available to all future patients with this disease — providing that long-sought cure. “So far, in the patients in which the treatment has been successful, it has lasted for as long as we have looked” — 10-to-12 years. “We hope it is forever, but we won’t know that until 30, 40, 50 years from now,” says Dr. Kohn, who will soon begin a clinical trial using a similar gene-therapy approach to treat sickle-cell anemia, a genetic disorder characterized by abnormally shaped red blood cells. His clinical trial for sickle-cell disease was developed with support of a $10-million CIRM grant. “That’s the beauty of stem cells. If we can get the gene into a long-lasting stem cell, it will be there for the rest of the person’s life, making gene-corrected blood cells.”

CULTIVATING KILLER CELLS

Immunotherapy is an established treatment for melanoma, with several drugs already approved for treatment. The drugs work by stimulating an immune response that causes T cells — the workhorse cells of the immune system — to attack and kill cancerous cells. One problem with the therapy, however, is that relatively few of those melanoma-destroying cells are actually produced. Now, Antoni Ribas, MD, PhD, and his team, with support from a $20-million CIRM grant, are developing new methods to boost the numbers of cells.

In recent work, Dr. Ribas, professor of hematology/oncology, and colleagues were able to dramatically reduce the size of melanoma tumors by isolating and then genetically modifying the patients’ T cells so that they would specifically attack tumor cells.

One downside to the treatment, however, was that although the altered T cells were initially very active, “with time they lost their antitumor activity,” Dr. Ribas says. “This results in a high rate of initial tumor responses, but as the T cells decrease their killer functions for melanoma, then the cancer starts to regrow.”

The researchers are now investigating a number of different techniques to preserve that cancer-destroying ability, including changes to the method by which the cells are grown in the lab and enhancing a phenomenon known as “antigen spreading.” In antigen spreading, T cells that are genetically engineered to attack particular cancer-cell lines transfer that immune response to other types of T cells that can attack the tumor via different types of antigens (the substances, such as proteins, that trigger immune responses).

But the ultimate solution, Dr. Ribas says, is to genetically engineer stem cells to target tumors — creating a group of cells that would continuously repopulate the body with their cancer-killing progeny. “With this research, we want to create a large army of activated and fully functional T cells with the main aim of providing higher rates of responses,” Dr. Ribas says. Furthermore, adds Dr. Ribas, who hopes to begin a clinical trial using these sorts of engineered stem cells in approximately two years, “what we learn from melanoma can be transferred to other cancers.”

TESTING FOR AUTISM

In just the past few years, hundreds of genes have been identified that are linked to autism-spectrum disorder (ASD), the puzzling neurodevelopmental condition estimated to affect 1-in-100 children in the United States. Although scientists haven’t yet determined just what those genes do to produce the unique suite of symptoms experienced by autism patients, “knowing these genetic mutations gives us an incredible toehold to begin to move to mechanistic therapy,” says Daniel Geschwind, MD, PhD, Gordon and Virginia MacDonald Distinguished Chair in Human Genetics and director of UCLA’s Center for Autism Research and Treatment. “It’s very analogous to
with autism. In some cases, mutations are produced by knocking out a specific stretch of DNA, in others, by overexpressing it. Each mutation is created using several different methods, and duplicate cultures are produced of each of those cell lines, “so you can see that we’re talking about a very large-scale project,” Dr. Geschwind says.

Although all of the tested mutations are rare – no known autism mutation occurs in more than 1 percent of patients – they could reveal vital information about the disorder and its causes. “We want to find areas of convergence in these genes that might provide a more global treatment or global view of the disorder,” he says.

Among other factors, the researchers will assay the RNA complement of each cell line. “The notion is that the RNA is a readout of how the genome is being turned on and off, so that gives us a first hint as to what pathways are actually being rearranged,” he says. “By correlating that with other functional phenotypes, like the cells’ morphology and kinds of synapses, we can triangulate in on the mechanism.”

For example, Dr. Geschwind says, “If we identify that the genes that code for proteins that make neuronal synapses are down-regulated in a bunch of these different mutations and then find morphological evidence of changes by looking at the cells themselves and physiological evidence that there is low synaptic signaling, that may lead us to a pathway that we can use to try to correct that problem. If we identify pathways for which there are already drugs developed,” he adds, “we can immediately start to test those drugs.”

“WE WANT TO FIND AREAS OF CONVERGENCE IN THESE GENES THAT MIGHT PROVIDE A MORE GLOBAL TREATMENT OR GLOBAL VIEW OF THE DISORDER.”
- DR. DANIEL GESCHWIND

“BY STUDYING THESE LYMPHOID PROGENITORS, WE CAN UNDERSTAND THE KEY GENES THAT CONTROL HOW STEM CELLS FIRST ENTER THE PATHWAY THAT LEADS TO THE GENERATION OF THE ENTIRE IMMUNE SYSTEM.”
- DR. GAY CROOKS
Finding the Missing Link

It’s long been known that the body’s immune system is generated through a regimented series of steps called lymphoid differentiation that starts with blood-forming stem cells, known as hematopoietic stem cells, in the bone marrow. Gay Crooks, MD, co-director of the Broad Center, and her colleagues have now identified a crucial early stage in this process: the so-called lymphoid-primed progenitor cell. The cell represents the “missing link” between hematopoietic stem cells and the rest of the human lymphoid system.

“With the knowledge gained on how to isolate these lymphoid progenitors, we are now conducting detailed gene-expression analyses to understand how the stem-cell program gets turned off and the lymphoid program is initiated,” says Dr. Crooks, professor of pathology and laboratory medicine and of pediatrics. “By studying these lymphoid progenitors, we can understand the key genes that control how stem cells first enter the pathway that leads to the generation of the entire immune system. That will give us targets through which we can manipulate the process.”

Discovering those targets could lead to new therapeutic methods to treat blood diseases, which is an area of particular interest to Dr. Crooks. “A major problem that plagues bone-marrow-transplant patients, young and old, is that the immune system takes several months or years to be remade from the transplanted stem cells. This makes our patients at high-risk for serious infections. One reason for studying the lymphoid progenitors in bone marrow is to understand how the stem cells might be encouraged to differentiate into lymphoid cells faster and more efficiently.”

There is no current medication or cell therapy to hasten the recovery of the lymphocytes, she adds. “That is what makes it such an exciting and important area of research.”

Controlling Prostate Cancer

Hundreds of thousands of men receive therapy every year for prostate cancer, and although those treatments work well when the disease is confined within the prostate gland itself, they are ineffective once the cancer metastasizes. “In that case,” says noted cancer researcher Owen Witte, MD, President’s Chair in Developmental Immunology and the center’s founding director, “we have a really limited set of therapeutic options, all of which alter the efficiency or production of androgen, or male steroid, used by the cancer as part of its growth control.” Unfortunately, the cancer invariably becomes resistant to this therapy as well, with tragic consequences.

Stem cells may be the solution, Dr. Witte says. His lab is working to characterize the biochemical pathways through which normal prostate stem cells self-renew – mechanisms that may be corrupted in advanced, aggressive forms of prostate cancer.

Recently, for example, Dr. Witte and his colleagues found that damage to the gene for a protein called Bmi-1, which is crucial for cellular repair, causes prostate stem cells to grow abnormally; blocking the expression of the protein, the team discovered, prevents that out-of-control behavior. “If we can enumerate the mechanisms that are used in prostate cells to maintain their normal growth and how those mechanisms are exploited as the cells turn into a cancer, that becomes the target for therapeutic intervention,” says Dr. Witte.

Indeed, through similar efforts over the past 35 years, his lab has contributed to the development of three different cancer drugs, including Gleevec, the world’s first drug to specifically target cancer cells. In the 1990s, he and his colleagues identified the gene for an enzyme called Bruton’s tyrosine kinase (BTK) that, when mutated, causes an inherited immune-deficiency disease. “We showed that the enzyme can also be a target for treating cancers of the immune system, including lymphomas and certain kinds of leukemia, leading to a new pharmaceutical,” he says.

“My hope is that this work on prostate cancer will ultimately lead to precisely the same point: new therapies to help patients with this disease and related diseases. The message that I think is most important is that this type of basic work – understanding cells and pathways – leads to targets, which leads to treatments.”

Kathy Svitil is a freelance health and science writer and director of news for the California Institute of Technology.
HEALING THE YOUNGEST BRAINS
With today’s technology, physicians can intervene to prevent or limit lifelong harm when babies suffer a brain injury at birth.

BY SHARI ROAN

JADE LOOP HAD THE PERFECT PREGNANCY. So when she went into labor on September 26, 2012, Loop and her husband, Tomer DeVito, didn’t anticipate that the birth of their first child would be anything less than perfect as well.

That’s not how it turned out. Sage DeVito was born, after many hours of labor, on September 28 at UCLA Medical Center, Santa Monica. But instead of letting out a wail as he gulped in his first breaths of air, the baby was silent, limp and blue.

“The medical team started to work on him immediately,” Loop recalls. “He wasn’t breathing. He did not cry. They rushed him out of the room. It was very scary. I didn’t even get to see him.”

