Through shared decision making, patients and their physicians become true collaborators in determining the best course of care.
I recall thinking, as I was shocked. Being the naïve first-year medical student that I was, coming from Pittsburgh to UCLA as a medical student. Like the uninsured. I told him that he really needed to see a primary-care doctor, it costs $10 to do so, but that was about it. There is so much material to cover in the first two years of medical school, I knew that I wanted to be part of the movement with USC and various certified-enrollment entities, such as the Saban Community Clinic and the Venice Family Clinic, and Karin Fielding School of Public Health as our faculty mentor, to sign up people for affordable health insurance. I joined with two other like-minded medical students, Jeffrey Fujimoto and Brandon Donenfeld & Associates, with the goal of connecting them to a steady source of care. Throughout the first part of my second year as a medical student, we did just that and were able to assist hundreds of people in understanding the ACA and obtaining health insurance.

Now when I go to health fairs on behalf of CCTC, I’m no longer in charge of registering patients and taking their vitals. Instead, I sit at another table with a sign that reads Sign up for Health Insurance through Obamacare, and I meet patients with the goal of connecting them to a steady source of care. The conversations I have now differ greatly from the one I had with these patients and try to help them the best I can. I don’t understand why obtaining access to healthcare has to be so complicated. It makes me wonder about possibly having a national healthcare system like in some other countries, where everyone is born with health insurance. After all, we are born with the right to an education, why shouldn’t we also have the right to healthcare?
Community engagement is hardly new to the David Geffen School of Medicine at UCLA (DGSOM) and UCLA Health System. Whether by overseeing the residency programs at two of Los Angeles County’s major public hospitals, supporting student-directed mobile clinics and health fairs, providing staff for the Venice Family Clinic — the largest free clinic in the United States — or spearheading research projects under our Clinical and Translational Science Institute with the aim of erasing healthcare disparities in one of this nation’s most demographically diverse urban areas, UCLA Health Sciences has been an essential part of the fabric of Greater Los Angeles for decades. But in 2011, as we developed our strategic plan, we determined that community engagement needed to be elevated to one of our core missions along with education, research and clinical care.

For UCLA Health Sciences, community engagement means improving health through solutions that address social, cultural and biological determinants, developing a comprehensive and diverse healthcare workforce and creating innovative healthcare-delivery models that maintain financial stability while serving all members of our community. A committee we launched to implement the community-engagement strategic plan already has made significant progress. After surveying more than 9,000 faculty and staff in the DGSOM, the UCLA School of Dentistry, the UCLA School of Nursing and clinical programs on campus, along with partners across Los Angeles County, we have the start on what in the next few months will become a bi-directional searchable database for all of our community-partnered programs and research projects.

Two other key initiatives are just getting underway. With our human-resource colleagues, we have developed a health-workforce toolkit to help guidance counselors, high-school administrators and Parent-Teacher Associations get students excited about careers in healthcare. We successfully piloted the program at King Drew Magnet High School with more than 1,200 students, and we expect to reach more than 20,000 students in Los Angeles over the next 12 months as we expand our efforts. The other project is a new competition that will provide funding to community-academic-partnered projects that can make a meaningful difference in the health of our community. This regional competition will provide financial rewards to the most-innovative community-partnered projects with the highest likelihood of improving health in Los Angeles.

I heartily applaud our faculty, staff and students who are embracing the opportunity and obligation to venture beyond the confines of the campus to optimize health through community partnership. In collaboration with a diverse group of partners, they are indeed harnessing the many assets of UCLA to improve the health of the people we serve.

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

To learn more about community engagement at UCLA Health and the David Geffen School of Medicine at UCLA, go to: community.medschool.ucla.edu
Two articles in the Spring 2014 issue of U Magazine particularly caught my attention, both linked by the economic crisis in our healthcare system.

In “U.S. Ranks Near Bottom in Efficiency of Healthcare Spending” (page 9), Dr. Jody Heymann shows that “the United States healthcare system ranks 22nd out of 27 high-income nations when analyzed for its efficiency of turning dollars spent into extending lives … [reflecting] a high price paid and a low return on investment.” Dr. Patricia Ganz, in her interview “Cancer Care in Crisis” (page 12), identifies “escalating cost” as a key factor in this crisis. As neither the cause of the economic crisis in healthcare, nor the solution to the crisis, is mentioned in either article, it is vital to identify them. The cause: the for-profit health-insurance industry. The solution: a single-payer health system. One of the worst aspects of the for-profit insurance industry is its overhead cost, which consumes 15- to 25 cents of every healthcare dollar before any healthcare is provided. Contrast this with the overhead of our government’s traditional Medicare insurance program, which is less than 3 cents of every dollar. At present, for-profit, investor-owned health-insurance corporations exercise an economically crippling level of control over our nation’s healthcare. As a consequence, the United States spends twice as much per person as the average western European nation. A system of single-payer national health insurance, or improved “Medicare-for-all,” is the solution for the United States. In such a system, a single public or quasi-public agency organizes healthcare financing, while the delivery of care remains largely in private hands. A recent study at the University of Massachusetts, Amherst, shows that upgrading the nation’s Medicare program and expanding it to cover everyone would yield more than a half-trillion dollars in efficiency savings in its first year of operation and could save $592 billion annually, enough to pay for high-quality, upgraded and comprehensive benefits for all residents of the United States, with no deductibles or copayments and at lower costs to most individuals, families and businesses. But we don’t have to wait for a national Medicare-for-all program; the Affordable Care Act allows the states to adopt their own Medicare-for-all-type system, beginning in 2017. Dr. Ganz, in her U Magazine interview, says that we need to “engage the patient right from the get-go in developing his or her understanding of what’s going on.” This is true. We need to educate ourselves, as well as our future patients and society at large, that with an improved Medicare-for-all program, we can have a healthcare system that is universal, of high quality, sustainable and affordable.

Robert Vinetz, MD
Los Angeles, California

We found the story “A Family Affair” (Spring 2014, page 22) to be both inspirational and informative. As the grandparents of Dylan Miceli-Nelson and the parents of Dr. Carrie Miceli, this is a story close to our hearts. We have many friends who ask about the progress of our grandson Dylan, but we find that they, as well as most people, do not really know much about this rare genetic illness. The article did an excellent job of helping people to understand more about Duchenne muscular dystrophy on a scientific level, while showing the human, emotional side to this devastating illness. We are so proud that all of those who work with the Center for Duchenne Muscular Dystrophy at UCLA to bring comfort and help to these boys and their families. Someday, their dedicated work will hopefully result in the eradication of this disease.

Tony and Barbara Miceli
Beverly Hills, California

It’s not hard to understand that the family-affair factor of Drs. Carrie Miceli and Stanley Nelson resonates within the walls of academia as well as outside UCLA within the parent community of Duchenne muscular dystrophy. As the mother of a 24-year-old Duchenne man, I seriously question if our son would be alive today if the Center for Duchenne Muscular Dystrophy (CDMD) at UCLA did not exist. Perhaps we would still be roaming the hospital halls in despair, overwhelmed with feelings of incompetence by the impossible task of coordinating our son’s care on our own. To fully understand the need for care, one needs to understand just how devastating and relentless this disease really is. In social media, Duchenne parents call our boys warriors. I challenged myself as a mother to find a better description but I can’t; warrior is by far the most accurate. In Southern California, a soldier can return from combat without the use of his limbs and find a state-of-the-art rehabilitation center. An individual suffering from a progressive weakening of the heart can find excellent clinics with experienced cardiologists. Do you need respiratory care or treatment for pulmonary disease? Easy to find. Need a neurologist? I searched my insurance database and found more than 300 neurologists within a 10-mile radius. Did you have a bad fall and need an orthopaedic surgeon to fuse...
your spine? No problem. Psychological and mental-health care is also readily available. Duchenne patients and their families have all the aforementioned to cope with, and much more. The caveat for Duchenne parents is all these disciplines must be coordinated because these health issues are dependent on each other. Preceding the formation of CDMD at UCLA, there was no clinic administering coordinated comprehensive care, just scientific endeavors, bits and pieces of care, with no real experts to help SoCal families navigate through this challenging journey. Drs. Miceli and Nelson and their colleagues Drs. Melissa Spencer and Rachelle Crossbe-Watson understand the race against the clock better than no other. I believe their personal connection to Duchenne, combined with their expertise and environment, allows them to think in more-efficient ways as to how to approach the quest for a cure. The unique cocktail of intellect, resources, motivation and sense of community is the perfect recipe for optimizing care and finding a cure. I predict CDMD at UCLA will become the leading center for Duchenne muscular dystrophy in the nation. Let’s not forget they are a family of warriors too. Thank you for shedding light on the most-common lethal genetic disease. Duchenne is finally getting the attention it deserves on the West Coast.

Tyla Hamburg Bohbot
Los Angeles, California

Thank you so much for publishing the article “A Family Affair.” As the mother of a 12-year-old with Duchenne, I found this article extremely informative on many levels. I will definitely forward this to all my friends and family and anyone who’d like to understand a bit more what Duchenne is, what it’s like to live with the disease and the latest in scientific breakthroughs. The article is a great look at a family affected by Duchenne that is working tremendously hard to make it all so much better to deal with, for all of us. After many years of traveling back east for a clinic we could really trust, my family is thrilled to have the Center for Duchenne Muscular Dystrophy (CDMD) right here in L.A. We feel so much safer now, especially with all the new medical issues that pop up with Duchenne. We are also thrilled to know that our son can participate in clinical trials right here at home. Here’s a quote from Dr. Stanley Nelson which, to me, says it all: “We think the Center for Duchenne Muscular Dystrophy is the right model for how you tackle rare diseases. You have to take this team-science approach and team-clinical approach, and those two things have to work well together to generate new ideas and new knowledge with an eye toward biotech.” Many thanks to all the teams at the CDMD.

Cathy Jones
Hermosa Beach, California

Re. “Meeting the Future Challenge” (Spring 2014, page 1). I believe Dr. Washington has missed the point. UCLA has problems that are unique. UCLA medical care is the highest priced in the nation. It will be excluded from the plans marketed by the state exchanges. It cannot compete with Kaiser and the HMO plans on price or efficiency. Its future is not in primary care but in tertiary care that can only be delivered at a handful of centralized hospitals in each large catchment area.

Isaac Gorbaty, MD
Tarzana, California

Dr. Washington responds: Dr. Gorbaty is correct when he writes that the cost of care at UCLA can be high, and that is something we need to take very seriously. But a number of points require clarification. UCLA is a part of Covered California, the statewide health-insurance exchange, through Anthem Blue Cross, and all of the UCLA products that are offered through Anthem are priced lower than what is available from Kaiser as well as being below the national average. Dr. Gorbaty also is correct when he states that tertiary care must be a significant part of UCLA’s future. As we move toward that future, we remain committed to providing tertiary and quaternary care of the highest level, as well as the best primary care possible.

Dr. William N. Valentine died on February 22, 2014. He was 96 years old. I met Dr. Valentine twice, about 42 years apart. The first time was as a medical student at UCLA. My final rotation at UCLA Medical Center was on Dr. Valentine’s service, where once I was asked by our chief resident to present a difficult case — of a man with psoriasis who developed arthritis and then endocarditis — to the professor. The chief resident gave me a few references, and I spent several hours in the library to prepare. Of course, I was nervous, but Dr. Valentine was gracious and asked me to not be timid, so I proceeded to present the case. He called me aside afterward and told me that it was a very good presentation. Three weeks later, I graduated, and my new bride and I moved to Denver, Colorado, for my pathology residency and beyond. When I retired, as professor of pathology at the CU Health Sciences Center, we moved to southern Oregon to be closer to our children and grandchildren. A few weeks after we moved to a retirement community, we went to dinner at one of the dining rooms and sat at a table for four. Soon another couple approached and asked if they could join us. “Of course,” my wife and I said, and we began to talk. The couple said their name was Valentine, and nearly at once I recognized my former professor. Kit, my wife, had never met him, and neither of us had ever met his wife Martha. We ended up having dinner together several times, with most discussions about our days at UCLA, where Dr. Valentine had been a chair of the Department of Medicine and where he did groundbreaking research to discover the underlying cause of hemolytic anemias. At that time, he was also in regular contact with Dr. Sherman Mellinkoff, the former dean of the medical school and a close friend. It was wonderful to become reacquainted with my old professor, whose encouragement meant so much to me.

Ray E. Stanford, MD ’66
Medford, Oregon
Picturing Pain

The pain of loneliness. The pain of post-traumatic stress. The pain of spinal stenosis, of uterine fibroids, of mortality. How to explain one’s pain to another person, to make it real for someone else? By drawing it.
To help UCLA medical students understand the experience of pain and illness and to reinforce in them that as physicians they must treat the person and not just the disease, *Pain*, an exhibition of postcards drawn by patients, has been put on display in the medical school’s Gallery at the Learning Resource Center through August 31, 2014.

One hundred sixty-five postcards were mailed to UCLA from people all over the world. “I expected to receive artwork about physical pain, like broken legs,” says gallery curator and guest artist Ted Meyer, who in his own work mixes art and medical images as a way to understand his childhood experiences of illness. “But nearly half of the cards were about emotional pain. That really surprised me.”

To solicit the artwork, Meyer placed notices on Facebook and websites dedicated to the niche of mail-in art. The artwork then came flooding in over two months, illustrating experiences from bunions and cystic fibrosis to pain caused by rape and anxiety. “In some cases, the two were linked, as in, ‘I suffered this injury or disease and now I’m depressed,’” Meyer says.

The exhibition is one of four that are put on each year as part of the David Geffen School of Medicine at UCLA’s doctoring program. In addition to the art exhibits, the three-year doctoring curriculum includes actors and role-playing to explore disease from the patient’s perspective and teach medical students the empathy and listening skills they need to become compassionate caregivers.

“A patient experiences illness in a very different way than a physician does,” says LuAnn A. Wilkerson, EdD, senior associate dean for medical education. “These exhibits target mostly first- and second-year students, who haven’t yet been immersed in the clinical setting. For them, disease is still a textbook concept.”

Each exhibit of artwork in the gallery program ties thematically to what students are studying in the classroom. Previous shows have focused on cancer, multiple sclerosis, migraine, Alzheimer’s disease, developmental disabilities, sexually transmitted diseases and back pain.