A short time later, doctors told the couple that Sage experienced a lack of oxygen at birth and may, as a result, have sustained a brain injury. But, one of the doctors added, “The good news is that you’re here.” UCLA has one of the foremost neonatal-intensive-care programs in the country and the skill and advanced technology to address such serious issues as oxygen-deprivation during birth. In Sage’s case, the treatment was therapeutic hypothermia, a protocol that is among several advances in neonatal care aimed at improving the outcomes for full-term and premature babies born with brain injuries.

Sage was rushed from Santa Monica to the neonatal intensive-care unit (NICU) at Mattel Children’s Hospital UCLA, where he was placed on a special blanket, through which cold water is circulated, to gradually and carefully lower his core temperature to about 92.3 degrees F. (Another method utilizing a cooling cap can also be used instead of a blanket.) By cooling the body, metabolic processes slow down, conserving energy needed for healing and calming inflammation resulting from the initial injury. The goal is to spare the infant from some degree of disability or developmental delay that might otherwise accompany such an injury.

“In the last decade, we’ve come to understand that, with brain injuries that are moderate, we can make a difference,” says Sherin U. Devaskar, MD, Mattel Executive Endowed Chair of the Department of Pediatrics and physician-in-chief of Mattel Children’s Hospital UCLA.

After three days in the NICU undergoing hypothermia treatment, Sage was warmed to a normal temperature and underwent an MRI exam, which showed no brain damage. Today, he is developing normally and hitting all of his developmental milestones.

“The people caring for him were the most amazing people I’ve ever been with,” Loop recalls. “I felt very lucky to be there.”

PHOTOS: Superstock Images
CONCUSSION DISCUSSION

MANY BRAIN INJURIES TO OLDER CHILDREN AND TEENS OCCUR DURING PARTICIPATION IN SPORTS, MORE THAN 1 MILLION EACH YEAR IN THE UNITED STATES, ACCORDING TO THE AMERICAN ACADEMY OF NEUROLOGY (AAN). But until recently, these injuries often went unrecognized – and untreated.

“Mild concussive injuries that were overlooked in the past are now coming to attention,” says Christopher Giza, MD, associate professor of pediatric neurology and neurosurgery. “When I was a kid, mild injuries to the brain weren’t really recognized. Nobody took you out of the game. You would continue participating in that activity, and you could get injury on top of injury.”

Dr. Giza is the co-author of newly released guidelines from the AAN on evaluating and managing athletes with concussion. Among the recommendations: An athlete with suspected concussion should be removed from play and not return until he or she has been assessed by a health professional trained in concussion. Athletes should return to play slowly and only after all acute symptoms are gone.

But more research is needed on traumatic brain injuries in youths. Dr. Giza maintains. There is some evidence, for example, that younger brains may be more vulnerable to traumatic brain injury than adult brains. Compared to collegiate athletes, high school athletes seem to have a longer duration of symptoms and need longer to recover. The question is: What if the potential for brain damage is higher in even younger children?

Still, the guidelines will go a long way to ensuring better care of youngsters with concussion. “Adolescent and childhood injuries don’t get near the awareness that they probably should,” Dr. Giza says. “In professional and Division I collegiate sports, they have a bully pulpit in the media. But there are many more high school, grade school and Pop Warner football players out there – probably millions – compared with about 2,000 NFL players. It’s time to focus more of our attention in brain-injury research where the numbers are.”

~ Shari Roan

KNOWLEDGE ABOUT BRAIN INJURIES IN INFANTS HAS EXPLODED IN THE PAST DECADE. Many of these injuries are, as in Sage’s case, the result of hypoxic ischemic encephalopathy (HIE) – which means the baby is deprived of an adequate supply of oxygen. The condition affects one to two babies per every 1,000 births in the United States and results in a mortality rate of about 15 percent. About 20- to 25 percent of surviving babies are permanently disabled with neurodevelopmental impairment.

Another major source of infant brain injuries is prematurity, which occurs in one-of-every-nine births in the United States. In about 10 percent of cases, premature babies develop cerebral palsy, while as many as half have some type of cognitive disorders or learning disability. Still other types of infant brain injuries occur because of problems in the pregnancy, such as intrauterine growth restriction.

Whatever the cause, infant brain injuries are shocking to families who are expecting to embark on one of the happiest times of their lives, Dr. Devaskar notes.

“A couple plans for a child. They go through nine months of pregnancy with nothing wrong. They do everything right,” she says. “I’ve had parents tell me: ‘We were healthy. We ate right. We took vitamins.’ And yet, at the last minute, something goes wrong, and they have a child who is disabled for the rest of his or her life. That is devastating.”

Neonatologists are trying to mitigate that devastation with such treatments as therapeutic hypothermia. The treatment is considered among the most exciting recent developments in neonatal medicine, says Meena Garg, MD, clinical professor of pediatrics and neonatology at the David Geffen School of Medicine at UCLA.

“Sometimes the blood supply from the mother to the fetus is interrupted, such as from placenta abruption or cord prolapse,” she explains. “When the blood supply is cut off, there is an immediate injury to some of the brain cells and neurons.”

More important, after this initial insult to the brain, another destructive and more insidious process continues to occur over the next three-to-seven days. The initial injury deprives the brain cells of the energy – in the form of oxygen and glucose – that is essential for brain function. This injury triggers inflammation that can result in secondary brain damage for several days after the initial injury. Therapeutic hypothermia helps blunt this secondary damage. As the body and brain are cooled, less energy is needed for brain function, minimizing injury. Cooling also interrupts the process of inflammation that causes the death of brain cells and neurons.

“The hypothermia slows down the ongoing damage in the brain,” Dr. Garg says. “It affects all aspects of inflammation in the brain.”

The key to successful treatment, says Dr. Garg, is applying the therapy within six hours of birth. In some cases, UCLA air-transport teams have flown as far as California’s Central Valley to pick up and return newborns to UCLA for timely treatment.

“Of all the transport types I do, transporting babies with hypoxic brain injury can be the most challenging, mainly because of the time factor,” says neonatologist Caroline Gibson, MD, a member of the air-transport team. “Sometimes we’re running through the hospital with the isolette. The protocol gets activated before I go out to pick up the baby, so as soon as we arrive, the whole team is waiting at the bedside.”

So far, UCLA has used therapeutic hypothermia to treat about 80 infants, and the outcomes have been good. International studies show babies who receive therapeutic hypothermia have a 20- to 25 percent improvement in outcomes compared to babies who receive standard care.

“In the United States, the incidence of HIE has not changed over the years,” Dr. Garg says. But, she adds, babies used to get only supportive care – nutrition, oxygen and ventilation.
“There was no specific treatment for the brain injury up until now. Therapeutic hypothermia is the first thing we’ve had to help these babies by preventing ongoing brain damage. Parents are relieved that there is something to help their baby; they want us to do everything we can.”

And further advances may be on the way. Childhood brain and behavior compose one of four core areas targeted by the new UCLA Children’s Discovery and Innovation Institute, which was founded to promote innovative and groundbreaking collaborative research to improve the lives of children.

Other advances in neonatal care, such as continuous electroencephalography (EEG) monitoring, have augmented the care of brain-injured newborns, Dr. Garg says. EEG measures and records the brain’s electrical activity. The technology is important in the care of brain-injured newborns in order to diagnose seizures, which also can damage the brain. About 60-to-70 percent of brain-injured newborns have seizures. But, unlike standard EEG, continuous EEG allows for constant surveillance of the baby. Data from continuous EEG monitoring can be sent, via wireless connection, to neurologists’ offices or homes for frequent and rapid assessment.

The neonatal team at UCLA also is using MR imaging to assess damage to the brain. “If you see major changes on MRI, you caution the family that this child needs close follow-up,” Dr. Devaskar explains. “Before we had this imaging, we could only rely on the clinical exam alone.”

In addition, UCLA researchers are studying whether or not seizure medications improve the outcomes for babies who have had therapeutic hypothermia. They are looking for biomarkers in the blood — chemicals that are clues to what’s happening in the brain — that can predict a baby’s eventual outcome, Dr. Devaskar says.

Moreover, studies are underway on whether or not stem cells can be used to repair the developing brain. Laboratory studies show that stem cells can be coaxed to become brain cells in a dish. Now scientists are studying how they can get those stem cells to the parts of the brain where they’re needed. These studies are at the pre-clinical stage of development.

Other therapies are aimed at babies with brain injuries that are caused by insults other than from lack of oxygen. Hypothermia, for example, doesn’t help preemies, who are especially prone to brain damage. Premature babies are benefiting from the enhanced imaging techniques, such as continuous EEG and MRI, because the information provides doctors and parents with a roadmap for the future.

“With better imaging, we’re able to prognosticate,” Dr. Devaskar says. “We then get these babies into an early intervention and follow-up program very quickly. They get vision, hearing, IQ and fine-motor testing.”

Dr. Devaskar points out that it really does take a village — neonatologists, pediatric neurologists, neuroradiologists, the neonatal/pediatric transport team and the entire staff of the NICUs — to ensure optimal and timely care of these babies.

“With early intervention programs, we’re making a difference,” she says.

Indeed, they have made a world of difference for Jade Loop and her son. Each new skill that Sage develops, such as sitting up and holding a cup, is a cause for celebration. “All of the other little things about being a new mother don’t matter to me — not getting enough sleep or the baby crying,” Loop says. “It doesn’t matter. This is a miracle.”

Freelance writer Shari Roan wrote about medicine and healthcare for the Los Angeles Times.
The first time Reza Jarrahy, MD, traveled to Guatemala with a team of plastic surgeons, in 1999, he was a surgical resident. He helped lug equipment over pitted roads to a military base near the border with Mexico and scrubbed dust off walls and sprayed Lysol everywhere to sanitize and convert an empty supply building into a four-room hospital.

The surgical team expected at least 100 mothers would come to them from the surrounding villages, seeking surgery to repair their children’s cleft lips and palates. But none came. It turned out the military base where they’d established their makeshift hospital was infamous. “The civil war had ended a few years earlier, but these were simple people who live with folklore and oral stories,” Dr. Jarrahy says. “All they knew is that in the few years before we arrived, their husbands and sons had been taken to this same base and never came back. No mother was going to bring her child there.”

Gradually, some mothers overcame their fears and trickled in. A few days later, word spread to the villages as women returned home and told how their children’s facial defects had been repaired. “It was like an early version of Twitter,” Dr. Jarrahy says. “Word got around.” Soon, hundreds of mothers and children descended on the base. “It was powerful to see how a simple operation can change the community’s idea of people and places they associate with evil-doing,” the UCLA plastic and reconstructive surgeon says.

Many physicians take their skills to remote areas to transform the lives of people who have limited access to medical care by performing surgeries and
Rather than parachuting in to treat impoverished populations and then leaving, American physicians on surgical missions need to cultivate relationships with their counterparts abroad as well as learn the cultural mores of the patients they will treat.

By Lyndon Stambler
treating myriad ills. But Dr. Jarrahy realized he could be even more effective in his work if he better understood the cultures of the people he was treating. Today, he is at the forefront of an interdisciplinary movement at UCLA to establish permanent ties with overseas practitioners and populations. He initiated an innovative collaboration with UCLA Latin America-specialist and anthropologist Bonnie Taub, PhD ’92, adjunct assistant professor in the UCLA Jonathan and Karin Fielding School of Public Health, to study the intersection between Western and traditional medicine.

Since 2007, Dr. Jarrahy has spent three-to-four weeks a year helping children in Guatemala, Peru and Brazil. "In these less-developed regions, you have an indigenous population living in poverty with virtually no access to healthcare. It’s very pure medicine, what we do. There’s no issue of money, no administrative burden,” he says.

But three years ago, Dr. Jarrahy, who is also on the faculty of the newly established Blum Center on Poverty and Health in Latin America and on the advisory committee of the UCLA Center for World Health, took a more critical look at the outreach. “Many missions follow the parachute model,” Dr. Jarrahy says. “You parachute in. You set up a hospital. You operate on 50 patients, and then you disappear. A baby comes in with a cleft lip. A baby goes out with a lip repair. That child’s life is changed, no doubt about it. But what if that baby has a complication? What about the longitudinal care? Who will take care of that child after we leave?”

When a Guatemalan doctor emailed him that a patient’s lip repair had come undone – a rare complication – Dr. Jarrahy realized he needed more knowledge. “When we take patient histories in the states, we get their backgrounds, occupations, whether they drink or smoke. That wasn’t part of our routine assessment for patients overseas. There was certainly no cultural awareness in our interactions with patients in the setting of surgical missions,” he notes.

Rather than the parachute as a model, he envisioned a garden. “The ideal situation is to be working together with other gardeners – local physicians, nurses and hospital administrators. You're educating them, training them and empowering them to develop systems whereby they can take care of these patients on their own,” he says.

Dr. Jarrahy was troubled that his patients were often filthy from head to toe. Even their teeth were black. He visited Lake Atitlan in Guatemala, guided by the non-profit Mayan Families. Visiting the homes of his patients – where eight-to-14 people may live in 10-by-20-foot shacks and the children are often malnourished – was an “aha! moment.” He came to understand how the living conditions of people in these remote areas might affect their surgical outcomes. “Everything is covered in soot because there’s an open fire in the corner, which is the family’s only source of heat and fuel for cooking,” he says. “Smoke inhalation can easily contribute to wound complications, such as causing a lip repair to fall apart. From the day these kids are born, that’s what they’re breathing.”

Through Mayan Families, Dr. Jarrahy joined a stove-building project, installing cinder-block ovens in homes to eliminate the need for sooty indoor fires. “These are people who live a simple lifestyle, but the impact of that lifestyle for their families is not lost upon them,” Dr. Jarrahy says.

Dr. Taub accompanied Dr. Jarrahy to assess that impact. While he performed surgeries, she interviewed family members about their understanding of the procedures. Such interdisciplinary alliances are becoming more common. As coprincipal investigators, Dr. Taub and Dr. Jarrahy expect their effort, funded by a transdisciplinary seed grant from the UCLA Office of the Vice Chancellor for Research and the Clinical and Translational Science Institute, will result in the development of anthropological-assessment tools to guide physicians in providing culturally appropriate care. Dr. Taub and Dr. Jarrahy also coordinated three “At the Crossroads” sympo-
sia at UCLA, funded by a working grant they were awarded through the Latin American Institute. The first, in March 2013, focused on medicine and culture, followed by gatherings in April on surgery and culture and in May on community well-being.

Many surgeons, like Dr. Jarrahy, will take vacation time and pay their own way to provide indigenous people with medical care, and their efforts often can make a dramatic difference in the lives of their patients – giving them potential to get married, to attend school without being bullied, to become accepted members of their communities. “The surgeons are extraordinary people who think beyond their own community,” says Dr. Taub. “Without their expertise, there wouldn’t be any intercultural exchange. But the additional awareness that someone like Dr. Jarrahy has developed about cultural beliefs and practices benefits local people. If they are asked about their beliefs and tell a story about their lives, it makes them feel more comfortable and trusting.”

Most surgeons don’t tend to have that holistic perspective, however. They are “laser focused,” Dr. Jarrahy says. “We think about the width of the cleft and how good the repair is, what the shape of the nose is afterward. But the questions Dr. Taub is asking of our patients and their families – how do they feel about receiving surgical care from visiting foreigners? Is the care consistent with their traditional beliefs about health and healing? – are to some degree as important as our technical efforts. Ultimately, the answers to her questions will determine to what extent our surgical interventions are successful. It’s unrealistic to expect that our patients will be compliant just because we come from the U.S. and we’re good surgeons. We can’t expect that. Cultural sensitivity is all the more important in that context.”

UCLA Pediatric Neurosurgeon Jorge Lazareff, MD, has been working to establish “gardens” overseas since 1990. Born and trained in Argentina, Dr. Lazareff was director of neurosurgery at Mexico City’s Hospital Infantil de Mexico Federico Gomez when Guatemala’s Jorge Von Ahn Hospital invited him to demonstrate surgical procedures. “I was pleasantly surprised at how knowledgeable the doctors from Guatemala were,” he says. “Pleasantly and shamefully surprised. Why should I have thought they would not be good?”

It was an epiphany. But in 2002, during his first medical mission, he saw Guatemalan doctors in one corner speaking Spanish and American-based doctors in another corner speaking English. “There was a divide and a separation,” he recalls. Dr. Lazareff no longer joins large missions. Instead, he goes with teams of two or three and matches up with local counterparts. In 2012, for example, Mending Kids International, a Burbank, California-based non-profit that organizes and sends medical missions abroad, dispatched Dr. Lazareff to Guatemala with a neurophysiologist and an anesthesiologist and matched them with Guatemalan neurosurgeon Graciella Manucci, MD, and her team. They did one cerebral-palsy surgery together. Afterward, Dr. Lazareff asked Mending Kids to fund the Guatemalan team rather than paying to bring him back to the country. Similarly, Dr. Lazareff worked for three months at UCLA with Nicaraguan neurosurgeon Juan Bosco Gonzalez Torres, MD. After promising signs from the Guatemala program, Dr. Gonzalez Torres submitted a budget for a neurosurgery clinic in Nicaragua, and Mending Kids agreed to fund it. “The concept was the same all along,” Dr. Lazareff says. “Don’t fund American doctors to do the work that can be done by local doctors.”

Dr. Lazareff, who along with Dr. Jarrahy is on the advisory committee of the UCLA Center for World Health, emphasizes cultural sensitivity to local practitioners, who might otherwise wonder, “What are you doing here, gringo?”

He has developed friendships in South Africa, Mexico, Guatemala, China, Iraq, Chile, Kenya, Romania, the Dominican Republic and Panama. “The way to respect people is by asking them what they need instead of saying to them, ‘I will tell you what the problems are.’” Dr. Lazareff says.