“Art can capture a multitude of meanings and help us see the world in different ways, including understanding what it’s like to live with illness,” Dr. Wilkerson observes. “Pain is considered unpleasant, something to be observed from a distance. We hope these images achieve the opposite, by compelling viewers to draw closer and consider how pain affects the whole person.”

To view a slideshow of additional images from *Pain*, click on the link to this article at magazine.uclahealth.org, or go to the Gallery at the Learning Resource Center website: www.medsch.ucla.edu/lrcgallery
A new study by UCLA scientists and colleagues in Germany adds further proof to earlier findings that deadly melanoma cells can spread through the body by creeping like tiny spiders along the outside of blood vessels without ever entering the bloodstream. The research also demonstrates that this process is accelerated when the skin-cancer cells are exposed to ultraviolet light.

It is well-known that melanoma cells from an initial tumor can travel through the bloodstream to other parts of the body to form new tumors. Through such metastasis, a small skin cancer can become life-threatening by spreading to the brain, lungs, liver or other organs. Fifteen years ago, Claire Lugassy, MD, and Raymond Barnhill, MD, both professors of pathology at UCLA’s Jonsson Comprehensive Cancer Center, discovered and described an alternative metastatic process, which they called extravascular migratory metastasis (EVMM), by which melanoma cells move along the outside surface of blood vessels by way of angiotropism — a biological interaction between the cancer cells and the blood vessel cells. Since then, Drs. Lugassy and Barnhill have continued this line of research to confirm the existence of this metastatic pathway of cancer cells.

With angiotropism and EVMM, the cancer cells may replace tendril-like cells called pericytes, which are normally found on the outsides of blood vessels. Imitating the pericytes, the melanoma cells creep along the length of blood vessels until they reach an organ or other point where they accumulate to form new tumors, the researchers say.

“At first our idea was controversial,” Dr. Lugassy says. “But mounting evidence confirming angiotropism and EVMM has revolutionized the knowledge of how cancer spreads through the body; other scientists have confirmed the process in other solid-tumor cell types, such as pancreatic cancer.”

The scientists observed the process in a genetically engineered mouse model of melanoma. The researchers also found that the immune systems of mice exposed to ultraviolet radiation responded with inflammation that accelerated the angiotropism, increasing the level of EVMM and leading to more lung metastases than among the mice not exposed to UV light.

“We have known for a long time that UV radiation is a factor in the development of melanoma,” Dr. Barnhill says. “But in this study, the melanoma was already present in the mice.”

Their colleague, Thomas Tüting, of the Laboratory of Experimental Dermatology at the University of Bonn (Germany), observed that UV light provoked inflammation at the site of the tumor, which caused the mouse immune system to attract a type of common white blood cells known as neutrophils, which, in turn, promoted angiotropism. With this new knowledge — and the confirmation of Drs. Lugassy and Barnhill’s research on angiotropism and EVMM — researchers in the scientific community can now begin looking for a drug target that will interfere with this EVMM process.
Older Adults: Build Muscle to Live Longer

New UCLA research suggests that the more muscle mass older Americans have, the less likely they are to die prematurely. The findings add to growing evidence that overall body composition — and not the widely used body mass index, or BMI — is a better predictor of all-cause mortality. The study is the culmination of previous research by endocrinologist Preethi Srikanthan, MD (FEL ’04), that found that building muscle mass is important in decreasing metabolic risk.

“As there is no gold-standard measure of body composition, several studies have addressed this question using different measurement techniques and have obtained different results,” Dr. Srikanthan says. “Our study indicates that clinicians need to be focusing on ways to improve body composition, rather than on BMI alone, when counseling older adults on preventive health behaviors.”

The researchers analyzed data collected by the National Health and Nutrition Examination Survey (NHANES) III, conducted between 1988 and 1994. They focused on a group of 3,659 individuals that included men who were 55 or older and women who were 65 or older at the time of the survey. The authors then determined how many of those individuals had died from natural causes, based on a follow-up survey done in 2004. The body composition of the study subjects was measured using bioelectrical impedance, which involves running an electrical current through the body. Muscle allows the current to pass more easily than fat does, due to muscle’s water content. In this way, the researchers could determine a muscle mass index — the amount of muscle relative to height. They looked at how this muscle mass index was related to the risk of death, and they found that all-cause mortality was significantly lower in the fourth quartile of muscle mass index compared with the first quartile.

This study does have some limitations. For instance, one cannot definitively establish a cause-and-effect relationship between muscle mass and survival using a cohort study such as NHANES III. “But we can say that muscle mass seems to be an important predictor of risk of death,” Dr. Srikanthan says. In addition, bioelectrical impedance is not the most-advanced measurement technique. “Despite these limitations, this study establishes the independent survival-prediction ability of muscle mass as measured by bioelectrical impedance in older adults, using data from a large, nationally representative cohort,” Dr. Srikanthan says. “We conclude that the measurement of muscle mass relative to body height should be added to the toolbox of clinicians caring for older adults. Future research should determine the type and duration of exercise interventions that improve muscle mass and potentially increase survival in healthy older adults.”

“Muscle Mass Index as a Predictor of Longevity in Older Adults,” American Journal of Medicine, February 18, 2014
Blood Test Serves as Crystal Ball for Heart-transplant Patients

A blood test commonly used to determine whether or not heart-transplant recipients are rejecting their new organ can also predict potential rejection-related problems in the future, a UCLA-led study finds. The researchers demonstrated how the AlloMap test, which uses a blood sample to measure changes in the expression of roughly a dozen genes, can be used over a period of time to assess the risk of dysfunction or rejection of a transplanted heart — months before such an event may occur.

“For the first time, we can use genomic testing over multiple patient visits to go beyond intuition to understand not just how patients are doing now, but also how they are likely to be a few months from now,” says Mario Deng, MD, medical director of UCLA’s Integrated Advanced Heart Failure-Mechanical Support-Heart Transplant Program. “It’s another step toward personalized medicine.”

The discovery that the white blood cells of transplant recipients contain this prognostic information on rejection, independent of how their transplanted heart may be functioning, could potentially improve care and outcomes, the researchers said.

AlloMap, which is based on research led by Dr. Deng in conjunction with more than a dozen of the largest U.S. heart-transplant centers and the Brisbane, California-based biotech company XDx, measures the expression levels of 11 genes from a patient’s blood sample, each of which is known to be associated with rejection risk.

The current study is based on data originally collected by leading transplant centers and published in the New England Journal of Medicine in 2010. For that study, 600 heart-transplant recipients were randomly assigned to be monitored for potential episodes of rejection either through routine biopsy or through the AlloMap test. The study found that AlloMap was equally as effective as biopsy at detecting rejection or dysfunction, and it resulted in increased patient satisfaction because it was less invasive. The new study demonstrates for the first time the ability of the AlloMap test, when used over time, to predict future events.

Dr. Deng and colleagues noted that using gene-expression profiling to predict the future likelihood of patients experiencing rejection-related problems with their transplanted heart could change the way such patients are treated. For example, those deemed to be at low risk for adverse events could be given lower doses of immunosuppressive drugs, which could reduce the significant side effects. Or patients found to be at high risk could be evaluated at shorter time intervals to determine the causes of the test-result variability, specifically to rule out rejection.

Increased Pesticide Links to Parkinson’s Disease

Studies have shown that certain pesticides can increase people’s risk of developing Parkinson’s disease. Now, UCLA researchers have found that the strength of the risk depends on an individual’s genetic makeup, which, in the most pesticide-exposed populations, could increase a person’s chance of developing the debilitating disease two-to-six fold.

In an earlier study, the UCLA team discovered a link between Parkinson’s and the pesticide benomyl, a fungicide that has been banned by the U.S. Environmental Protection Agency. That study found that benomyl prevents the enzyme aldehyde dehydrogenase (ALDH) from converting aldehydes — organic compounds that are highly toxic to dopamine cells in the brain — into less-toxic agents, thereby contributing to the risk of Parkinson’s. For the current study, UCLA researchers tested a number of additional pesticides and found 11 that also inhibit ALDH and increase the risk of Parkinson’s — and at levels much lower than they are currently being used.
Vitamin A vs. Tuberculosis

Western countries are once again tackling tuberculosis (TB), with recent outbreaks in Los Angeles and London. The rise of drug-resistant TB, called a “ticking time bomb” by the World Health Organization, and the high cost of fighting the disease highlight the need for new approaches to treatment. Now, UCLA researchers investigating the role of nutrients in helping the immune system fight against major infections show that vitamin A may play an important role in combating TB.

The UCLA team found that vitamin A and a specific gene assist the immune system by reducing the level of cholesterol in cells infected with TB. This is important because cholesterol can be used by TB bacteria for nutrition and other needs, the researchers say.

“If we can reduce the amount of cholesterol in a cell infected with tuberculosis, we may be able to aid the immune system in better responding to the infection,” says Philip Liu, PhD ’05 (FEL ’09), assistant professor of medicine in the divisions of dermatology and orthopaedic surgery. “Understanding how nutrients like vitamin A are utilized by our immune system to fight infections may provide new treatment approaches.”

To investigate the role of vitamin A in immune defense, the UCLA team first compared its effects on cells to the effects of a similar nutrient, vitamin D. The researchers thought the two vitamins might use the same mechanism to aid the immune system, but this wasn’t the case. Instead, they found that when the vitamins were added to human blood cells infected with TB, only vitamin A decreased the cells’ cholesterol levels. They also discovered that the action of vitamin A was dependent on the expression of a gene called NPC2.

Further experiments showed that even if an infected blood cell was stimulated with vitamin A, it would not be able to fight the TB bacteria if the cell couldn’t express the NPC2 gene, which helps the cell effectively rid itself of cholesterol. The cholesterol is stored in cell compartments called lysosomes, which play an important role in fighting infection. Once the lysosomes are unlogged, they can again become effective in killing the TB bacteria.

The next stage of research will focus on better understanding how the immune system takes the inactive form of vitamin A, retinol, and creates all-trans retinoic acid, the form of the nutrient that can activate the infected cells against the TB bacteria.

They also found that people with a common genetic variant of the ALDH2 gene are particularly sensitive to the effects of ALDH-inhibiting pesticides and are two-to-six times more likely to develop Parkinson’s when exposed to these pesticides than those without the variant.

“We were very surprised that so many pesticides inhibited ALDH and at quite low concentrations — concentrations that were way below what was needed for the pesticides to do their job,” says Jeff Bronstein, MD ’88 (RES ’92), PhD ’88, professor of neurology and director of the movement disorders program at UCLA. “These pesticides are pretty ubiquitous and can be found on our food supply. They are used in parks and golf courses and in pest control inside buildings and homes. So this significantly broadens the number of people at risk.”

In the previous study, Dr. Bronstein and his team had determined the mechanism that leads to increased risk. Exposure to pesticides starts a cascade of cellular events, preventing ALDH from keeping a lid on the aldehyde DOPAL, a toxin that naturally occurs in the brain. When ALDH does not detoxify DOPAL sufficiently, DOPAL accumulates, damages neurons and increases an individual’s risk of developing Parkinson’s. In the current study, the research team developed a lab test to determine which pesticides inhibited ALDH.

They then found that those participants in the epidemiological study who had a genetic variant in the ALDH gene were at increased risk of Parkinson’s when exposed to these pesticides.

The report suggests that therapies modulating ALDH enzyme activity or otherwise eliminating toxic aldehydes should be developed and tested to potentially reduce Parkinson’s disease occurrence or slow its progression, particularly for patients exposed to pesticides.

Researchers at UCLA took a new approach to identify genes that may contribute to bipolar disorder. Instead of using only a standard clinical interview to determine whether or not individuals met the criteria for a clinical diagnosis, the researchers combined the results from brain imaging, cognitive testing and an array of temperament and behavior measures. Using the new method, the investigators — in collaboration with others at UC San Francisco, Colombia’s University of Antioquia and the University of Costa Rica — identified about 50 brain and behavioral measures that are both under strong genetic control and associated with bipolar disorder.

“The field of psychiatric genetics has long struggled to find an effective approach to begin dissecting the genetic basis of bipolar disorder,” says Carrie Bearden, PhD, associate professor of psychiatry and psychology at the Jane and Terry Semel Institute for Neuroscience and Human Behavior at UCLA. “This is an innovative approach to identifying genetically influenced brain and behavioral measures that are more closely tied to the underlying biology of bipolar disorder than are the clinical symptoms alone.”

The researchers used high-resolution 3-D images of the brains of 738 adults, 181 of whom have severe bipolar disorder; questionnaires evaluating temperament and personality traits of individuals diagnosed with bipolar disorder and their non-bipolar relatives; and an extensive battery of cognitive tests assessing long-term memory, attention, inhibitory control and other neurocognitive abilities. Approximately 50 of these measures showed strong evidence of being influenced by genetics. “These findings are really just the first step in getting us a little closer to the roots of bipolar disorder,” Dr. Bearden says. “What was really exciting about this project was that we were able to collect the most extensive set of traits associated with bipolar disorder ever assessed within any study sample. These data will be a really valuable resource for the field.”

Individuals in the study are members of large families living in Costa Rica’s central valley and Antioquia, Colombia, with a very high incidence of bipolar disorder. The groups were chosen because they have remained fairly isolated, and their genetics are therefore simpler for scientists to study than those of general populations. The fact that the findings aligned closely with those of previous, smaller studies in other populations was surprising even to the scientists, given the subjects’ unique genetic backgrounds and living environments.

“This suggests that even if the specific genetic variants we identify may be unique to this population, the biological pathways they disrupt are likely to also influence disease risk in other populations,” Dr. Bearden says.

The researchers’ next step is to use the genomic data collected from the families — including full genome sequences and gene-expression data — to begin identifying the specific genes that contribute to risk for bipolar disorder. The researchers also plan to extend their investigation into the children and teens in these families.

“Multisystem Component Phenotypes of Bipolar Disorder for Genetic Investigations of Extended Pedigrees,” *JAMA Psychiatry*, February 12, 2014
Scientists at UCLA’s Jonsson Comprehensive Cancer Center have demonstrated how viruses reprogram the metabolism of the cells they invade to promote continued viral growth within an organism. The findings could have implications for cancer treatments based on similarities between viruses and cancer-cell mechanisms and may even lead to drugs that could inhibit the virus that causes the common cold, the scientists say.