Dr. Lazareff becomes animated at the notion that doctors in the developing world need to be told what to do. “All participants
“Children are universally beautiful, no matter where they are. They don’t care about insurance. They don’t care about Obamacare. They just want to live normal lives.”

have to stand at the same level, on the same platform,” he says. But while there are many qualified physicians in these countries, poor infrastructure often prevents them from helping the neediest children.

Practicality is at the core of the approach of pediatric cardiologist Juan Carlos Alejos, MD (RES ’90, FEL ’93). “We can do all the surgeries we want, but if the kids can’t get any care after we leave, it’s all for naught,” he says. “They’re going to die.”

Dr. Alejos has been leading surgical missions to Peru, where his father trained as a pediatrician, since the mid-1990s, and he has developed close professional and personal ties with physicians and surgeons there. “Our counterparts in Lima and Arequipa follow these children after we leave, and when they need anything, we are here to communicate with them via Skype or email or Dropbox,” he says.

In 2006, Dr. Alejos created the non-profit Hearts with Hope, which sends four missions to Peru and El Salvador each year and is branching out to other countries. His organization has screened thousands of children, performed 113 cardiac surgeries and conducted thousands of dental evaluations, fillings and extractions. The organization sent a team of 72 people to Peru in April 2013, including surgeons, cardiologists, pediatricians, dentists, nurses and humanitarian volunteers. They do outreach in the villages and conduct surgeries, electrophysiology and cardiac catheterization at hospitals in Lima and Arequipa, the second-largest city in Peru, and San Salvador.

Dr. Alejos has heard stories about teams of doctors who would charge the government fees for their services. “They would go into part of the hospital, close off the wing and operate,” Dr. Alejos says. “Kids would be operated upon, but nobody was learning from them. Nobody was monitoring them. They just did their stuff and left. Wherever we go, we’re going to take care of the kids who need it most, while working side-by-side with that hospital’s medical team. We’re not there to take over. We want the physicians and their staff to learn from us and to want us to come back.”

In Peru, Dr. Alejos has observed that indigenous people are coming down from the mountains for work. Greater urbanization means they have one foot in the village, one in the city. “Certain herbs and teas to them are keys in treating diarrhea or all kinds of illnesses. We have to respect that. I’ve seen it in Los Angeles. If you disrespect their medical culture, they’re never going to listen to you,” he says. And he’s seen it in his own family; although Dr. Alejos’ father was a doctor, his grandmother used traditional remedies. “If you got a stomach ache, she would give you some kind of herb,” he says.

Indeed, many indigenous people seek treatment from both Western doctors and traditional healers. Dr. Taub’s research with Oaxaca’s Zapotec people showed they can simultaneously accept Western and traditional diagnoses. “It’s not that they have a brain tumor and they don’t also have soul loss,” Dr. Taub says. “They believe that they have both. As a result, they can benefit from seeing the traditional healer to address soul loss and the doctor to address the brain tumor.”

Dr. Alejos holds seminars to educate Western participants about what to expect during missions. Pediatric cardiothoracic surgeon Brian Reemtsen, MD (RES ’02), traveled to Lima with Hearts with Hope in May 2011 and found it easy to work with his counterparts there because Dr. Alejos had established such close bonds.

Every day, Dr. Reemtsen was bused along rutted roads to the Hospital Nacional Dos de Mayo in Lima, which was like a gated city with armed guards, surrounded by shantytowns. “There were children running around, feral dogs and no order,” Dr. Reemtsen recalls.

During that week, Dr. Reemtsen performed 10 surgeries on children in dire need, some with only one pumping chamber of their heart. “They were so blue, it was unbelievable, like a squid,” he recalls. But one in particular stood out. A mother who knew her infant son had a heart defect had slipped past security to see the team of American doctors. Moved by her “willingness to sacrifice anything for her child,” Dr. Reemtsen successfully operated on the baby.

Even when a sick child is able to reach the hospital, the odds of being treated successfully are long. Equipment often is decades old and outdated. Certain medications and blood thinners are nonexistent. Even temperature control can be a challenge. “For cardiac surgery, you need to cool the patients,” Dr. Reemtsen says. “That’s one of the biggest hurdles down there, ice and air conditioning.”

When a devastating earthquake struck Haiti in 2010, David M. Cutler, MD, assistant clinical professor in the Department of Family Medicine, felt compelled to help. He went with his wife, Mary Bugbee, PhD, a psychologist, and their son Nathan and has returned each year since, working with the Henri Gerard Desgranges Foundation. Initially, he saw patients and helped rebuild a clinic in Petit Goave, 42 miles southwest of Port-au-Prince. “You’re going from the wealthiest country to the poorest country in the Western hemisphere,” Dr. Cutler says. “You’re going to the country with the highest infant and maternal mortality rate in the Western hemisphere. To ask what role cultural awareness has in working in an environment like that is like...
Voodoo, for example, is pervasive. When Dr. Cutler first arrived, his son came down with an infection. Dr. Cutler treated him with penicillin and prednisone, but a high-level minister they stayed with suggested a special voodoo oil that he rubbed on Nathan’s back. Nathan soon recovered. Which one of the treatments had worked? “We’ll never know for sure,” Dr. Cutler says.

When taking patient histories, Dr. Cutler had to be sensitive when asking about sexual activities, important in diagnosing the spread of sexually transmitted diseases. But male sexual prowess is part of voodoo culture. “They won’t always be revealing because that information has special meaning that we don’t really understand,” he says.

Dr. Cutler realized that spending four weeks in Haiti in no way gives him cultural understanding or knowledge of what the people need. Instead, he asked local practitioners how he could help. “I take my lead from them,” he says.

Most women coming to the clinic had vaginal infections, so Dr. Cutler initiated a female-infections survey in March. Moreover, nearly 99 percent of births take place in the home. Dr. Cutler’s team began a GPS-aided mapping study of births to estimate how many women would use a new birthing center, an effort to reduce mortality rates.

Dr. Cutler was honored when the Haitian doctor at the clinic, Pierre Andre Tessier, MD, called him “Quatre by Quatre,” the Creole term for four-wheel-drive vehicles. “He’s willing to go anywhere to get the job done,” Dr. Tessier says.

“When I recall those words, I feel humbled by the strength, courage and endurance displayed by the Haitian people in the face of overwhelming adversity,” Dr. Cutler says. “They are the real heroes.”

Even if they leave exhausted, the doctors leave gratified. For their patients, the surgeons themselves may seem like modern-day shamans. In Brazil, Dr. Jarrahy remembered a 12-year-old girl and a 14-year-old boy who made the arduous trek from the Amazon to Sao Paolo to see him. “It’s like they heard this rumor in their villages, and they went on this pilgrimage,” he says.

In turn, Dr. Jarrahy and the others return with stories to share at symposia and around the water cooler. One shelf in Dr. Jarrahy’s office is lined with hand-crafted figurines presented to him by the families of his overseas patients. “What going overseas has reinforced for me is to continue to focus on children and their families,” Dr. Jarrahy says. “Children are universally beautiful, no matter where they are. They don’t care about insurance. They don’t care about Obamacare. They just want to live normal lives.”

Lyndon Stambler is a freelance writer and teaches journalism at Santa Monica College.
Remarkable advances in technology have made it possible for physicians to save the lives of patients who in years past would have had limited chance for survival. But sometimes the choice of whether or not to use today’s technology raises a thicket of troubling ethical questions through which doctors and patients and their families must find their way.
An infant is born prematurely at 22 weeks, weighing only about 1 pound and with bleeding in the brain. He tentatively clings to life, but in light of the fact that there is minimal likelihood he will recover a level of functional mental capacity, the question is raised of how aggressively to treat him. Elsewhere in the hospital, a grief-torn family hopes for a miracle and presses doctors to assertively treat their loved one, even though the medical team has concluded that further intervention is futile and would, instead, actually cause the patient increased pain and indignity.

From life’s beginning to its end, and at all points in between, there are opportunities for vexing ethical dilemmas to arise. And in this era of advanced technology, those opportunities are increasing.

Cases in which a patient or her family seeks treatment that physicians judge non-beneficial or even harmful are among the most common, but they are far from the only ones. Other troubling scenarios involve seriously ill patients who want to leave the hospital or who refuse interventions deemed critical to their recovery. When patients can decide for themselves, their autonomy is honored, but what if it isn’t clear whether or not they have the mental capacity to make an informed decision?

An advance directive can serve as a guide to the patient’s desires, but even then there is considerable gray area. Family members can serve as surrogate decision-makers, but what if there is disagreement among them? Or what happens when it appears to the healthcare team that a family is not following the patient’s wishes or not acting in his best interests? Or how about when physicians themselves disagree over what is appropriate treatment and what is ineffectual?

Such issues create a maze of conflicting choices for physicians, nurses and other healthcare professionals and patients and their families to work their way through. At UCLA, the UCLA Health Ethics Center has tried to ease that journey and provide guidance when complex decisions must be made. The center draws on experts from many fields (medicine, nursing, public health, social work, spiritual care, law) to provide education, service and research. Its goal is to ensure humanistic and compassionate solutions to the difficult ethical situations that inevitably unfold in healthcare settings.