Previous research has shown that when normal cells become cancer cells, they are reprogrammed to act in certain ways that are very similar to virus-infected cells; the cells change their metabolism to support the maintenance and reproduction — and thus the spread — of the cancer. “In our laboratory, we’ve always been interested in how cancer cells acquire metabolic changes, compared to normal cells,” says Assistant Professor of Molecular and Medical Pharmacology Heather Christofk, PhD. “We decided to look at viruses and how they change the metabolism of cells they invade, because we thought they might be using mechanisms similar to those in cancer cells and that there might be some crossover in the way the mechanisms work.”

The researchers discovered that the adenovirus — the type of virus that causes the common cold — reprograms the cell it invades to be able to take on more glucose, an important nutrient for cells and viruses. The virus also instructs the cell to increase its use of the glucose to create energy and grow larger. These metabolic alterations enable the virus to begin replicating inside the cell.

“With this knowledge, we hope to begin designing drugs that can inhibit the increased glucose uptake in these cells,” says postdoctoral scholar Minh Thai, co-researcher on the project. “This could lead to drugs that stop the growth of viral infections, the most common being cold or flu, but also meningitis or some types of pneumonia. Then it might be possible to use the same kind of drug to stop the growth of cancer cells.”

“Adenovirus E4ORF1-Induced MYC Activation Promotes Host Cell Anabolic Glucose Metabolism and Virus Replication,” Cell Metabolism, April 1, 2014

Hints Gleaned from Cold Virus Point to Potential Cancer Treatments

Heart-Lung Machine Saves Heart-attack Victim

James Manzi is lucky to be alive. When the 79-year-old Brentwood, California, resident arrived at Ronald Reagan UCLA Medical Center’s emergency room in full cardiac arrest, the medical team tried everything to stabilize him, including shocking his heart 29 times with a defibrillator in an attempt to restore a normal rhythm.

It was a long-shot; only one out of every 10 people who suffer cardiac arrest outside the hospital survives. Seeing that the efforts to resuscitate Manzi were proving fruitless, UCLA emergency-medicine physician Eric Savitsky, MD (RES ’95, FEL ’97), made an urgent request for a rarely used but potentially lifesaving technology known as extracorporeal membrane oxygenation, or ECMO.

ECMO employs a sophisticated pump to take over the functions of the heart and lungs and is traditionally used to support adults in cardiac failure waiting for a heart transplant and to help protect the delicate respiratory systems of premature infants. And, in this case, it proved to be a lifesaver for Manzi. Once on the ECMO device, his heart stabilized, and he was able to undergo coronary angioplasty on an artery that was completely blocked; a stent also was placed to keep the artery open. He has since made a nearly 100 percent recovery.

“We are so pleased that this rare use of ECMO helped save Mr. Manzi’s life,” Dr. Savitsky says. “ECMO may be a viable option in very select heart-attack patients who come to emergency rooms that are equipped to provide this therapy.”

Manzi is grateful to the emergency and cardiac teams that went the extra mile to save his life — his wife Barbara calls them “angels in green” — and in April, he had the pleasure of being surrounded by family and friends while celebrating his 80th birthday.

“I’ve always enjoyed my life and now appreciate it even more,” says the father of five, who also has six grandchildren. “Just being alive is wonderful.”
Acetaminophen provides many people with relief from headaches and sore muscles, and when used appropriately, it is considered mostly harmless. Over recent decades, the drug has become the medication most-commonly used by pregnant women for fevers and pain. But a study by UCLA, in collaboration with the University of Aarhus in Denmark, has raised concerns about acetaminophen’s risks during pregnancy.

The UCLA researchers show that taking acetaminophen during pregnancy is associated with a higher risk in children of attention-deficit/hyperactivity disorder (ADHD) and hyperkinetic disorder.

“The causes of ADHD and hyperkinetic disorder are not well-understood, but both environmental and genetic factors clearly contribute,” says Beate R. Ritz, MD, PhD, chair of epidemiology at the UCLA Jonathan and Karin Fielding School of Public Health. “We know there has been a rapid increase in childhood neurodevelopmental disorders, including ADHD, over the past decades; it is likely there are environmental components.”

The UCLA researchers used the Danish National Birth Cohort, a nationwide study of pregnancies and children, to examine pregnancy complications and diseases in offspring as a function of factors operating in early life. The cohort focuses especially on the side effects of medications and infections. They studied 64,322 children and mothers who were enrolled in the cohort from 1996 to 2002. Acetaminophen use during pregnancy was determined, using computer-assisted telephone interviews that were conducted up to three times during pregnancy and again six months after childbirth. They also obtained diagnoses of hyperkinetic disorder among the cohort’s children and identified if ADHD medications had been obtained for the children.

More than half of the mothers reported using acetaminophen while pregnant; the children of those mothers were at a 13-percent-to-37-percent higher risk of later receiving a diagnosis of hyperkinetic disorder, being treated with ADHD medications or having ADHD-like behaviors at age 7. The longer acetaminophen was taken — that is, into the second and third trimesters — the stronger the associations. The risks for hyperkinetic disorder/ADHD in children were elevated 50 percent or more when the mothers had used the common painkiller for more than 20 weeks in pregnancy.

“It’s known from animal data that acetaminophen is a hormone disruptor, and abnormal hormonal exposures in pregnancy may influence fetal brain development,” Dr. Ritz says. She noted that acetaminophen can cross the placental barrier and suggested it is plausible that acetaminophen may interrupt fetal-brain development by interfering with maternal hormones or through neurotoxicity.

If further studies verify the findings, then acetaminophen should no longer be considered “safe” to use during pregnancy, the researchers say.

“Acetaminophen Use During Pregnancy, Behavioral Problems, and Hyperkinetic Disorders,” JAMA Pediatrics, 2014
UCLA pediatrics — the right start for kids

What’s the only thing more important than your health? If you’re like most people, it’s your child’s. At UCLA, we understand. We offer complete pediatric care for infants, children and teens at our hospitals and offices throughout the area. It’s the world-renowned care UCLA is known for, right in your neighborhood — for the ones you care about most.

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On-ramp to the Fast Track

The rate of autism in the United States is skyrocketing, prompting federal health officials to take steps to quicken the pace of research and development of more-effective pharmacological responses. UCLA’s Dr. James T. McCracken is at the forefront of that effort.

Autism, once a mysterious and infrequently recognized disorder, is now on most everyone’s radar. The condition and its origins receive much public and media attention and often are the focus of controversy. There is no singular constellation of symptoms that defines autism; its expression can fall anywhere along an extended spectrum. One autistic child might not speak and have pervasive developmental disorders, while another may be a bright student but socially isolated. In the hope of fast-tracking studies of promising drugs to address the core deficits that underlie autism-spectrum disorders (ASDs), which the Centers of Disease Control and Prevention says affects one-in-68 children in the United States, the National Institute of Mental Health (NIMH) awarded a $9-million grant to UCLA. James T. McCracken, MD (FEL ’87), will lead that effort as a principal investigator, coordinating a national network of researchers at UCLA and other academic centers. Freelance writer Clara Sturak, herself a passionate advocate on behalf of children with autism, spoke with Dr. McCracken for U Magazine.

What led the NIMH to the fast-fail-trials approach to address the issues of autism?

Dr. James T. McCracken: Over the last 10 years, different large pharmaceutical companies have been working to develop new drugs to treat neuropsychiatric disorders, including ASDs. A huge number of those drugs failed in testing, and so much capital was lost, that it’s caused a lot of these big pharmaceutical companies to abandon the business of creating neuro-pharmaceutical drugs. As one might imagine, this created a great deal of alarm within the mental-health field. Without the resources of big drug companies, how can much-needed new and effective drugs be developed? The NIMH recognized the challenge and started “fast-fail” networks.

Why “fast fail” and not “fast success”?

Dr. McCracken: The emphasis on “fast fail” springs from the fact that most experimental drugs are destined to fail. So knowing that outcome as early as possible is crucial to not waste time and money and to inform the science. The major problem encountered in drug development for neuropsychiatric disorders is that too many
compounds are failing to show benefits or safety in late-stage clinical trials. The goal of a fast-fail program is to weed out as early as possible those drugs that are less likely to make it through successfully as approvable treatments. We can then focus on those drugs we believe will be successful, which will benefit the entire drug-development process from beginning to end.

Still, with a growing need for effective treatments for ASDs, wouldn’t drug companies consider the cost of neurological-drug development a financial risk worth taking?

Dr. McCracken: It’s not just an issue of money; this kind of work also absorbs a great deal of time. Recent estimates are that it takes 13 years on average to go from the identification of a new potential drug in the laboratory to having it approved and marketed, at a cost of $1.8 billion per each new approved medication. The final costs of drug development include the cost of many more failures, which often occur in the second and third phases of clinical trials. Often, there will be a lot of excitement about a potential new treatment that ultimately disappoints. Simply reducing the late-stage failure rates of drugs in clinical studies from 66 percent to 50 percent — guided by fast-fail trials — could shave 30 percent off the total costs. That would free up money that might double or triple the number of other compounds a company could pursue. This is one place where both medicine and people with these disorders could clearly benefit. Neuropsychiatric disorders — depression, schizophrenia, dementia, autism — are among the top-10 disabling illnesses. So it is clear that the need for effective treatments is huge.

How have advancements in basic science aided your team in finding new approaches to studying compounds?

Dr. McCracken: Our basic-science colleagues are generating enormous information on the likely underlying causes of ASDs. One goal of the fast-fail-trial networks is to make strategic choices about what compounds or drugs to test, based on growing basic science. A number of animal models of ASDs have been developed and studied, including several at UCLA. Together with progress in genetics, basic findings have suggested some pathways for possible treatments. By themselves, basic findings are incomplete and fraught with risks of not translating.

“Recent estimates are that it takes 13 years on average to go from the identification of a new potential drug in the laboratory to having it approved and marketed, at a cost of $1.8 billion per each new approved medication.”
“The goal of a fast-fail program is to weed out as early as possible those drugs that are less likely to make it through successfully as approvable treatments.”

to human beings. But when the basic findings line up in agreement with clinical studies, strong hypotheses emerge to test them as treatments, which is exactly how we came to the choice of our first compound for our fast-fail trial. The other goal of the networks is to take leaps by doing trials differently — using different kinds of measurements. The testing is not only faster, it’s less clinical and more empirical. Of course, we still test on human subjects, but it is more to incorporate empirical data. Instead of using information gained from interviews with, or surveys of, the subjects, we look at biological measurements or changes in brain function that can be seen on brain scans or electroencephalography.

By looking at hard data, you are reducing the built-in subjectivity of participants’ reporting?

Dr. McCracken: Yes, by using more-objective measures, we expect more-accurate and reliable results, though we will continue to survey the subjects. It’s just that we won’t be relying only on traditional clinical reporting.

How do you envision new drug treatments for ASDs differing from what is available at present?

Dr. McCracken: The pharmaceutical approach to autism up until now has not been particularly effective. Existing psychotropic drugs are being used to treat symptoms or behaviors sometimes seen in autism, like outbursts of anger or hyperactivity, but the core deficits associated with autism have not been addressed. The core problems in ASDs are difficulties with effectively communicating or developing language, difficulty relating well to others and intense repetitive behaviors that can border on being all-consuming and can block kids from learning. Some other features do commonly occur. For instance, up to 70 percent of children with ASDs show anxiety symptoms, and many have sensory-processing disorders and/or some degree of intellectual or cognitive difficulties. Cognitive difficulties can range across a whole spectrum — from severely impaired to superior intelligence, but with specific areas of strength and weakness — but the other symptoms emerge from the core deficits. We are focusing on pharmaceuticals to treat those core deficits.

The first compound your team is testing is a gamma-aminobutyric acid (GABA) enhancer. How was it chosen, and why?

Dr. McCracken: We’ve chosen to test a drug that accentuates the action of GABA in the brain. GABA and its neurons are found throughout the brain — it is one of the brain’s most-important neurotransmitters, affecting everything from learning and memory to anxiety to inhibiting electrical storms such as seizures. The signaling in the brain by GABA appears to be reduced in ASDs,
“Existing psychotropic drugs are being used to treat symptoms or behaviors sometimes seen in autism, like outbursts of anger or hyperactivity, but the core deficits associated with autism have not been addressed.”
By Shari Roan

Through shared decision making, patients and their physicians become true collaborators in determining the best course of care.
Craig Mann was bewildered enough when he was diagnosed with prostate cancer late last year. The 54-year-old Lake Forest, California, man is a laboratory scientist who takes good care of himself, eating healthy foods and participating in marathons and triathlons. He was certainly unprepared to hear that he had cancer.

But the diagnosis was only the first blow. Mann was taken aback by the numerous treatment options doctors presented to him and by the differences among the opinions. A urologist recommended surgery. A radiation oncologist recommended radiation therapy. Each option has pros and cons.

Mann’s primary-care physician suggested he consult with experts at UCLA. That’s when he encountered a novel program designed precisely for people like him who are standing at the crossroads of complex medical decisions. Before attending the consultation, Mann was advised to respond to a questionnaire to help him learn about prostate-cancer treatments and think through his choices.

“That was helpful for choosing what was important to me,” Mann says. “The survival statistics are really good for this cancer. But I was most concerned about quality-of-life issues. The survey was a way to think about everything and hone in on my priorities.”
Shared decision making is a concept that is gaining traction in medicine, particularly in areas of healthcare, where patients are presented with more than one reasonable treatment option. The programs, which feature patient-education tools such as online surveys or videos, have several goals. One is to help people thoroughly understand their choices and assure them that they are making informed decisions. Another major objective is to curb healthcare costs by sometimes steering people away from expensive treatments that are unlikely to result in better health or improved patient satisfaction.

Ultimately, shared decision making cuts through biases and crystallizes important issues for both doctor and patient, says UCLA Vice Chair of Urology Christopher S. Saigal, MD ’94 (RES ’00, FEL ’01), MPH, who implemented his department’s shared-decision-making program in which Mann participated. “Shared decision making improves the decision-making processes for both parties,” he says. “It is a collaboration. The idea is not that the patient tells the doctor what to do — the doctor does have expertise and an opinion that has to be heard by the patient — but the patient is in charge of the decision. It’s his body.”

“Shared decision making doesn’t replace the doctor-patient relationship. But in an era when doctors are, in fact, substantially more stretched for time, it is good to have tools to help them leverage their time with patients.”

“I’ve been doing this for 12 years, and the change has been astounding — especially in the last two or three years. It has become normalized,” says Catharine “Kate” Clay, director of shared-decision-making education and outreach for The Dartmouth Institute for Health Policy and Clinical Practice at Dartmouth’s Geisel School of Medicine in Hanover, New Hampshire. The institute has been a leader in promoting the concept. “People are no longer just giving lip service to it, and they’ve gotten over all of their objections about why it won’t work. Now people are saying we need to do this, and we need to get payors to pay for it.”

ONE MIGHT ARGUE THAT DOCTORS AND PATIENTS should always strive to have productive conversations regarding treatment options. But, in reality, that’s not always so easy. Until just a few decades ago, not only did patients yield nearly all decision making to their doctors, but also they often were not even told all of the facts about their conditions.

“The idea that patients are equal partners in decision making is relatively recent in medicine,” says Dr. Saigal. For example, in the ’50s, it was considered ethical to withhold information that a patient had terminal cancer, he says. “Because treatments were limited, it was considered too cruel to fully inform a patient. We’ve come a long way from this paternalism since then.”

In the late 20th century, a patient-empowerment movement began that demanded shared decision making as a basic tenet of healthcare; however, that trend emerged at a time when physicians, faced with growing demands for healthcare and a surge in new tests and treatments, had less time than ever to spend in conversation with patients. “At a time when patients wanted more and more information, doctors and healthcare systems were less and less able to respond to that,” says Tom Rosenthal, MD, chief medical officer for UCLA hospitals. “Shared decision making doesn’t replace the doctor-patient relationship. But in an era when doctors are, in fact, substantially more stretched for time, it is good to have tools to help them leverage their time with patients.”

Any physician can choose to adhere to the philosophy of shared decision making — and any patient can ask for it, Clay says. “One good physician who gets it can change his or her practice,” she says.
says. “It is simply a matter of his or her style of talking with patients to make it collaborative instead of a one-way push.”

But some large medical institutions are finding the concept works best when a department establishes a protocol for offering decision-making aids. The tools can consist of computer questionnaires, interactive programs, downloadable apps, pamphlets or videos that are created specifically for this purpose. Group educational classes are another type of decision-making aid. Besides educating the patient, the tools clarify patient goals, values and objectives. Cultural and religious beliefs, the patient’s age, family support and even the patient’s financial resources are open for consideration in the decision-making process.

“Patients’ values and beliefs are very much part of the decision in this format,” says Dr. Saigal. “Those values, wherever they come from, differ among people. It’s amazing what a variety of beliefs there are about medical treatments and the value of their outcomes.”

**IN SOME CASES, SUCH AS THE URGENT NEEDS** of someone having a heart attack, shared decision making is moot. But, in recent years, treatment options have exploded for many non-emergency conditions, and often there’s conflicting evidence about which treatments are superior, Dr. Saigal says. “Men with prostate cancer who have localized disease have three main options: surgery to remove the prostate, radiation to destroy prostate-cancer cells or active surveillance — being carefully watched to see if the cancer is going to get worse,” he says. “These are very different options with very different side-effect profiles.”

For example, surgery for prostate cancer is associated with a risk of urinary or sexual dysfunction; active surveillance of the cancer doesn’t carry those risks but is associated with a somewhat shorter life expectancy for younger men with aggressive cancer. UCLA’s Department of Urology began offering a shared-decision-making tool for men with prostate cancer in 2013. Department staff plug in data about the patient’s diagnosis, such as the “aggressiveness” score of the tumor, test results, age, race and other medical conditions — all things that could affect the treatment decision. After the patient completes a 15-minute survey regarding his preferences, the resulting report is sent to the doctor ahead of the scheduled consultation, during which the physician and patient meet to discuss the options.

“The report says, taking into consideration the evidence and who you are clinically and what your preferences are, here’s the best match for you to discuss with your doctor, here’s the next-best match and so on,” Dr. Saigal says. “The patient walks into the office knowing all of the options. Then he can move on to have a more-informed, in-depth discussion with his doctor.”

**REPRODUCTIVE HEALTH IS ANOTHER AREA** where decision aids are particularly useful. Aparna Sridhar, MD (FEL ’13), MPH, assistant clinical professor in UCLA’s Department of Obstetrics and Gynecology, recently launched an iPad app that she developed during her fellowship at UCLA to help women make more-informed choices about birth-control methods. The free app, called Plan A Birth Control, takes women through the lengthy and complex list of reversible contraceptive methods, pointing out the pros and cons of each and how they work.

Birth control is a perfect area for a shared-decision-making aid because more than a dozen methods and numerous factors go into choosing
contraceptives — medical history, personal health characteristics, lifestyle factors, future pregnancy plans and financial resources. Moreover, significant public misconceptions abound about various methods, she says.

“My passion is family planning and birth control,” Dr. Sridhar explains. “I want my patients to have a tool that they can use and to which I feel comfortable referring them. I want them to use the app and be able to say ‘okay, maybe this is actually what I want.’ This is an adjunct to the patient-physician encounter. It’s to give them basic knowledge before they come to me.”

Preliminary research showed the app is well-received by patients, although they still appreciate talking to someone in person about their choices. Dr. Sridhar hopes to eventually offer the app in a kiosk in the clinic, so patients can use it prior to their appointments.

“The goal is really to provide the care that patients feel is best for them and to make sure that they fully understand the pros and cons of their options.”

AN EVEN-MORE-ELABORATE shared-decision-making program is underway at UCLA for patients with painful chronic conditions, such as hip or knee arthritis, spinal stenosis or herniated disc, in which treatment choices are complex and highly individualized. UCLA is one of 20 participants in a national study on shared decision making called the High Value Healthcare Collaborative.

Funded by the national Centers for Medicare and Medicaid Services (CMS) and led by the research team at Dartmouth, the study is a rigorous test of the potential benefits of shared decision making. “We’re focusing on preference-sensitive decisions,” says Associate Professor of Medicine O. Kenrik Duru, MD (FEL ’03), who is participating in the UCLA arm of the study. “In the case of advanced knee arthritis, a knee replacement won’t extend life and it involves surgery and rehabilitation. Would you rather manage your pain with conservative care or go with joint replacement? That is patient preference.”

Study participants watch a video that was produced for the study. The video depicts actual patients who discuss their condition and how they arrived at their various choices. The video describes treatment options and the pros and cons of each. After watching the video, patients participate in a 45-minute-telephone or in-person discussion with a health coach who helps them distill the information.

“We make it very clear to our patients that we are coming from a neutral, unbiased stance, and we are here to support our patients,” says Stephanie Ackerman, a health coach in Dr. Duru’s office. “Our sole objective is to help them make the best decisions for themselves through information and analyzing various demographics that matter to them — income, support, etc.”

Issues arise that perhaps wouldn’t have come to light without the program, she notes. One patient, who looked to be a good candidate for surgery based on medical data alone, was actually terrified of anesthesia and feared surgery. Another patient, also a potential candidate for surgery, had no one to assist him at home. Those patients ended up feeling more comfortable with a nonsurgical pain-management treatment plan. “Without that background information, patients and physicians may not have a common understanding of what is the best option,” Ackerman says.

After the session, the health coach enters notes in the patient’s file to inform the physician of which treatment option the patient is leaning toward. But no decision is made until the doctor and patient confer. “The goal is really to provide the care that patients feel is best for them and to make sure that they fully understand the pros and cons of their options.”
options,” Dr. Duru says. There’s a phrase that sums up the intent of the program, he adds: “No decision about me without me.”

Donald Perry, 66, recently participated in the program after he sought care for severe back pain linked to spinal stenosis. He and his wife Jeanette watched the video in the office and discussed the information with Ackerman. The process helped Perry decide on a nonsurgical approach — epidural anti-inflammatory injections, physical therapy and acupuncture — instead of opting for immediate surgery.

“That was one of the better things that I’ve done since I’ve been having the back problems,” Perry says about the program. “It clarified the options I had and basically let me know what is involved with the surgery.”

The video and counseling made his visit with his physician extremely productive, Perry says. “I can talk to the doctor on a different level now because of the things I learned from the video and from Stephanie. I feel a lot more comfortable now about what to do.”

UCLA JOINED THE HIGH VALUE HEALTHCARE COLLABORATIVE last year and hopes to enroll about 500 people in the program. The study grew out of observations by Dartmouth researchers that rates of certain kinds of discretionary procedures, such as knee-replacement surgery, Cesarean sections and surgery for benign prostatic hyperplasia, varied widely around the country. “The Dartmouth people’s idea was that if you informed patients about procedures in a structured kind of way — taking out the variability between the way one surgeon described it compared to the way another surgeon described it — you might get more-uniform rates of patients electing to undergo that kind of procedure,” says Dr. Rosenthal, a founding member of the High Value Healthcare Collaborative. “They discovered the rates of patients electing to undergo these procedures would go down. They called this shared decision making.”

A report published earlier this year by The Cochrane Collaboration, an international not-for-profit organization that focuses on disseminating accurate information about healthcare interventions, found strong evidence that decision aids improve people’s knowledge about their options and promote more-active decision making. “The biggest impact is that patients who have gone through a shared-decision-making process and are exposed to a decision aid are much-better informed and engaged in their care,” Clay says.

While doctor and patient satisfaction is a primary goal of shared decision making, there is keen interest in whether or not such programs lower healthcare costs by reducing the number of people who undergo elective surgeries in favor of less-costly options that can result in good outcomes. A 2012 study in the journal Health Affairs looked at the impact of decision aids among patients considering hip and knee surgery. Researchers, from the University of Washington, found decision aids were associated with 26 percent fewer hip-replacement surgeries and 38 percent fewer knee-replacement surgeries.

Another study, published earlier this year in BMJ Open, polled U.S. physicians and found that two-thirds were very enthusiastic about using shared decision making to lower healthcare costs.

“Shared decision making is one of many initiatives and innovations that the healthcare system is undertaking to grapple with the challenge that society is positing to us, which is to figure out ways to reduce cost while not reducing quality,” Dr. Rosenthal says. “This is not a panacea for healthcare costs. But it’s likely to be an important component of it. And it’s almost certainly the right thing to do, informing patients in a systematic way.”

Craig Mann agrees. After completing the survey and discussing the alternatives with his fiancée, he met with Mark S. Litwin, MD (FEL ’93), MPH, chair of the Department of Urology, to discuss the options.

“We talked it over, and I decided to choose surgery,” Mann says. “The doctor is going to know more than anyone else. He has a bigger picture. And the whole process helped me think about everything and decide on my priorities.”

“Shari Roan writes regularly about healthcare and medicine.”
Dr. Warwick J. Peacock dreamed of the Surgical Science Laboratory as a place where surgical residents could not only master anatomy, but also experiment, with the ultimate goal of improving patient care.
On a February morning, under the glare of operating-room lights, six UCLA neurosurgery residents embark on a rare adventure into the human body. As they start cutting into three bodies, Professor of Surgery Warwick J. Peacock, MD, encourages them. “That should be the linea alba,” he says, in his gentle South African accent. “There are some adhesions. Always stick your finger in to make sure you’re not cutting into the bowel. It spoils the day.”

Incisions made, the residents approach the spine from the front, sawing through the sternum, moving beyond the lungs and following the rib head to the pedicle, then removing a thoracic disc on each body — in two hours.

Of course, completing a discectomy in two hours on a living patient would be extraordinary. But this was no OR. No one is worried about scheduling, anesthesia or bleeding. The bodies are cadavers, and the bitter and antiseptic scent of embalming fluid, not blood, fills the air. In UCLA’s Surgical Science Laboratory, one of the few of its kind dedicated to the training of surgical residents, the fledgling surgeons can practice and make mistakes. They bubble with excitement, viewing anatomy rarely seen in this era of minimally invasive surgery and computer modeling: lungs, the front of the spine, the aorta.

For Dr. Peacock, an emeritus pediatric neurosurgeon who developed new techniques for treating children with cerebral palsy by first trying the techniques out on cadavers, teaching residents and exploring the human body on a daily basis has been “one of the most fascinating parts of my life. It is a novel experience every time.”

One veteran surgeon’s love of anatomy is helping new generations of surgical residents to sharpen their skills for the benefit of patient care.
After completing the discectomy, three of the residents — Sergei Tarterov, MD, Javinder Nangiana, MD, and Rich Everson, MD — remove their caps and masks, revealing young faces. They speak with Dr. Peacock, the lab’s director, about challenges in the OR. “If there’s anything you guys need, let me know,” he tells them.

Engaging and passionate, Dr. Peacock is a born teacher. In 2013, he received the first Distinguished Service in Education Award from the David Geffen School of Medicine at UCLA. Colleagues called him a “master educator” and a “visionary,” who is “revolutionizing surgical-anatomy instruction.”

“The most-important aspect of teaching is not the transmission of fact,” says the tall, thin man with blue eyes. “It’s the transmission of enthusiasm.”

That enthusiasm is infectious. “Dr. Peacock is an amazing teacher,” says Dr. Everson. “He includes just the right amount of detail; it’s clinically oriented. He was a practicing neurosurgeon. There’s nobody better to teach us than someone like that.”

Dr. Peacock envisioned the Surgical Science Laboratory as a place where surgical residents could not only master anatomy, but also experiment. The goal is straightforward: to improve patient care. “If you know your anatomy, you’re going to be able to treat your patient a lot better than if you don’t know your anatomy, no question,” he says. “When they finish their course with me, they know their anatomy.

Medical students learn the basic structures of the human body, but a surgical resident must know how to reach his or her target without damaging anything along the way. Surgeons, Dr. Peacock says, “are athletes of the small muscles,” and it takes hour upon hour of practice and repetition to train those muscles to perform the way they must.

“I don’t think anyone has anything quite like what UCLA does and what Dr. Peacock does,” says pediatric and fetal surgeon Diana L. Farmer, MD, chair of the Department of Surgery at UC Davis Medical Center. “It’s brilliant and it’s clever, and it wouldn’t surprise me if it becomes the standard throughout the country.”