“Hospitals that develop and provide cutting-edge medicine need a mechanism to balance complicated medical and ethical issues,” explains Neil Wenger, MD ’84 (RES ’87, FEL ’89), the center’s director. “Academic medical centers such as UCLA often confront complex questions of life and death. We help patients, their families and clinicians through the process of negotiating difficult ethical decisions.”

Ventilators, dialysis machines and other technologies commonly used in critical-care units can keep patients alive through artificial breathing and organ function, but the question may arise, at what cost? “These wonderful technologies were designed to be temporary – to sustain someone who is experiencing a health crisis, but who is expected to get through it and to be liberated from these machines,” says James Hynds, PhD, LLB, the center’s clinical ethicist. “It was not envisaged at their inception that these machines would be used on a long-term basis and certainly not, in some cases, for the rest of the patient’s life.”

Prior to the middle of the 20th century, Dr. Hynds notes, physicians had little to offer seriously ill patients to keep them from dying. Technology eventually created a range of interventions that could keep patients alive for weeks, or even months, but often in a debilitated, burdened state. Dr. Hynds believes that until recently, too many doctors provided these interventions whenever requested by families without giving due consideration to what it would mean for patients or how it would change the practice of medicine.

“The purpose of medicine cannot simply be to keep people alive for as long as possible in the absence of health and well-being,” Dr. Hynds says. “Medicine doesn’t exist to make dying more painful, more inhumane. But these devices, when continued inappropriately once it has become obvious the patient cannot recover, have the potential to allow the disease to take a tighter grip on the patient, ultimately producing a death that is much more cruel than anything nature herself could devise.”

Dr. Hynds believes there is a growing appreciation among physicians that medicine should be about healing and bringing a degree of wholeness to the patient. That can be achieved, he says, through palliative care, even as the physician is letting nature take its course and allowing the patient to die.

High-tech interventions used outside of critical-care units, such as the ventricular-assist device (an artificial heart designed to serve
Understand what’s happened, what the concerns are, and how we can set up a “moral space” to enable conversations to occur. “One of the things that can break down when there are ethical concerns is communication, so at the beginning, you need to bring people together to understand what’s happened, what the concerns are, and how we can move the decision process forward is invaluable.”

Although anyone can request an ethics consultation, Dr. Hynds says the majority of the cases at UCLA are initiated by physicians, typically because they are concerned that a patient’s or family’s request runs contrary to the concept of what it means to be a good doctor. Rajan Saggar, MD, director of the medical intensive-care unit at Ronald Reagan UCLA Medical Center, says he appreciates the role Dr. Hynds and other ethics-center experts play as a liaison between healthcare providers and patients and their families during difficult times. “The family and the physicians have the same goals, but often there are differences over what is attainable,” Dr. Saggar says. “To have experts who come without any biases and can act as a third-party in processing information communicated to them, despite physicians’ best efforts. Micle has seen cases in which the ethics team is brought in because of a conflict between the healthcare team and the patient’s family over how to proceed, but also when there are disagreements or confusion over patients’ advance directives and what they mean under given circumstances. “Everything moves so quickly in healthcare,” Micle says. “It’s important at times to step back and ask the larger questions to make sure we’re doing what’s best for the patient.”

When she is called in to consult, Katherine Brown-Saltzman, RN, MA, the center’s codirector and assistant clinical professor in the UCLA School of Nursing, says, her initial goal is to create the “moral space” to enable conversations to occur. “One of the things that can break down when there are ethical concerns is communication, so at the beginning, you need to bring people together to understand what’s happened, what the concerns are, and how we can mutually come to the best decision,” she explains. “It’s important to be able to clearly state what the ethical concerns are and to be able to clarify that in a true dilemma, no matter what course you take, there will be some harm and some regret.”

Often, the staff of the ethics center will bring in experts from other disciplines to assist. David Wallenstein, MD, a physician with the Santa Monica/UCLA Palliative Care Service, is frequently called on for end-of-life cases in which families are pushing for aggressive care that the healthcare team deems pointless. “These are heart-rending situations,” Dr. Wallenstein says. “The patient is receiving treatment that is painful and non-beneficial, and the grieving family has alienated the healthcare personnel with their insistence that certain treatments be given based on their desire to do what they believe is right.” Dr. Wallenstein says his challenge in these cases is to work with the family and healthcare team to develop a treatment plan in which the patient will be more comfortable, while the family feels its wishes are being honored.

When families have spiritual questions or needs, a chaplain can be called in to consult. Often these situations, too, involve end-of-life cases in which families are at odds with the healthcare team’s recommendation to withdraw aggressive treatment. “Some families may say that they’re waiting for a miracle, and it’s often the chaplain’s role to go beyond the stated belief in a miracle, see the family’s pain and do some grief and spiritual counseling to help them let go,” says Rev. Karen Schnell, director of UCLA Health’s Spiritual Care Department.

Other issues for which chaplains are called to consult include questions of a religious nature, such as whether or not a procedure such as organ transplantation or an unusual fertility treatment is endorsed by the patient’s faith, and how to handle situations in which a treatment decision might run afoul with the faith’s teachings. In some cases, a patient’s religious values conflict with a physician’s moral imperative to provide lifesaving treatment, such as when the patient’s beliefs preclude receiving a blood transfusion. Other faith-based conflicts occur within families. For example, an incapacitated patient’s advance directive on life-prolonging treatment may run contrary to a family member’s religious beliefs, and the medical team believes the family member is pushing for care that the patient wouldn’t want.

“Our task is to use our special training to listen to people’s
Among the most common is patient autonomy vs. the physician’s professional obligations. As a general rule, much latitude in the decision-making process is given to the patient or the patient’s surrogate decision-maker, including in cases where the physician might not choose the same course for his or her family member. But doctors aren’t expected to render care that won’t provide any benefits to the patient or that they believe will do more harm than good.

On the other hand, patients have the right to decline treatment or hospitalization recommended by healthcare professionals – as long as they have the capacity to decide what’s in their best interest. “If, after a series of formal and informal tests, patients are demonstrated to lack insight into their own circumstances, we wouldn’t allow them to make a decision that would result in harm,” Dr. Hynds explains. “We would treat them, so they could return to a state of being capable of exercising autonomy.”

Rebecca Seixas was feeling the burden of having to make a decision on the fate of Fiona (not her real name), an elderly woman who had suffered a massive stroke and was now being kept alive by a breathing machine. Seixas had gotten to know Fiona six years earlier when she served as her home-care nurse, and the two had become close friends. Now, in the absence of any other friends or family members who could speak on Fiona’s behalf, Seixas found herself in the role of surrogate decision-maker. After unsuccessful attempts to take the patient off the breathing machine, Fiona’s nurses were asking Seixas if she knew whether or not the patient, given her poor prognosis, would want to continue with the aggressive intervention. Seixas hadn’t discussed such a scenario with her friend. The case was considered by the ethics committee, which assembled the people who knew the patient best, so they could discuss what she would have wanted. The committee ultimately recommended withdrawing the life support and shifting to palliative care. “Everyone made me feel so comfortable,” says Seixas, who provided input to the committee. “To have the discussion and hear that everything possible had been done, all protocols had been followed and that she wasn’t going to improve gave me the courage to say that I didn’t think she would want this.”

The multidisciplinary ethics committee meetings also can provide assurance to physicians facing complex decisions. Mousa Shamonki, MD, a UCLA reproductive endocrinologist, has twice requested that his cases go before the committee. “Both were situations in which patients made unusual requests, and I wasn’t comfortable acting on my own,” he says. In each case, Dr. Shamonki and the patient presented the background and their perspectives to the committee, which then held lengthy discussions before having members weigh in. “It was extremely helpful to have a consensus statement that sorted out the issues that needed to be considered,” Dr. Shamonki says.

In 2011, the center began a fellowship program to train future clinical ethicists. “To be able to walk with patients, families and providers in these challenging situations is both humbling from a personal perspective and rewarding in terms of my professional development,” says Kevin M. Dirksen, MDiv, MSc, the center’s Amy and Anne Porath Clinical Ethics Fellow. “UCLA has provided me the opportunity to learn the craft and skill of ethics consultation, which cannot be captured in a lecture hall or in a textbook.”

Meanwhile, the center continues to promote awareness in UCLA’s hospitals, employing what Brown-Saltzman says is one of the busiest consultation services in the country. “If you have a lone ethicist trying to do consultation work, or you just have an ethics committee that meets once a month and tries to do a few consults, you are missing a huge swath of everyday issues that clinicians are struggling with,” she says. “As a center, we are trying to create an environment in which ethical issues are seen as a routine part of clinical practice. Most of these cases are not black-and-white, which is why we are brought in – to get at core values and translate those values into good care.”

Dan Gordon is a regular contributor to U Magazine.
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Here when u need us most
Photo Doc

By Kim Kowsky

For more than four decades, Richard M. Ehrlich, MD, has built a career as a distinguished physician and surgeon.

Beyond the walls of UCLA, however, he has built a parallel career – and an international following – as a preeminent fine-art photographer.

His images have been displayed in galleries and accepted into the permanent collections of 19 museums around the world, including the Los Angeles County Museum of Art, the Hammer Museum, the Smithsonian Institution’s National Museum of American History, the Jewish museums of New York and Berlin and Yad Vashem in Jerusalem, Israel.

“Richard is one of the best contemporary fine-art photographers in America today,” says Craig Krull, owner of the eponymous gallery in Santa Monica, which represents Dr. Ehrlich’s photography. “His zest and curiosity about life come across in his work.”

Dr. Ehrlich focuses his lens on an eclectic variety of subjects, selecting topics that are visually interesting yet not overexposed. Persistence is essential; it has, in some cases, taken him years to obtain the necessary permissions to take his photographs. His shots of sand-filled houses and abandoned diamond mines in the southern Africa country of Namibia and fantastically masked Lucha Libre wrestlers in Mexico City are rich with color and emotion. A moody series of stacked and blended sunset images taken near his home in Malibu pays homage to the “multiform” expressions of the mid-20th-century painter Mark Rothko. Quiet pictures of World War II-era documents and rows of card catalogs and file cabinets from the Holocaust Archives in Bad Arolsen, Germany, silently exclaim the enormity of Nazi crimes.

With his landscapes and photographs of digitally altered MRI and CT scans displayed on the walls throughout Ronald Reagan UCLA Medical Center and UCLA Medical Center, Santa Monica, Dr. Ehrlich’s patients usually are familiar with their blue-scrub-wearing urologist’s artistic pursuits.

But collectors, who pay up to $10,000 for one of his larger framed photographs, may know nothing about his life in medicine; he drops the honorific Dr. when displaying his art.

“I don’t want people to think I’m a dilettante,” says Dr. Ehrlich. “This is a serious pursuit for me. If I were younger, it would be another career.”

Dr. Ehrlich earned his medical degree at Cornell University and completed residencies in surgery (New York Hospital-Cornell University Medical Center) and urology (Columbia Presbyterian Medical Center) before joining the U.S. Air Force. In 1971, he came to UCLA, where he performed the medical center’s first pediatric laparoscopic procedure, as well as the world’s first pediatric laparoscopic partial nephrectomy and ureteral reimplant.

As a boy, he was passionate about photography and had a darkroom in his home in Westchester, New York, but he opted to focus most of his energies on sports. He played shortstop and pitched on his high-school baseball team and won the New York State Tennis Doubles Championship, and he continued to play tennis as an undergraduate at Cornell. But he says today that putting aside photography was “a major mistake.” It wasn’t until he was well into his medical career that he turned his attention again to artistic pursuits and tried painting. He concluded after a few years that he “wasn’t any good at it” and shifted back to photography.

“I decided if I was going to do it, I was going to do it right and not just dabble in it,” Dr. Ehrlich says. “I studied, took a lot of lousy photographs, enrolled in some courses and spent time with other photographers.”
Dr. Lin Chang, MD ’86 (RES ’92), professor of medicine, was included on a list of 125 leading gastroenterologists in America by Becker’s ASC.

Dr. Thomas J. Coates, Michael and Sue Steinberg Distinguished Professor of Global AIDS Research, received the 2013 Elizabeth Fries Health Education Award from the James F. and Sara T. Fries Foundation.

Dr. Mario Deng, medical director of the UCLA Integrated Program for Advanced Heart Failure, Mechanical Support and Heart Transplant, received the Gold DOC Award (shortly before his death), Quincy Jones and many others. The images will be part of an upcoming music-based fundraiser to support the UCLA Center for Autism Research and Treatment.

Awards/Honors

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For a lot of doctors, medicine is all they know, and when they retire, they don’t know what to do with themselves. It’s good to have something in your life that balances out what you normally do,” he says. “As I come to the end of my career as a physician, I’m fortunate to have photography as a consuming passion.”

Kim Kowsky is a freelance writer in Los Angeles.

Dr. Richard Ehrlich utilized radiological imaging techniques as a springboard for artistic interpretation. He published the results as Anatomia Digitale, and a number of the book’s images are displayed in the administrative area of the second-floor operating suites at Ronald Reagan UCLA Medical Center.

Dr. Richard Ehrlich, go to: ehrlichphotography.com

A current project, “Face the Music,” portrays the states of bliss experienced by iconic musicians as they listen to favorite songs. Still only halfway through the project, Dr. Ehrlich has already photographed Ringo Starr, Herbie Hancock, Sergio Mendez, Herb Alpert, Dave Brubeck (shortly before his death), Quincy Jones and many others. The images will be part of an upcoming music-based fundraiser to support the UCLA Center for Autism Research and Treatment.

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To see more photography by Dr. Richard Ehrlich, go to: ehrlichphotography.com

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Dr. John DiFiori (FEL ’94), chief of the UCLA Sports Medicine Program, was installed as president of the American Medical Society for Sports Medicine.

Dr. Jason Ernst, assistant professor of biological chemistry, received a 2013 Sloan Research Fellowship from the Alfred P. Sloan Foundation.

Dr. Gary Gitnick, chief of the UCLA Division of Digestive Diseases, was included on a list of 125 leading gastroenterologists in America by Becker’s ASC.

Dr. Sotiris Masmanidis, assistant professor of neurobiology, received a 2013 Sloan Research Fellowship from the Alfred P. Sloan Foundation.

Dr. Gary W. Mathern, director of the UCLA Pediatric Epilepsy Program, received the Ambassador for Epilepsy Award of the International Bureau for Epilepsy and the International League Against Epilepsy (ILAE). Dr. Mathern also was named co-editor-in-chief of the ILAE publication Epilepsia.

More than 200 UCLA physicians have been named to the prestigious Best Doctors in America list for 2013. To see which UCLA physicians are on this list, go to: uclahealth.org/BestDoctors.

Dr. Barbara Natterson-Horowitz, clinical professor of medicine in the Division of Cardiology, was a finalist for the AAAS/Subaru SB&F Prize for Excellence in Science Books from the American Academy of Arts and Sciences for Zoobiquity: What Animals Can Teach Us About Health and the Science of Healing (Knopf, 2012).

Dr. Dennis J. Slamon, director of the Revlon/UCLA Women’s Cancer Research Program at UCLA’s Jonsson Comprehensive Cancer Center, was honored by The Hope Funds for Cancer Research.


Dr. A. Eugene Washington, dean of the David Geffen School of Medicine at UCLA and vice chancellor for UCLA Health Sciences, was appointed vice chair of the California Wellness Foundation.

Dr. Yi Xing, PhD ’06, associate professor of microbiology, immunology and molecular genetics, received a 2013 Sloan Research Fellowship from the Alfred P. Sloan Foundation.

Kim Kowsky is a freelance writer in Los Angeles.

To see more photography by Dr. Richard Ehrlich, go to: ehrlichphotography.com

Adams Would Have Loved Photoshop” – at several galleries and museums, including the Annenberg Space for Photography in Los Angeles.

A current project, “Face the Music,” portrays the states of bliss experienced by iconic musicians as they listen to favorite songs. Still only halfway through the project, Dr. Ehrlich has already photographed Ringo Starr, Herbie Hancock, Sergio Mendez, Herb Alpert, Dave Brubeck (shortly before his death), Quincy Jones and many others. The images will be part of an upcoming music-based fundraiser to support the UCLA Center for Autism Research and Treatment.

“...Dr. Richard Ehrlich utilized radiological imaging techniques as a springboard for artistic interpretation. He published the results as Anatomia Digitale, and a number of the book’s images are displayed in the administrative area of the second-floor operating suites at Ronald Reagan UCLA Medical Center.

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Postcard from Turkey

Andrew Li, MD, is a resident in general surgery at Harbor-UCLA Medical Center, and his wife, Salma Shabaik, MD, is a family medicine physician and spent part of her training, in spring 2012, at the UCLA Center for East-West Medicine. After hearing about the horrors occurring in Syria, the couple decided to volunteer to help those injured in the conflict. They treated refugees at the Turkey-Syria border in late 2012. That experience inspired them to create Second-Breath, a grassroots initiative that accepts donations of medical supplies to redistribute to community clinics in the United States and for use in international relief efforts.

Our journey began on November 8, 2012, in Antioch, Turkey, with Dr. Ahmed, a 29-year-old Syrian veterinarian. He arranges medical care for those near the border with Syria and coordinates international-physician volunteers. We piled our supplies into Dr. Ahmed’s tiny Saipa sedan and took off. The landscape on the 45-minute drive south toward the border was stark, flat and dusty. “Look there,” Dr. Ahmed shouted, pointing to a small Turkish village tucked at the feet of the austere Nur Mountains. “Five people died there from Syrian shelling.” The rest of the drive was silent.