FOR YEARS, DR. PEACOCK TAUGHT ANATOMY TO UCLA SURGICAL RESIDENTS wherever he could find space. Needless to say, it was unwieldy. “We had to roll these bodies around all over the place. It was a blooming nightmare,” he says. In 2009, he approached Alan G. Robinson, MD, then-executive associate dean of the medical school, about creating a dedicated lab. “Would you like a surgeon who doesn’t know his anatomy to operate on you?” he asked.

“Oh, my God, no, this is a no-brainer,” Dr. Robinson responded.

Even with Dr. Robinson’s support, it took three years to establish the lab. “I was a real nuisance,” Dr. Peacock says, a twinkle in his eyes. “It does take a crazy person who has a bit of time to pester and push to get it done.”

Dr. Peacock pushed back when one administrator told him, “We’re not going to do it,” referring to installing expensive new air ducts in the basement of the UCLA Center for the Health Sciences, where the lab is located.

“Oh, yes we are,” Dr. Peacock shot back.

Since the lab opened in April 2012, its use has expanded from only general surgery to group sessions with more than a dozen disciplines, from orthopaedics to OB/GYN. Dr. Peacock works one-on-one with general-surgery residents in 20 two-hour sessions, dissecting the entire body, and others, like neurosurgery resident Dr. Everson, can ask for his personal guidance if they wish. “To my knowledge, UCLA is the only place in the country that does that,” says Dr. Farmer.

As Dr. Peacock and a resident prepare to begin their lesson, they first solemnly thank the body donor. Dr. Peacock then extends his hand, telling...
the resident: “Here’s the scalpel, let’s start.” Whereas some surgeons desensitize themselves, Dr. Peacock remains fully engaged: “The beauty of the human body, as I find it when I dissect, makes me aware of a great joy that I am seeing such wonders, such perfection, I just don’t believe something like this can happen just by chance.”

The lab is producing results. Before it opened, Dr. Peacock tested 40 general-surgery residents. Only two could correctly identify more than 80 percent of the body parts on a cadaver. Dr. Peacock repeated the test a year after the lab opened; not one resident failed, and two had perfect scores. Moreover, a survey taken several months after the lab opened found that residents had a positive reaction to the lab for learning procedures and boosting their confidence.

The lab also provides a forum for experimentation. Avital Harari, MD, an endocrine surgeon, spent time in the lab to master a technique for removing the adrenals through the back instead of through the abdomen. In addition, UCLA’s face-transplant team rehearses there. “The only shortcut needed in surgery is preparation, and Dr. Peacock’s lab allows us to do just that,” says Kodi Azari, MD (FEL ’04), chief of reconstructive transplantation. “The hand- and face-transplant programs would not exist without the ability to go through the procedures until the surgical team performs as a perfect symphony.”

Sam Lan, MD, PhD, a retired general surgeon and medical-school classmate of Dr. Peacock’s who now teaches anatomy at the Albert Einstein College of Medicine in New York City, called the lab “unique.” “It is set up as an operating-room theater. They can experiment. They might even be able to innovate. That applies not only to residents, but also to surgeons who are trying to innovate new surgical techniques. That is definitely different,” he says.

**DR. PEACOCK KNEW WHEN HE HAD AN APPENDECTOMY,** at age 11, that he would become a doctor. “I was so excited by the doctors and the hospital that I never considered anything else,” he says.

As an intern at Cape Town’s Groote Schuur Hospital, he worked alongside pioneering heart surgeon Christian Barnard, MD, who performed the world’s first heart transplant in 1967, and initially aspired to become a cardiac surgeon. But during his general-surgery training at Durban’s King Edward Hospital, Dr. Peacock switched to neurosurgery. King Edward was, in apartheid South Africa, an overcrowded black hospital where patients slept on mattresses on the floor. In contrast to his predecessors, Dr. Peacock aggressively treated patients who had been paralyzed from stab wounds to the spine. Instead of dying, many recovered. After training in Toronto, Canada, as a pediatric neurosurgeon, he returned to South Africa, treating patients with brain tumors, epilepsy, spina bifida and cerebral palsy from around the whole country. To refine the rhizotomy procedure he applied to improve the walking patterns in patients with cerebral palsy, Dr. Peacock first visited the pathology lab, practicing on cadavers and, later, baboons.

But South Africa’s apartheid struggles hit close to home. His son organized protests against apartheid and his daughters were tear-gassed at rallies. Meanwhile, Dr. Peacock staged his own protest at Groote Schuur Hospital, where he worked in the mid-1980s. He was reprimanded when he began moving black children from their overflowing ward to the half-empty white-children’s ward. But he persisted. “On the third attempt, they let it go,” says Dr. Peacock. In 1985, Donald Becker, MD, then UCLA’s chief of neurosurgery, invited him to UCLA to become the school’s first pediatric neurosurgeon. The invitation came in the same mail delivery as his son’s Army induction papers, and Dr. Peacock and his wife Ann, now a successful screenwriter (her credits include *The Chronicles of Narnia: The Lion, the Witch and the Wardrobe, Nights in Rodanthe* and *The Killing Room*), pulled up stakes and moved to Los Angeles. The move, he says, was “like going from Earth to Mars” for his family.

Dr. Peacock spent 11 years at UCLA before becoming chief of pediatric neurosurgery at UC San Francisco. He retired in 2001, but that was short-lived. In 2005, he returned to Los Angeles, and UCLA asked him to teach anatomy to medical students and then exclusively to general-surgery residents. Dr. Peacock felt “privileged” to do his part, and for years he taught anatomy just for the joy it gave him. As he puts it, “The single-most-important experience that turns a layperson into a medical person is dissecting a human body, a dead body. You have to come to terms with
“If you look in a textbook, it’s beautiful. The nerves are color-coded yellow and the arteries are red and the veins are blue. That’s not what it looks like inside the body. ... When you open the belly, there is no textbook that looks like what you see.”

Dead bodies rather than live ones. Apart from rare occasions, this was not happening.

Dr. Peacock is passionate that “those who are going into surgery (16 percent of UCLA medical graduates in 2013) need to really learn their anatomy very thoroughly,” and today residents in nine of the 10 surgical specialties trained at UCLA spend time in the Surgical Science Laboratory to achieve this goal.

When they enter the lab, the students find five stations within its windowless room. Up to 20 bodies, with another 15 in an adjacent room, can be stored at one time. The facility also is used by surgeons like limb-transplant chief Dr. Azari and his teams to work out and rehearse their techniques. On one morning, a team of gynecological surgeons worked on a torso at one table, while two hand surgeons dissected an arm at another.

Everything that happens in the lab is done under the watchful eyes of representatives from UCLA’s Donated Body Program. “From the time that the body arrives at UCLA to its final disposition, we control where that body is at all times,” says Dean Fisher, director of the Donated Body Program. Throughout the procedures, there is utmost respect for the men and women who have willed their bodies to advance medical science. Each May, medical students and residents hold a memorial service that includes poetry and songs to honor the donors.

IN LATE JANUARY, A GROUP OF EIGHT GENERAL-SURGERY RESIDENTS visited the lab at 9 am to practice kidney transplants. They removed the left kidneys from four cadavers, preserved the vessels and transferred them to the right side. Residents Patience Odele, MD, and Nicholas Lahar, MD, were cutting through fat and connective tissue when they discovered the kidney they were working on had a double ureter, a rare occurrence. “It’s amazing how different everybody is,” Dr. Odele says. “We always talk about these variations, and sometimes you see those variations in patients.”

Dr. Peacock, an enthusiastic pianist who keeps his fingers limber on the keyboard during downtime (he has a small electric piano in the locker room across the hall from the lab), sees these “variations on a theme” daily. “If you look in a textbook, it’s beautiful,” Dr. Peacock says. “The nerves are color-coded yellow and the arteries are red and the veins are blue. That’s not what it looks like inside the body. Not only that, but they’re covered with fat and tissue planes. So when you open the belly, there is no textbook that looks like what you see.”

Vatche Agopian, MD (RES ’10, FEL ’12), a transplant surgeon, helps the residents acquire the hands-on experience. “Bodies aren’t built like Hondas or Fords,” he says. “There’s no manual. Here, the residents can do extensive dissections and solidify their knowledge of three-dimensional anatomy.”

Dr. Agopian lauds another team at work in the lab, Elise Lawson, MD, and Rena Farhadi, MD, as they quickly remove the left kidney. “This is perfect, guys,” Dr. Agopian says, holding up the kidney for everyone to see. “This is the ureter that drains the urine. This is the artery that brings the blood from the aorta into the kidney. This is the gonadal vein, and this is the ureter that goes into the bladder.”

Drs. Farhadi and Lawson then work together to suture the kidney into the right side. “I don’t think you could do it if you didn’t enjoy it,” Dr. Farhadi says. “You have to love it.”

“Not just like it, but love it,” Dr. Lawson agrees.

Drs. Agopian and Peacock give pointers on dissection techniques, keeping the atmosphere light. “I want it to be fun,” Dr. Peacock says. “They can make a mistake. It doesn’t matter. I just say to them,
‘Okay, you cut that nerve. Suture it together.’ And they won’t forget it. I don’t expect them to know; I expect them to learn.”

After finishing the kidney transplants, the general surgeons return to ORs around Los Angeles — Harbor-UCLA Medical Center; Olive View-UCLA Medical Center; UCLA Medical Center, Santa Monica; Veterans Administration hospitals; and Ronald Reagan UCLA Medical Center — with more knowledge and experience. “The biggest difference is the difference between zero and one,” Dr. Peacock says. “To do one of these procedures here before you do it on a patient is huge.”

That is exactly what the six neurosurgery residents have experienced, practicing skills in the lab that translate to the OR. An attending surgeon showed them a procedure on the brachial plexus, a complicated area of nerves in the shoulder, which residents later applied in the OR. During another visit, Neil Martin, MD, chair of UCLA’s Department of Neurosurgery, worked with residents on a carotid endarterectomy. The residents have done dozens of neck surgeries since.

Another time, they practice the anterior approach, often used if there is a tumor on the front of the spinal cord. Spine surgeon Langston T. Holly, MD ’95 (RES ’01, FEL ’02), is teaching the residents, and Dr. Peacock moves a plastic skeleton next to the cadaver on which they were working to help reinforce Dr. Holly’s points. As a resident, Dr. Holly had worked with Dr. Peacock. “He’s very patient,” Dr. Holly says. “He does a good job of explaining the anatomy. Probably more important than anything, he loves teaching.”

Despite his wry humor, Dr. Peacock maintains a serious demeanor, although it is not funereal. The lab gets noisy as residents call out for various instruments — an extensive and scrupulously maintained assemblage of retractors, Mayo scissors, clamps and Adson’s forceps. When a visitor expresses concern about possibly bothering the residents, Dr. Peacock responds, dryly, “You can’t bother a neurosurgeon.”

As soon as the residents arrive in the lab, Dr. Peacock gets them working on the cadavers. In short order, they expose the abdomen and the thoracic area, procedures usually reserved for general and thoracic surgeons. For these neurosurgery residents working in a minimally invasive world, this is a rare experience. “The trend now is that less is more,” Dr. Nangiana, one of the residents, says. “It’s excellent for the patient, but when you’re looking at a small corridor to get down to the tumor through the vessel, you don’t see the whole structure and the anatomy around it. To come here and get a full dissection, not only of the corridor you’ll be using, but also of the anatomy around, it gives you more confidence when you’re in the OR.”

While Dr. Nangiana is speaking, Dr. Martin enters the lab and puts on gloves and a gown. He walks over to a body being dissected by two residents. “These guys got down there in a flash,” Dr. Peacock tells Dr. Martin.

Dr. Martin peers into the abdominal cavity and points, asking, “What’s the most impressive thing you see there?” He is pointing to the aorta and the vena cava. “You’ve got to be super, super careful,” Dr. Martin says. “A little tiny nick in the aorta would shoot blood up and splatter it all over the ceiling. You can’t go in there blind.”

The residents are already well-aware of how risky spinal surgery can be, but the pointers from Dr. Martin are appreciated. “You’ve got to be extra careful. A small mistake can be disproportionately large,” says neurosurgery resident Ausaf Bari, MD, PhD. The work being done in the lab with cadavers is “absolutely essential” for training surgeons, Dr. Martin says: “The tactile feedback is crucial. It doesn’t supplant the apprenticeships that people get in the operating room, but this is a non-pressure environment, so the trainees aren’t distracted by other issues. We want everyone to know their way around the human brain and spinal cord and the entire body, as well as they do around their bedroom at night when the lights are off.”

Indeed, no one wants to operate in the dark, especially not these residents. “No surgery is too difficult if you know where you are,” says Dr. Teterov. “It’s only difficult if you’re lost or unsure about what to do. If you take some care and you’re meticulous in your preparation, it’s easier than it seems.”

Lyndon Stambler is a freelance writer and teaches journalism at Santa Monica College.
“The cost of a world-class medical education should not deter our future innovators, doctors and scientists from the path they hope to pursue,” David Geffen said when his $100-million scholarship gift was announced.

Photo: Stephen Lovekin / Getty Images
The David Geffen Medical Scholarships promises a debt-free education, drawing a special breed of students to UCLA to create a cadre of physicians with the vision and leadership to alter the future course of medicine.

William Sheppard, Jr. is a student at one of the world’s most-prestigious medical schools, but when he asks his own family members if he can check their blood pressure, they don’t want any part of it. “They don’t trust medicine at all,” says the first-year student in the David Geffen School of Medicine at UCLA. “Even if I were to find something, they wouldn’t go to the doctor; they’d rather not know.”

Sheppard grew up in an underserved African American community in South Los Angeles. For many of the members of his family, particularly the older males, distrust of medicine is a legacy that stems from years of racism and injustices such as the infamous Tuskegee study — in which impoverished rural African American men who thought they were receiving free healthcare from the federal government instead were being studied to examine the untreated progression of syphilis.