We arrived at a one-star hotel that had been converted to a post-surgical and urgent-care unit. In order of decreasing frequency, we saw fractures, lower-extremity amputations, wounds, spinal-cord injuries, upper-extremity amputations and enucleations caused by bullets, mortars and missiles. There were other healthcare professionals from different parts of the world, and we had to be creative in our communication. Fortunately, between Salma and me, we are fluent in Arabic, Spanish, Mandarin and English. One interesting situation occurred when I conversed in Spanish with a Spanish-trained Syrian orthopaedic surgeon regarding a Turkish patient who only spoke French and Turkish. In the end, we relied on the patient’s friend, who knew both Arabic and Turkish, to let the patient know that his bullet wound was healing just fine.

We not only treated these brave men and women, we lived with them, ate with them and shared stories with them over hot tea. They spoke of pain, separation and sadness, but also revealed to us a great resilience and optimism. One of the most unforgettable moments was witnessing a British physical therapist and five Syrian amputees cheer on 7-year-old Malek, with an above-the-knee amputation, as he walked up the stairs with a pair of crutches. Malek was caught in the explosion of a missile launched by a fighter plane. He received the amputation in a Syrian field hospital and from there was transferred to various rehabilitation centers, displacing him from his family. During our visit, his parents and older brother were still in Aleppo, Syria. With the continued conflict and chaos, it is uncertain if Malek will see his family again. Despite the terrible casualty count, the courage and resolution of the Syrian people should give us hope that peace will come, though at what cost in human life, no one knows.

For more information about Second-Breath, go to: second-breath.org
Reflections of an RN/MD

Sheila Overton, MD ’83, a board-certified ob/gyn, has worked passionately to educate parents, teens, teachers and health professionals about teen sexual health. She chaired a teen-pregnancy-and-STD-prevention program at Kaiser Permanente for more than 10 years. In 2000, Dr. Overton received the Los Angeles County Commendation for Excellence in Women’s Health. She is the author of Before It’s Too Late: What Parents Need to Know About Teen Pregnancy and STD Prevention (iUniverse.com, 2010) and is in private practice in Maryland.

My journey toward becoming a physician began in nursing school. Earning a BS degree in nursing in 1979, before completing my medical training, has given me a keen appreciation for both roles and the importance of synergy between them. Early in my training, I embraced the principles of incorporating social justice and community service into the practice of healthcare, which strongly influenced my work in the area of teen pregnancy and sexually transmitted disease (STD) prevention.

Teen-pregnancy rates have dropped, which is, of course, a good thing. But the reduction in the teen-pregnancy rate isn’t enough for us to declare the problem solved. Every year, 7 percent of all teen girls get pregnant – a shocking and unacceptable statistic. And STD rates among teens continue to climb.

Taking care of pregnant teens provides an up-close, firsthand perspective on the cascade of health, economic and social problems that result when children become parents. Pregnancy is the leading reason that teen girls drop out of high school. They and their children are all too often relegated to a life of poverty.

Discussion of teen pregnancy and STDs centers largely on girls, but in my outreach to teens, parents, educators and community leaders, I also emphasize the critical need for teenage boys to understand the importance of making smart choices about their sexual health.

In His Own Words: Anthony “AJ” Johnson, MD ’98

Anthony “AJ” Johnson, MD ’98, is a lieutenant colonel in the U.S. Army, serving as vice chair of the Department of Orthopaedics and Rehabilitation at San Antonio (Texas) Military Medical Center. In addition, he is custodian of the Military Orthopaedic Trauma Registry and team physician for U.S. Armed Forces Martial Arts and Soccer and a medical volunteer with the U.S. Paralympics Committee.

I’ve always maintained that my dad and West Point made me the man that I am, while UCLA made me the doctor I am. Today, when people see me in uniform or see my military ID, most of them stop to say, “Thank you for your service.” While I appreciate the gratitude and sentiment (and quite often the beers … especially the beers), I want to tell them that the military does not have a monopoly on service. Sure, I am proud of my two Bronze Stars earned during three deployments to Afghanistan and Iraq, but these aren’t the accomplishments of which my family is most proud.

My family is most proud of my current volunteer role for the U.S. Paralympics Committee as the physician for Team USA Men’s and Women’s Wheelchair Basketball. Do you want to be inspired? Have you ever watched a triple amputee play international wheelchair basketball? Do you want to be awed? Have you ever watched a double-upper-extremity amputee compete in archery? The Paralympics Movement, which began in London in 1948 as the Stoke Mandeville Games, strives to use the performances and incredible stories of each athlete to teach the values of acceptance and appreciation for people with a disability by linking sport with social awareness. The movement also can serve as an avenue of healing for the some 50,000 servicemen and servicewomen injured in the wars in Iraq and Afghanistan, more than 1,500 of whom are amputees.
Inaugural Kaleidoscope Ball

On April 17, 2013, the inaugural Kaleidoscope Ball took place at the Beverly Hills Hotel to benefit the UCLA Children’s Discovery and Innovation Institute. The event, cochaired by Amanda Brown Chang, Beth Friedman and Shari Glazer, raised more than $1.8 million. Heather and Steven Mnuchin received the Philanthropic Leadership Award; Cameron Cohen the Innovator Award; and LL Cool J the Kaleidoscope Award. Guests were delighted by a designer-dollhouse showcase, featuring 10 custom dollhouses created by Los Angeles’s most feted interior designers, as well as entertainment by Blue Sky Riders, with actress Patricia Heaton as the evening’s host.

To learn more about the UCLA Children’s Discovery and Innovation Institute, go to: uclahealth.org/cdi

First baseman Steve Garvey was a member of the Los Angeles Dodgers’ most enduring infield lineup. He was with the Dodgers from 1969 to 1982 and with the San Diego Padres from 1983 to 1987. Garvey is one of just 15 Major League Baseball players to have 200-plus hits over six or more seasons. The retired MVP, head of Garvey Communications television productions and a member of the Baseball Assistance Team board, is on a winning streak again. In fall 2012, after being diagnosed with prostate cancer, Garvey underwent surgery performed by Dr. Mark S. Litwin, chair of the UCLA Department of Urology, which cured him of the disease. Since then, he has been sharing his success story and raising awareness of the disease. Moreover, in April 2013, Garvey auctioned some of his baseball memorabilia and directed a substantial portion of the proceeds to UCLA Urology. According to Dr. Litwin, “Steve is a terrific spokesman for bringing prostate cancer to the attention of countless individuals and for supporting UCLA’s research and patient-care efforts. We all appreciate his contributions of time and energy, as well as his generosity.”

Sports Illustrated referred to Garvey as baseball’s “Iron Man” (April 25, 1983), and clearly, he continues to live up to that honorable designation in many ways.

From Bat to Cancer Battle, Steve Garvey’s a Winner

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Steve Garvey donated proceeds of his auctioned memorabilia to UCLA.

Photo: Courtesy of Los Angeles Dodgers
Dr. Walton Li, MD ’74 (RES ’78, FEL ’79) made a $2-million gift to establish the Walton Li Chair in Cornea and Uveitis at the Jules Stein Eye Institute (JSEI). The chair will support the teaching and research activities of the division chief in perpetuity, as well as help create novel programs. Dr. Li’s connection to UCLA has spanned nearly four decades. He earned his medical degree from UCLA in 1974, and he completed his residency (1978) and fellowship (1979) at JSEI. In 1980, he established and has since been head of the Department of Ophthalmology at the Hong Kong Sanatorium & Hospital. In 2005, he was elected chairman of the board of directors of the hospital and was also appointed its medical superintendent. The Li chair is a fitting testament to his commitment to advance ophthalmology and fight blindness.

The Mary Oakley Foundation, Inc. pledged $1 million to establish the Mary Oakley Foundation Chair in Neurodegenerative Diseases at the Jules Stein Eye Institute (JSEI). The chair will be awarded to a distinguished faculty member in the areas of neuro-opthalmology or glaucoma. For nearly a decade, the foundation has awarded grants to JSEI in support of senescent (biological aging) organ research. The establishment of the chair was facilitated by Dr. William C. Stivelman, CEO/medical director of the foundation and associate clinical professor of ophthalmology at JSEI.

Joan and Jerome Snyder pledged $1 million to create the Joan and Jerome Snyder Chair in Cornea Diseases at the Jules Stein Eye Institute (JSEI); it will be awarded to an eminent faculty member in the area of cornea. The Snyders have been loyal donors to UCLA for more than 20 years, and in 2007, they established the Jerome and Joan Snyder Chair in Ophthalmology to support the activities of the director of the Ophthalmology Residency Program. Mr. Snyder is the founder and senior partner of the J.h Snyder Company, one of the largest privately held real-estate-development firms in Los Angeles.

The Jonsson Cancer Center Foundation has received more than $120,000 in proceeds from the 2012 One Ball Matt Memorial Golf Tournament in Dong Guan City, China, for lung-cancer research under the direction of Dr. Edward Garon. This annual event, held in memory of Callaway Golf employee Matt Christiansen, has raised nearly $275,000 since 2010 to advance Dr. Garon’s efforts at UCLA’s Jonsson Comprehensive Cancer Center.