Beyond not seeking treatment for anything but the most-serious ailments, the distrust has contributed to a lack of awareness about chronic conditions such as diabetes or about the importance of preventive care. And it’s not just a problem within Sheppard’s family. “When I go to church, I see people who know they have diabetes but don’t really understand why that is,” he says. “They eat the food around them, which typically is fast food, and they don’t realize the importance of taking their medications. It becomes a downward spiral.”
The problem hit home for Sheppard when his uncle was diagnosed, after ignoring early symptoms, with late-stage kidney cancer. Troubled by his uncle’s potentially avoidable death, Sheppard, who was 15 at the time, began to contemplate a career in medicine. In the summer before his junior year at UC Davis, where he pursued research in organic chemistry and co-authored papers that were published in the prestigious journals Nature Chemistry and Journal of the American Chemical Association, he joined the student-run Imani Clinic, which serves a low-income African American area in Sacramento. There, he realized that there was nothing unique about his own family, or community. “Many of the patients displayed reticence while interacting with the volunteers and doctors,” Sheppard recalls. They would conceal medically important information or admit to not following prescribed treatments. Some hadn’t seen a physician in several years.”

Lack of trust and poor access are a deadly combination that Sheppard is determined to address. He has set lofty goals: In addition to practicing in an underserved community, he is committed to dedicating time to being an advocate, dismantling barriers to trust and educating the population about healthier lifestyles.

THANKS TO A HISTORIC GIFT by entertainment executive and philanthropist David Geffen, Sheppard and 14 other first-year medical students now are pursuing their grand ambitions unencumbered by the often-stifling reality of graduating with six-figure debt. The David Geffen Medical Scholarships provides full financial support to nearly 20 percent of students entering UCLA’s medical school each year. It is based entirely on merit — the students chosen demonstrate enormous intellectual achievement as well as accomplishments and leadership in more than one area — and the total cost of attending medical school, including tuition, room and board, books and supplies and other expenses, is covered by the $100-million scholarship fund.

“Mr. Geffen has once again made a transformative gift to medical education,” says A. Eugene Washington, MD, MSc, vice chancellor of UCLA Health Sciences and dean of the medical school that bears Geffen’s name following a previous $200-million gift to the school in 2002 — the largest gift to a medical school ever given up to that time. “This new fund is about more than just money. This gift is about helping students to pursue their dreams.”

“The cost of a world-class medical education should not deter our future innovators, doctors and scientists from the path they hope to pursue,” Geffen said when the scholarships were first announced. “We need the students at this world-class institution to be driven by determination and the desire to do their best work and not by the fear of crushing debt. I hope in doing this that others will be inspired to do the same.” In recognition of his advocacy and achievements, Geffen was awarded The UCLA Medal during May’s Hippocratic Oath ceremony for the 2014 medical-school graduates.

For graduates of medical school preparing to embark on their careers, the prospect of paying back loans taken out to cover the cost of their education is daunting. Nationally, 86 percent of new doctors finished school in 2012 with an average debt of $170,000. One-in-three graduates owes in excess of $200,000. At UCLA, the numbers are somewhat better, but with the tuition, fees and other expenses continuing to rise, the cost of a four-year medical education at UCLA is more than $300,000. Although most students are partially supported by scholarships, the average debt for a UCLA student upon graduation still is $130,000.

While it’s true that most practicing physicians will have sufficient means to pay off their debt, it inevitably affects decisions they make about what directions to pursue, says Clarence H. Braddock III, MD, MPH, vice dean for education. “During their training, students may forgo opportunities to delve into areas about which they are passionate — experiences that could change them in some fundamental way and create the kind of physician who might do some amazing things in the world,” Dr. Braddock says. For example, he notes, some students want to pursue a second degree in public health, public policy or business administration but are deterred by the specter of racking up additional debt.

For others, the need to pay off large sums of money is a factor to consider in deciding on a specialty. “Often, physicians end up choosing a path because they’re driven by the need to pay off enormous debt,” says Dr. Washington. Those who are passionate about going into primary care in...
an underserved community can easily find their enthusiasm dampened by the looming financial burden. “At this time of great societal need and unprecedented opportunity for improving health, it is critical that more medical students find relief from career-dictating debt,” Dr. Washington adds. “Freed to make career choices based on their passions, students are expected to pursue aspirations better aligned with the evolving healthcare needs of an ever-changing society.”

CAROLINE GROSS KNEW SHE WOULD BE A PHYSICIAN for as long as she can remember. Beginning when she was a little girl, Gross would accompany her father, a gastroenterologist, on his hospital rounds. From her spot at the nearest nurse’s station, she would watch her dad’s warm interactions with his patients. “I would draw pictures for the patents and pretend to fill out medical forms when I was first learning to read,” Gross recalls. “My father never pushed me into medicine, but I could see his passion and how proud he was to be a physician, and I saw myself doing the same thing.”

Growing up in Westwood, in the shadow of one of the world’s leading academic medical centers, Gross became involved with UCLA Health. In the summer before her junior year of high school, she jumped at the opportunity to observe the work of Theodore B. Moore, MD (RES ’92, FEL ’95), who is now chief of pediatric hematology/oncology at Mattel Children’s Hospital UCLA. In a clinic that smelled both of disinfectant and lollipops, Gross sat in on Dr. Moore’s patient checkups. After days of witnessing sobs from toddlers undergoing painful therapy and optimistic smiles from children who were far more ill than they knew, Gross would collapse in her bed and cry. But amid the sadness, she also saw miracles of survival, remission and hope. “I realized a physician’s greatest potential — the opportunity to directly change a life or at least ease a vulnerable individual’s pain,” she says. “Physicians offer an incomparable gift. I knew that this was a gift I wanted to help provide.”

As Gross went through school, she became fascinated with the science underpinning medicine, but it was always the humanistic element that held the greatest appeal. While an undergraduate at Cornell, in Ithaca, New York, she held the hand of an older woman, while the woman struggled through memory tests being conducted as part of a study by the university’s Memory, Aging and Cognitive Impairment Lab. Gross was moved by the aging veterans she worked with who were suffering from congestive heart failure and stroke and fighting to change deeply entrenched health behaviors. And she’ll never forget the young mother she met one summer while in Tanzania to educate villagers in the small town of Babati about HIV and AIDS; with no access to medical care, the HIV-positive infant girl the mother was holding was sure to be added to the nearly 100,000 AIDS-related deaths in that country. Each experience strengthened Gross’s resolve to pursue a career helping the sick and vulnerable as a physician.

She applied to 31 medical schools and was accepted to some of the nation’s best. As Gross pondered her options, UCLA was a clear front-runner. She loved the diversity of the patient populations she would be seeing in her rotations through the four UCLA-associated hospitals, the boundless research opportunities and the dedication of the faculty to the medical students. Then, two weeks before Gross had to make a final decision, she learned she had been chosen as part of the first class of David Geffen Medical Scholarships recipients. She was ecstatic. “I’ve never been financially focused, but the debts of going to medical school are so high that you have to think about it when choosing,” she says. “We’re all so in awe of what David Geffen has done for us,” Gross adds. “A lot of our most-talented people are turning away from the medical profession because of the burden of debt that comes with medical school and the possibilities of lower compensation in the future. This program allows people to put aside these financial burdens and enter a field that really needs them. As someone whose interests have...
always been more in primary care, I have been given a chance to follow my dreams. I will be exposed to so many possibilities, with all options open.”

**IT DIDN'T TAKE LONG FOR THE FIRST CLASS OF DAVID GEFFEN MEDICAL SCHOLARSHIPS** recipients to confirm what had been assumed from the beginning, that the students chosen for the prestigious awards would be special. At an introductory luncheon, where the students could meet some of the faculty and provide feedback on the selection process to help further develop the program, “we asked the students if there was anything they wanted to discuss,” recounts Dr. Braddock. “And they said they had already been talking about launching an initiative as a group and had ideas they wanted to propose.”

One of the ideas was for the students to volunteer as decision-support coaches for patients entering the UCLA health system — talking through educational materials with newly diagnosed patients, helping them develop questions for their doctors and assisting them in making the best decisions about their treatments. “The first year of medical school is like jumping on a treadmill that’s already moving at six miles an hour,” says Dr. Braddock. “These were busy students, and yet there was something inside each of them that wanted to figure out how to make an authentic impact on patients. That was impressive to me, that they would coalesce around something like that without us asking them to do anything.”

The selection process for admission to the David Geffen School of Medicine at UCLA is already highly selective; each year, as many as 8,000 individuals apply for fewer than 200 spots. The task of choosing the recipients from the highly accomplished pool of accepted students falls to a diverse committee consisting of physicians and scientists across a broad spectrum of practice settings and research interests.

“There are no set criteria,” says Dr. Braddock. “The goal is to find individuals who have something extra in their life narrative that predicts that they could make a huge impact — whether in research, policy advocacy, bringing new paradigms to clinical practice, or in some other way — if given the opportunity to discover and pursue their passions.”

**MATIAR JAFARI BEGAN TO CONSIDER MEDICINE** after his grandfather stopped recognizing him. “He was always a huge part of my life,” Jafari says. “Then he came back after two years of living in Iran, and he didn’t know who I was.” Sadly, Jafari’s grandmother would soon suffer the same fate as her spouse. Jafari, then in college, turned to research for answers.

“I wanted to learn about the scientific basis of these illnesses,” he says. While earning his degree in biology at UC Irvine, Jafari spent all four years of his undergraduate education working in a neuroscience-research lab, looking at how to enhance learning and memory in autism mouse models and ultimately getting the opportunity to present his group’s findings at national meetings.

His dreams of medical school, vague when he began college, started to solidify. At the urging of mentors, he began doing volunteer work to learn more about the medical field. At a local homeless clinic, he witnessed firsthand the needs of an underserved community. Traveling to Nicaragua with Global Medical Training, he helped to serve medically deprived communities in the region and came away inspired by the impact physicians had on these populations. Shadowing a group of surgeons, Jafari gained an appreciation for the application of basic-science knowledge to improve patient care. He started to see himself as a physician-scientist, helping to unravel the mysteries behind diseases such as the Alzheimer’s and dementia that had robbed his grandparents of their cognition and identity.

Then things became even more personal.

In December 2011, as Jafari was finishing his last year as an undergraduate, his mother was diagnosed with breast cancer. “We have such a close relationship,” he says. “We share everything, help each other through difficult times.” This would be the most difficult of all. Even though it had been only a year since her last mammogram, Jafari’s mother was diagnosed with stage 3B cancer. She required a double mastectomy and removal of nearby lymph nodes where the cancer had spread. Jafari was there as his mother opened her eyes after the surgery. “Can I get you anything?” he asked. She looked back and whispered, “A hug.”

The next night, Jafari watched as his mother’s surgeon visited her bedside at 11 pm and sat with her for more than an hour. Jafari had hardly ever seen his mother cry, but now she was scared. The physician held her hand, caressed her head and talked to her in detail about the treatment plan.
“He made my mom feel comfortable — that there was someone looking out for her who would be there at a moment’s notice if she needed anything in this battle,” Jafari says. That was the night he decided he wanted to be a physician-scientist, caring for patients as well as conducting research to find better treatments for them. “In one of the darkest moments of my life, I was able to find something that was good,” Jafari says. “Pursuing my dream of being a physician-scientist, I could provide that compassionate care for patients on a daily basis, while making discoveries in the laboratory that can help future generations of patients.”

Jafari received acceptances from some of the nation’s top MD/PhD programs. His mother, who was by now undergoing chemotherapy treatments, insisted he not choose based on which was closest to home, but UCLA was already the leading candidate for other reasons. Jafari loved the breadth of research opportunities, the proximity of the labs to the hospital and the emphasis on translational research. Then he learned he had been chosen as a recipient of The David Geffen Medical Scholarships, and the decision became an easy one. “In most MD/PhD programs, only one of the four years it takes to get your PhD is covered; the other three have to be funded by your principal investigator,” Jafari explains. “With this scholarship, all of the training is covered, which makes me so much more appealing to PIs. I can now join any lab without funding restrictions. What Mr. Geffen has done with this donation is just unbelievable.”

TO BE SURE, THE DAVID GEFFEN MEDICAL SCHOLARSHIPS provides the medical school with an invaluable recruitment tool. But Dr. Braddock believes the potential impact of the program extends well beyond the benefits to UCLA.

“We are committing, with Mr. Geffen’s support, to a different approach to admitting and training future physician leaders,” he says. “We believe the legacy of these scholarships will be a cadre of physicians with the vision and leadership abilities to make an impact on the world in ways that haven’t been possible before.” It already appears that the impact of The David Geffen Medical Scholarships is extending beyond UCLA; the gift has been a catalyst for other schools to substantially boost their financial support to medical students.

Sheppard decided early on that he wanted to be among the new breed of doctors that Geffen’s gift will make possible. While providing free primary care to an adult population at the Imani Clinic in Sacramento as a UC Davis undergraduate, he concluded that the area’s youth could also be suffering from gang influence and the nutritional problems associated with underserved communities. So he started Hoops 4 Health, a basketball-based organization located next door to the clinic, to give the area’s youth an outlet to stay physically active and away from negative influences, while providing education about healthy lifestyles.

“Basketball kept me focused and out of trouble during a time when a lot of my peers would hang out with the wrong crowd,” Sheppard says. But under Sheppard’s leadership, Hoops 4 Health grew into something larger. The youth who attend are educated about diabetes, hypertension and obesity in the hope that they will bring their lessons home to their parents and spread them through the community. Parents are also invited to become involved in everything from blood pressure readings to taking home free healthy food bags. Hoops 4 Health continues to thrive under new leadership now that Sheppard is at UCLA.

When he was growing up, Sheppard had no mentors directing him onto the path of a college education and medical school. As a David Geffen Medical Scholarships recipient, he undertakes that role for others, returning to his home neighborhood most weekends, making sure to talk to the youth at his church and also taking a leadership role in his community — giving talks, being visible at neighborhood meetings, advocating for patients. And now he is much-better positioned to achieve his dream of being a truly engaged physician.

“This scholarship is about much more than just having the costs of my education paid for,” he says. “It allows me to pursue any field of medicine that sparks my interest. It provides me with the opportunity to connect with our school’s leaders and with leaders in the communities I plan to serve. It doesn’t get any better than that.”

Dan Gordon is a regular contributor to U Magazine.

For more information about The David Geffen Medical Scholarships and to watch a video, go to: geffenscholarship.medschool.ucla.edu
No one would think twice if, at this stage of their long and accomplished careers, UCLA emeriti professors Elizabeth Neufeld, PhD, and Richard Gold, MD, chose to spend their time perfecting their golf swings, writing their memoirs or traveling. Instead, Drs. Neufeld and Gold devote their energies to furthering the academic mission of the David Geffen School of Medicine at UCLA. As assistant deans for academic affairs, they pore over the dossiers of hundreds of medical-school faculty to evaluate their suitability for moving up the academic ranks. Dr. Gold, a radiologist and former chair of the UCLA Academic Senate’s Council of Academic Personnel, appraises the appointments and promotions of clinical faculty; Dr. Neufeld, former chair of the UCLA Department of Biological Chemistry, assesses basic-science faculty as well as researchers and project scientists.

“As assistant deans for academic affairs, they pore over the dossiers of hundreds of medical-school faculty to evaluate their suitability for moving up the academic ranks. Dr. Gold, a radiologist and former chair of the UCLA Academic Senate’s Council of Academic Personnel, appraises the appointments and promotions of clinical faculty; Dr. Neufeld, former chair of the UCLA Department of Biological Chemistry, assesses basic-science faculty as well as researchers and project scientists.

“One of them bring a wealth of knowledge and experience and an extraordinary commitment to their work,” says Jonathan R. Hiatt, MD (RES ’82), professor of surgery and vice dean for faculty. “Both were very successful and eminent faculty members in their own areas who are now providing exceptional service to the faculty as a whole.”

The work is complex. Each appointment or promotion, from junior faculty seeking fourth-year appraisals to faculty proposed for endowed chairs, involves a meticulous review process that is codified in The CALL, a several-inches-thick manual of UCLA’s policies and procedures for academic promotion and advancement. Together, Drs. Neufeld and Gold review about 20 candidates and write about 15 recommendation letters each week. For each evaluation, they scour through a hefty dossier that can include the candidate’s record, personal statement, curriculum vitae, data summary, department chair’s letter, letters of evaluation from peers, department vote and teaching evaluations. They write letters of evaluation for candidates at so-called barrier advancements — promotions from associate professor to full professor, for instance, or from full professor at Step 5 to Step 6 or from full professor at Step 9 to above-scale status. In addition, they review the progress of assistant professors in their fourth year to determine how likely these young faculty are to achieve promotion to associate professor.

“There are two purposes for the process,” Dr. Neufeld says. “One is quality control and the other is fairness to the individual. It’s a way to provide transparency.”

Occasionally, a file doesn’t pass muster, and that can make things very difficult. “You’re trying to grab anything out of the performance to justify a promotion because it’s hard not to support a faculty member,” Dr. Gold says. “You empathize, but you want to be fair to everyone else. You can’t lower university standards for one person.”

Born in New York in 1935, Dr. Gold earned his medical degree from the University of Louisville in Kentucky in 1960, served as a captain and medical officer for the U.S. Air Force from 1961 to 1963 and completed his residency in radiology at Yale-New Haven Hospital in Connecticut and a research fellowship in skeletal radiology at UC San Francisco in 1968.
An affable man who plays classical and jazz piano, Dr. Gold came to UCLA as assistant professor in the Department of Radiology in 1972, and he earned tenure in 1978. At the time, he wasn’t interested in the promotion process and doesn’t remember much about it. He went on to hold several leadership posts for the department, earned a University Distinguished Teaching Award in 1999 and served on the Council of Academic Personnel (CAP) of the UCLA Academic Senate from 2001 to 2005. He became assistant dean in 2005. “I really do enjoy the work,” says Dr. Gold. “I learn a lot, and I get a kick out of seeing the faculty doing well. It’s a matter of pride in the school of medicine and in the university.”

A no-nonsense woman who enjoys opera and crossword puzzles, Dr. Neufeld also relishes reading about the accomplishments of UCLA faculty, and she says she has gained a new perspective on the intricacies of the appointment and promotion process. “When I was department chair, I didn’t really understand how the system worked, and there were many things that used to irritate me,” she says. “Now I understand why department chairs are asked to complete so much paperwork.”

Dr. Neufeld is the only child of refugees from the Russian Revolution. Her parents first settled in France, where she was born. When Germany was moving to occupy the country, in 1940, they fled again, bringing her to the United States and landing in New York. She earned her doctorate in comparative biochemistry in 1956 and spent several years doing postdoctoral research at UC Berkeley before moving to the National Institutes of Health in 1963, where she held several key posts. She came to UCLA in 1984 and served as chair of the Department of Biological Chemistry until 2004.

Dr. Neufeld is an authority on lysosomal storage disorders, a group of about 50 inherited metabolic disorders that include Tay-Sachs, Hurler and Sanfilippo syndromes. Her work has led to genetic tests for these diseases and laid the groundwork for the development of new therapies. Widely recognized for her contributions to science, she won the National Medal of Science in 1994 for her work on Hurler and Sanfilippo syndromes and was named California Scientist of the Year in 1990.

While she is still actively involved in research, she says her work as assistant dean is very interesting, and she offers the following advice for young faculty who are preparing their dossier for promotion: “Do good work. Be succinct. Follow instructions.”

Kim Kowsky regularly writes faculty profiles for U Magazine.

“Awards/Honors

**Dr. Abbas Ardehali (RES ’95, ’97),** director of the UCLA Heart and Heart-Lung Transplant Program, was honored by the Cystic Fibrosis Foundation at its 2013 Breath of Life Gala for his work to pioneer innovative treatments for patients with end-stage lung diseases.

**Dr. Robert Cherry,** formerly director of clinical and operational excellence at Navigant Consulting, was selected as chief medical and quality officer for UCLA Health to lead quality-improvement efforts across the entire health system.

**Dr. Bowen Chung,** assistant professor-in-residence of psychiatry and biobehavioral sciences at the Jane and Terry Semel Institute for Neuroscience and Human Behavior at UCLA, was a member of a UCLA-RAND team that received the Joint Team Science Award from the Association of Clinical and Translational Science and the American Federation for Medical Research.

**Dr. David Heber, MD (RES ’77, ’79),** professor emeritus of medicine and founding director of the UCLA Center for Nutrition, was inducted into the 2014 Class of Fellows of the American Society for Human Nutrition. The highest honor of the society, this accolade recognizes individuals for their significant discoveries and distinguished careers in the field of nutrition.

**Dr. Lee Todd Miller,** vice chair of education in the Department of Pediatrics, received the Arnold P. Gold Foundation Humanism in Medicine Award from the Association of American Medical Colleges for his contributions to academic medicine.

**Dr. Gary Small (FEL ’83),** professor of psychiatry at the David Geffen School of Medicine at UCLA, received the 2013 Breath of Life Gala for his work to pioneer innovative treatments for patients with end-stage lung diseases. He also received the Arnold P. Gold Foundation Humanism in Medicine Award from the Association of American Medical Colleges for his contributions to academic medicine.

**Dr. Owen Witte,** director of UCLA’s Eli and Edythe Broad Center of Regenerative Medicine and Stem Cell Research, was inducted into the American Association of Cancer Research Academy in recognition of his instrumental research into the development of targeted cancer drugs.

“**I really do enjoy the work. I learn a lot, and I get a kick out of seeing the faculty doing well. It’s a matter of pride in the school of medicine and in the university.”**
Global Brigades, a student-led international-development organization, takes action through a variety of disciplines, including medicine. Global Medical Brigades (GMB) at UCLA, part of Global Brigades, offers missions throughout the year. UCLA-trained physicians have volunteered, through GMB, to provide comprehensive health services in rural communities with limited access to healthcare in Ghana, Honduras and Panama. Each community receives a brigade every three-to-four months, during which hundreds of patients are treated. Between these missions, the in-country team maintains relationships with the communities to provide follow-up and conduct community-health-worker trainings to empower local leaders to perpetuate a consistent level of healthcare.

Robert “Bob” A. Goldberg, MD ’83 (RES ’87, FEL ’88, ’89), and Jan K. Takasugi, MD ’83

For our family vacation in 2009, Jan and I took our children Kevin and Gina on a GMB mission to Honduras. I thought the best part of this experience was working with the college students from UC Santa Barbara and UCLA. For most of them, it was their first exposure to medicine. I was impressed with their idealism and with their enthusiasm to learn. The first day, we arrived at a small village, and the patients were lined up around the block by the time we got there. There were almost 700 patients, and we had only eight doctors. It was a struggle to see everybody. That evening after dinner, we made a classroom out of the dining room and taught courses in medical-history taking and medical assisting. Instead of just observing, the students were assigned to work as medical assistants. We were able to see far more patients, and the students got a real sense of medical practice. It was a thrill to see them working hard, gaining self-confidence and really making a difference in the lives of these grateful patients.

We were fortunate to have an impressive, talented group of physicians who loved teaching. Several specialties were involved, including family practice, surgery, orthopaedics and ophthalmology, so it was a mini-medical school with not only the students, but also the physicians learning from each other as they diagnosed and treated a wide variety of diseases. Even though I do charity work at home, there’s nothing like the experience of going to a community that has no other access to medical care, where no insurance or payment is involved, and where people are so grateful for the care they receive. The physicians and students especially enjoyed the opportunity to create a genuine human bond with the delightful families we met in these charming rural villages. Being with these young, idealistic students reminded me of the wonder of being a physician and brought me back to my own days as a young student of medicine.
Doug Katsev, MD (FEL ’90)

My daughters, Kiki, who was attending UCLA, and Cailyn, a student at Berkeley, and I joined Dr. Bob Goldberg and Dr. Jan Takasugi and their two children on a GMB trip to Honduras in 2009. The team consisted of approximately 100 people, mostly undergraduates from UCLA and UC Santa Barbara, who had decided to spend their vacation time as volunteers. The group had extraordinary talents. Although the team was diverse, the common factor was a big, giving heart! It was refreshing to be around college students with an incredible appetite to learn. I was impressed that these young adults understood that living a fulfilled life is more about what you give than what you receive.

Although Bob and I had been friends for a long time, having both families together on a medical mission created a bond that will never break. Unlike most family vacations, the memory of this trip strengthens with time, rather than fades. As a volunteer eye surgeon, I have traveled to every continent to perform cataract and corneal surgeries. The ability to take what I learned from my medical education to help people in developing countries to see better and to guide the next generation cannot be overstated. I have participated in two GMB trips to Honduras (2008 and 2009). For anyone who participates in a GMB mission, your life and the lives of those around you will be forever changed. True happiness comes from a lifestyle of giving to others.

Gregory L. Hirsch, MD ’78 (RES ’81, FEL ’83)

In May 2011, I traveled to Francisco Morazán FMO, located in the central part of Honduras, to volunteer on a GMB mission. I went at the suggestion and invitation of my UCLA college roommate and closest friend, who also is a physician. We joined a team that included an American nurse practitioner, two Honduran doctors and 20 pre-med/nursing students who were taught to take vital signs, point out findings and listen to the heart and lungs. Each day, the team saw approximately 150 patients to provide care for such issues as hypertension, diabetes, infections, parasites and immunizations. Some patients walked or rode horses down from the hills to reach the clinic. With the desire to provide care for everyone in the area, the team drove in a four-wheel-drive vehicle into the hills to see people who could not travel to the clinic.

I went on this mission because I’ve always wanted to go to a developing country to help people from a different culture. It was exhausting and exhilarating at the same time. The people were very warm and gracious. I intend to do it again in the future.

For more information about Global Brigades, go to: globalbrigades.org
In Her Own Words: Hollanda Leon, MD ’99

Dr. Hollanda Leon examines a young patient at the American Indian Health & Services Clinic, where she is medical director.

Dr. Hollanda Leon, MD ’99, is a board-certified family-practice physician and the medical director at the American Indian Health & Services Clinic in Santa Barbara, California. She has worked with the Native American community and medically underserved populations of Santa Barbara for more than 10 years. In 2007, she served as executive director and medical director during a transition phase of the clinic. Since then, the clinic has expanded from two providers to more than 13 healthcare professionals, including those in family practice, pediatrics, dentistry, mental health and endocrinology. The clinic serves Native Americans and non-Native Americans.

My interest in working with medically underserved populations began with my involvement with the Flying Samaritans at the University of California, Irvine during my undergraduate years. Over the course of my medical education at UCLA, I was involved in externships that sent me to various rural areas, including Yelapa, Mexico. I then took it a step further and decided to take a year off from medical school to explore different parts of the world and work on a project with Patrick Dowling, MD, MPH, chair of family medicine at UCLA, on Health Professional Shortage Areas in Los Angeles. These experiences showed me that even though there is a huge medical need in other countries, sometimes the medical need is greatest in our own backyard.

During my residency at White Memorial Medical Center in Los Angeles, I decided to set up a rotation at the American Indian Health & Services Clinic. I was very excited to be offered a position when I completed my residency, and so my journey began in Native American health. Since I enjoyed working with an underserved population, this was a natural progression for me. Working with the Native American population has taught me a lot about patient care and treating patients respectfully by addressing their physical, social, emotional and spiritual well-being. We have a very busy clinic that serves a high-risk population with complicated medical and socioeconomic issues. Most of our patients are uninsured or have Medi-Cal or Medicare. Even though we are a small clinic, we are working on becoming a patient-centered medical home and are into our fourth year of electronic health records. We are very involved with the community and have a clinic on wheels that is used for health fairs and events. Our clinic is considered a model for many of the federally qualified health centers and urban Native American clinics. We have a great team of providers who all have the same passion to provide quality healthcare for our patients in the community.
Postcard from Guatemala

Dean M. Anselmo, MD ’98 (RES ’05), is a pediatric surgeon and co-director of the Vascular Anomalies Center at Children’s Hospital Los Angeles (CHLA), a pediatric surgeon at Miller Children’s Hospital in Long Beach, California, and assistant professor of clinical surgery at Keck School of Medicine of the University of Southern California. He completed his residency in general surgery at UCLA and a fellowship in pediatric surgery at CHLA. Dr. Anselmo has had a long-standing interest in global medicine, and he has participated in pediatric-surgery missions to Ecuador, Guatemala and Mozambique.