The eighth annual No-Limit Texas Hold’em Poker Tournament, benefiting Mattel Children’s Hospital UCLA, was held at Fox Studios on March 30, 2013, marking the final chapter of this popular event. Since 2006, it has been hosted by Hospital Board Cochair J.R. DeLang, whose leadership has resulted in a cumulative $1.35 million raised. Participants enjoyed a day of card-playing, NCAA basketball viewing and bidding on silent-auction items, as well as the opportunity to hear firsthand from a patient family about the difference philanthropy makes.

The 14th annual Mattel Party on the Pier, benefiting Mattel Children’s Hospital UCLA, is set to delight guests on Sunday, October 6, 2013, from 10 am to 2 pm at the Santa Monica Pier. Highlights include rides, carnival games, a silent auction, celebrity appearances and a VIP tent for sponsors. Last year’s event was the most successful yet, raising $800,000 to launch high-priority programs and innovative discoveries.

For sponsorship opportunities and tickets, go to: partyonthepier.ucla.edu
**Gifts**

Suzanne and Stanley Caplan are new donors to UCLA with a commitment to the Department of Surgery. Their support underwrites the work of Dr. Ronald W. Busuttil, executive chairman of the department, whose specialty is transplantation, including the liver and pancreas. Their contribution will bolster his highest priorities, as he continues to pursue excellence in patient care, research and education in this lifesaving mission.

UCLA alumna Jerri de Cordova has donated assets valued at more than $500,000 to establish a charitable-gift annuity benefiting the Jonsson Cancer Center Foundation. This contribution, made in honor of Mrs. de Cordova’s sister Jean L. Kline, will support highest-priority breast-cancer research at UCLA’s Jonsson Comprehensive Cancer Center.

Dr. David and Randi Fett have pledged $500,000 to establish the David and Randi Fett Orbital and Ophthalmic Plastic Surgery Fellowship Endowment at the Jules Stein Eye Institute (JSEI). It is in addition to their recent gift of $300,000 in 2010. These contributions support fellow training by Dr. Robert A. Goldberg, chief of ophthalmic plastic and orbital surgery at JSEI. The Fetts have strong ties to UCLA, since Dr. Fett’s grandfather (BA 1932), Mrs. Fett (BS 1984) and Dr. Fett (resident in ophthalmology at JSEI between 1981 and 1984) all received degrees at UCLA. This most recent contribution continues their long-standing tradition of giving in order to make a difference in the lives of others.

The Furlotti Family Foundation has committed $500,000 over five years to support the OCD Treatment Program in the Jane and Terry Semel Institute for Neuroscience and Human Behavior at UCLA. The first payment of $100,000 launched the pilot study focused on the development, testing and dissemination of a novel virtual reality (VR)-based treatment for childhood obsessive-compulsive disorder (OCD) under the direction of Dr. John Plackett.

Long-time UCLA donors Wendy and Theo Kolkotrones have completed their pledge to support the redesign of the Jules Stein Eye Institute (JSEI) website. This contribution will help modernize the site and expand user functionalities for online visitors and JSEI staff and faculty. The Kolkotrones also have made a generous gift for corneal research headed by Dr. Bartly J. Mondino, director of JSEI. Their other recent donations of more than $300,000 each will advance the cutting-edge work of Dr. John Glaspy at the Jonsson Comprehensive Cancer Center and Dr. Helena Chang at the Revlon/UCLA Breast Center. An additional philanthropic investment will support residents under the direction of Dr. Jeffrey Eckardt in the Department of Orthopaedic Surgery.

The Jean Perkins Foundation continues its philanthropic dedication to UCLA Health through two major contributions to the UCLA Department of Surgery. A second $300,000 gift has been directed to the Center for Advanced Surgical and Interventional Technology (CASIT) to support the Prosthetic and Balance Haptic Project, improving prosthetic options for amputees and patients with lower-limb neuropathy. Dr. E. Carmack Holmes and Dr. Gregory Carman are codirectors of CASIT. In addition, the foundation is underwriting Dr. Justine Lee’s bone-growth research, under the direction of Dr. Timothy A. Miller in the Division of Plastic and Reconstructive Surgery.

The family of William M. Ryan made a gift of stock to establish the Ruth Carr Quasi-Endowment Fund in The UCLA Foundation. This contribution is to underwrite the Ruth Carr Program for Physician Vitality under the direction of Dr. Andrew F. Leuchter and Dr. Elizabeth A. Bromley in the Center for Health Services and Society at the Jane and Terry Semel Institute for Neuroscience and Human Behavior at UCLA.

A contribution from Sun West Mortgage Company has been received by the UCLA Division of Pediatric Surgery. This support will bolster several of the division’s key priorities under the direction of Dr. James Dunn, chief, as well as Dr. James Atkinson, medical director of the UCLA Medical Center, Santa Monica campus.

Pat and Joe Yzurdiaga have made a $1-million contribution to the Pat and Joe Yzurdiaga Endowed Cataract Fund at the Jules Stein Eye Institute. This gift will support cataract programs under the direction of Dr. Kevin M. Miller, chief of the Comprehensive Ophthalmology Division.

**In Memoriam**

On May 1, 2013, Mrs. Margaret (Peggy) M. Bloomfield passed away. She was the widow of William E. Bloomfield, Sr., who died in 2004. The couple began what became an extraordinarily successful nationwide apartment-laundry business – Web Service Company. They then spent the rest of their lives giving back to the community in numerous ways, including being dedicated to a variety of causes related to health. One of Mrs. Bloomfield’s favorite memories was working with her husband to install the billboard on Santa Monica Boulevard, in West Los Angeles, that counts the number of smoking deaths annually. A leading supporter of UCLA, she was chair of the UCLA Chancellor’s Cabinet of the Chancellor’s Associates; a member of and major donor to the UCLA Women’s Health Executive Advisory Board; a long-standing and generous donor to the Jonsson Comprehensive Cancer Center, Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research at UCLA, and UCLA/Orthopaedic Hospital Center for Cerebral Palsy; and a member of Women & Philanthropy at UCLA, among others. Mrs. Bloomfield also attended the Westwood Village Rotary Club meetings until shortly before her death. Among her other passions were music, children’s health, politics, and education, and she was a member of the Mayflower Society and the Daughters of the American Revolution. Mrs. Bloomfield is survived by her son, daughter, stepdaughter, eight grandchildren, and 17 great grandchildren. Donations may be made at www.cancer.ucla.edu.
This was going to be a no-hassle work-related trip. We were heading to a meeting in Cleveland on March 27, 2013, aboard an American Airlines 767 to Dallas-Fort Worth, where we would change planes. It was about an hour-and-a-half into the flight, crossing over eastern New Mexico, and we were working on our laptops, when there was a tremendous thud.

We looked down at the floor next to us and into the face of a large man in his 60s who had collapsed in the aisle. He regained consciousness after a moment, and we asked if he had any illnesses or was taking medication; he told us he was diabetic, took insulin and had high blood pressure.

And then, it all changed. His breathing stopped and his pulse ceased. One moment he was talking to us, and the next he was blue. It was hard for us to believe this was happening, but a situation like this, you just switch onto autopilot.

Neither of us had coded a patient since our earliest years of clinical training, but now we had no choice. A flight attendant brought oxygen and the plane’s automated external defibrillator (AED) unit, which also shows an EKG trace. The pilot called over the loudspeaker, “Is there a doctor on the plane?” Two young men stepped forward: UCLA neurosurgery resident Dr. Brandon Evans and Brian Fisher, a third-year medical student at Texas Tech University. How lucky for us—and for the man we were attending—that they were among the 183 passengers on our flight. The four of us performed CPR. While we were ventilating and start an IV, Dr. Evans took control of the plane headed for its landing, kneeling around him in the narrow aisle. Several more shocks were required as we descended. Amazingly, he stabilized as we circled to land. He opened his eyes and looked at us. “I’m sorry,” he said.

It was the gentle landing we’d ever experienced, like glass. We pulled right up to the gate, and paramedics were on the plane as soon as the door opened. Brian, the medical student, also got off the plane; Lubbock was his final destination, so instead of having to change planes in Dallas, he had an unreported direct flight. The passengers applauded as the paramedics took over on the plane as soon as the door opened. Brian, the medical student, also got off the plane; Lubbock was his final destination, so instead of having to change planes in Dallas, he had an unexpected direct flight. The passengers applauded as he was disambushed.

As the paramedics took over our patient—Charles “Chip” Collison is his name—off the plane, alive, we felt an overwhelming sense of humility and gratitude that we and our young colleagues, Brian and Dr. Evans, had an opportunity to make a difference. The next day, we received a text that Chip was alive; surgeons had placed a stent in his heart, and he was expected to recover. Later, a note from Chip arrived. It said, “Thank you, from the bottom of my still-beating heart.”
Stem-cell research is on the cusp of transforming patient care through the development of personalized therapies for a wide range of diseases.

The mission of the new UCLA Children’s Discovery and Innovation Institute is to alleviate suffering and restore the promise of childhood as quickly and efficiently as possible.