At times, it can be easy to forget the relevance of the work you do when you are in the middle of it. I was reminded of that point during a pediatric-surgery mission in Guatemala with Mending Kids International (MKI). I performed many complex procedures and worked with local surgeons in an effort to improve pediatric surgical care. After a complex surgery, I went to speak to the mother of a child who was born with a congenital anomaly, which I had just repaired. I told her that the operation went very well, that there were no complications and that I was very pleased with the outcome. She looked at me and began to cry. She told me that she never thought it would be possible that someone would be able to fix her baby and give him a chance at a normal life. She expressed a profound and heartfelt gratitude for the work of the MKI team. It was a moment that made me appreciate the importance of the work that MKI does in its pediatric-surgery missions. The concerted effort of a group of like-minded and compassionate individuals can make a staggering impact on a child’s life that otherwise would not be possible. I decided to devote a portion of my time and effort to global health and pediatric-surgery missions for the same reason I decided to become a pediatric surgeon: There is no reward greater than improving a child’s life. When compared to all the kids in the world who need help, it seems at times that these missions represent just a small drop in a bucket; however, to the individual children and families who are cared for by MKI, it is a massive drop in a little bucket.

For more information about Mending Kids International, go to: mendingkids.org
The UCLA Jonsson Cancer Center Foundation’s (JCCF) annual signature event, Taste for a Cure, was held April 25, 2014, at the Beverly Wilshire Hotel. Steve Mosko, president of Sony Pictures Television, was honored with the 2014 Gil Nickel Humanitarian Award, which was presented by actor/comedian Joel McHale. The evening featured French wine and cuisine, including tastings provided by 14 of France’s most-prestigious wineries. Dinner co-chairs were JCCF board members Joe Cohen of CAA, Jon Holman of The Holman Group, Larry Maguire of Far Niente Winery, Jay Sures of UTA and Dana Walden and Gary Newman of 20th Century Fox Television. Over the years, Taste for a Cure has raised nearly $10 million for highest-priority cancer research at UCLA’s Jonsson Comprehensive Cancer Center.

Clockwise from Top Left: (From left) Ami Cohen and JCCF board member Joe Cohen; Jonsson Cancer Center Foundation executive director Scott Thompson and JCCF board member Jon Holman; JCCF board member Bill Tanner and Terre Steinbeck; Sony Pictures Television president Steve Mosko, recipient of the 2014 Gil Nickel Humanitarian Award; How I Met Your Mother’s Alyson Hannigan and JCCF board vice chair Jay Sures; Actor/comedian Joel McHale, JCCF board vice chair Dana Walden and actor/comedian Tom Papa, who entertained guests with a stand-up routine; Ronald Katz, JCCF president Dr. Judith Gasson and Maddy Gordon; Glee star Lea Michele, Glee creator Ryan Murphy and Glee star Darren Criss. Center Left: JCCF board member Mike Wiley and JCCF board chair Randy Katz. Center Right: Carol and Joe Sullivan.

Photography: Vince Bucci
People-Animal Connection
Friends Spread Love for Valentine’s Day

Doggie ambassadors surprised and delighted pediatric patients at Mattel Children’s Hospital UCLA by delivering handmade Valentine’s Day cards on February 13, 2014. Hosted by UCLA’s Chase Child Life Program, three teams from the UCLA People-Animal Connection (PAC), one of the most-comprehensive animal-assisted therapy and activity programs in the nation, helped the children celebrate by donning Valentine’s Day costumes and visiting them in their hospital rooms and in the pediatric playroom. The dogs and their owners included Scout and his owner, hospital volunteer Beth Goldfarb; Daisy and Paco with their owner, hospital volunteer Jane Tomlinson; and Finn, a 7-year-old great Pyrenees-Labrador mix, with owner Erin Rice, director of the PAC Program. Each handmade Valentine card was created with love and compassion and generously donated by members of Dollies Making A Difference, a group of women who create one-of-a-kind dolls and Teddy bears to send to children all over the world. The organization also donates dolls, as well as other gifts, to hospitalized patients during the holidays.

L.A. Fun Ride Promotes UCLA Blood and Platelet Center

The 17th Annual City of Angels Fun Ride presented by Volkswagen took place May 4, 2014. Led by Peter Heumann and his family, the event featured both recreational and advanced bike rides through Los Angeles. In the last four years, the ride has raised more than $100,000 for the UCLA Blood and Platelet Center. Recent proceeds have enabled the center to purchase a much-needed new truck for off-site blood drives.
Mattel Children’s Hospital UCLA celebrated its second-annual Kaleidoscope Ball, with this year’s theme “Designing the Sweet Side of L.A.,” at the Beverly Hills Hotel on April 10, 2014. Benefiting the UCLA Children’s Discovery and Innovation Institute (CDI), the gala raised more than $2.5 million.

Co-Chaired by hospital board members Amanda Brown and Beth Friedman, the event honored Maureen and Bryan Stockton (chairman and CEO of Mattel, Inc.) with the Humanitarian Award for their commitment to civic philanthropy and 9-year-old Grace Suomi — a former patient — who received the Innovator Award. Professional dancers and siblings Julianne and Derek Hough received the Kaleidoscope Award, given to members of the entertainment industry who bring light and laughter to children through their professional achievements and personal humanitarianism.

Kaleidoscope Ball Generates Support for Children’s Discovery and Innovation Institute.

Through the Looking Glass Brightly

Photography by Vince Bucci
Highlights of the night included a cocktail reception that featured 12 extraordinary cakes designed by top Southern California pastry chefs and a special musical performance by Grammy Award-winning artists Vince Gill and Amy Grant. Actress Maria Menounos served as the evening’s host. Mattel, Inc., Harry Winston, Inc. and Toys “R” Us were presenting sponsors.

The CDI, led by Dr. Sherin U. Devaskar, executive chair of the UCLA Department of Pediatrics and physician-in-chief of Mattel Children’s Hospital UCLA, has a mission to save lives and advance children’s healthcare around the globe through transformative research.

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

For more information about Mattel Children’s Hospital UCLA, go to: uclahealth.org/mattel
Construction of Connie Frank Kidney Transplant Center Begins

Patient advocate Connie Frank and her husband Evan Thompson saw the seeds of their generous philanthropy begin to sprout, when UCLA Health started construction on the Connie Frank Kidney Transplant Center at UCLA. With a planned completion date of fall 2014, the new center, housed in the Peter Morton Medical Building (200 UCLA Medical Plaza), will replace the current kidney-transplant clinic in the same building. The new transplant center will have substantially more space, expanding from a 3,500-square-foot shared suite to an approximately 10,000-square-foot suite designated exclusively to the center.

Frank chose to fund the kidney center because of her strong passion for improving the multiple aspects of a patient’s clinic experience. The Connie Frank Kidney Transplant Center will provide a more-comforting and convenient environment by offering many of the supplementary services that patients must now access in other parts of the building, such as on-site blood-draw and infusion stations. “I have always been concerned about the patients and how to make their experiences easier as they go through stressful medical treatments,” Frank says. “We want the new center to give the patients a sense of care and comfort.”

The current clinic serves more than 11,000 kidney recipients and donors each year. The new state-of-the-art facility will significantly raise the bar of an already strong kidney-transplant program. According to David T. Feinberg, MD (RES ’92, FEL ’94), MBA, president of UCLA Health System, UCLA’s kidney-transplant program is recognized as consistently being one of the most successful in the country. Other advanced features of the new center include a nurse manager to address patient questions and concerns, a designated work area for clinicians to collaborate on patient care, select procedures that do not require hospital resources and remote consultation with other UCLA clinical and diagnostic services, such as radiology and cardiology.

In Memoriam

An optometrist for 50 years, Dr. Samuel Goetz passed away from pancreatic cancer on October 24, 2013, at his Los Angeles home. He was 85 years old. Dr. Goetz received his bachelor’s degree from UCLA in 1955, and, after graduating from and teaching at the Los Angeles (now Southern California) College of Optometry, he established a private practice. Dr. Goetz bonded strongly with UCLA. A Holocaust survivor, he was a moving force behind the establishment of a Holocaust-studies chair at UCLA. His son Joseph, now an ophthalmologist, graduated from the UCLA School of Medicine (now the David Geffen School of Medicine at UCLA) and attended a Stein Eye-affiliated residency program. Barry A. Weissman, OD, PhD, Stein Eye Institute professor of ophthalmology emeritus, reflected on his colleague, saying, “Sam was a strong supporter of the campaign to fund an optometric clinician-scientist chair at Stein Eye and was a loyal attendee of our grand rounds. It was always gratifying to have his participation and his wise and gentle counsel.” Dr. Goetz is survived by his wife Gertrude, his son Joseph, his daughter Genie and nine grandchildren.

Dr. Norman Frederick Sprague III (MD ’73, RES ’78), passed away unexpectedly on March 14, 2014. After earning his MD, Dr. Sprague trained in orthopaedic surgery. He also served as a clinical instructor of orthopaedic surgery at the David Geffen School of Medicine at UCLA and was one of the early pioneers in arthroscopic surgery. Dr. Sprague was a member of many medical organizations and was a dedicated philanthropist. The Sprague family has supported multiple health-sciences efforts at UCLA, including the Jonsson Comprehensive Cancer Center, Mattel Children’s Hospital UCLA, the Department of Orthopaedic Surgery and medical-education programs. Recently, their generous philanthropy created the Marianne and Norman F. Sprague III Medical Student Scholarship. He and his wife Marianne have six children, including UCLA alumna and resident Jessica Sprague, MD ’13.
Gifts

The Eli and Edythe Broad Foundation has committed $4 million to be split equally between the UCLA Division of Digestive Diseases and the UCLA Broad Stem Cell Research Center. The foundation pledged $2 million to further the work of Dr. Charalabos "Harry" Pothoulakis, director for basic research in the UCLA Center for Inflammatory Bowel Diseases and Eli and Edythe Broad Chair in Medicine in the UCLA Division of Digestive Diseases. Dr. Pothoulakis and his team conduct research aimed at identifying the molecular mechanisms involved in the development of Crohn’s disease and ulcerative colitis. The gift will advance current investigations, which include revealing how neuropeptides and hormones contribute to inflammatory bowel diseases (IBD) and the roles of obesity and fat tissue in their development. In addition, it will support Dr. Pothoulakis’s collaboration with Dr. Dimitrios Ililopoulos, director of the UCLA Center for Systems Biomedicine, and his group to explore potentially clinically viable methods that they hope will revolutionize the delivery of novel drugs in IBD patients.

The Broads also gave $2 million to support the highest priorities of the UCLA Broad Stem Cell Research Center, including the center’s Innovation Award Program. Under the direction of Dr. Owen Witte, the Innovation Award Program provides valuable resources that help accelerate the translation of basic stem-cell research to patient therapies. To date, the Innovation Award Program has funded more than $5 million in research that includes the areas of neurodegenerative disease, cardiac disease, cancer and genetic blood diseases. This continued gift reflects Mr. and Mrs. Broad’s ongoing commitment to the stem-cell-research program at UCLA and expands UCLA’s ability to develop and test new patient-specific cell-based therapies through UCLA Cellular Therapeutics.

The Beckman Coulter Foundation has renewed a grant of $100,000 to benefit the UCLA Department of Urology. Specifically, funds will support Dr. Leonard Marks (RES ’73, ’78) and his targeted-biopsy and focal-therapy program. According to Dr. G. Russell Bell, president of the foundation, its board members visited UCLA and were impressed with the work of Dr. Marks and his team. Following the visit, the foundation’s board members began directing funds to the program. To date, the foundation has donated $417,000 to UCLA’s urology programs.

The Jonsson Cancer Center Foundation (JCCF) has received a bequest of $570,000 from longtime supporter Barbara Grant through the Barbara B. Grant Trust. This unrestricted planned gift advances the JCCF’s mission to support the highest-priority needs of UCLA’s Jonsson Comprehensive Cancer Center.

Cheryl Williams and Norman Lapin made a multiyear gift of $100,000 to support the research work of Dr. Susan Perlman (RES ’79, FEL ’80), professor of neurology and an expert on ataxia. Ataxia, a neurological condition, causes dysfunction of the parts of the nervous system that coordinate movement, including the cerebellum, vestibular system and sensory-system inputs. The UCLA Ataxia Center, under the direction of Dr. Perlman, has grown to become one of the largest ataxia clinics in the United States. The clinical investigations led by Dr. Perlman specifically aim to evaluate treatments that have the potential to reduce nerve-cell damage and slow the progression of the disease.

The Wilbur May Foundation pledged $1 million to establish the Wilbur D. May Endowed Fellowship at UCLA’s Stein Eye Institute. This gift, which will support the training of fellows at Stein Eye, is the second fellowship the foundation has generously provided to support the advanced study of and research in ophthalmology and vision science. The Wilbur May Foundation and the May family are staunch supporters of UCLA, and in 1998, they established the David May II Endowed Chair in Ophthalmology to honor Mr. May’s association with the Stein Eye Institute. David May was one of the original trustees of the Institute.

The gift from the late Paula Kent Meehan to establish Paula’s PetPal Place will enable patients to visit with their pets in a reserved space outside Mattel Children’s Hospital UCLA.

Thanks to the generosity of the late Paula Kent Meehan, hospital stays will be brighter for patients through her $500,000 gift to establish Paula’s PetPal Place within the UCLA People-Animal Connection (PAC) Program. The new service will allow patients who are hospitalized for extended periods of time to reunite with their own family pets in a specially designated exterior space at Mattel Children’s Hospital UCLA. PAC recognizes the powerful bond between patients and their personal pets, particularly at a vulnerable time when a connection to normalcy promotes healing. Bringing patients together with their own pets is an integral part of their mental and emotional well-being. The UCLA PAC Program is one of the most-comprehensive animal-assisted therapy and activity programs in the nation. Since its inception in 1994, PAC teams have recorded more than 200,000 inpatient visits, as well as thousands of visits with families and guests at UCLA medical centers and community events. This gift also will provide vital support for the annual operating budget of the PAC program.

The David Geffen School of Medicine at UCLA has received a $215,000 gift from the estate of alumnus Dr. James A. Musich (MD ’81, RES ’84). In recognition of his dedication to training the next generations of physicians, the gift will be used to create a scholarship for medical students, as well as support education and travel activities for residents in the Department of Anesthesiology.

Continuing its commitment to the UCLA AIDS Institute, the James B. Pendleton Charitable Trust has made a new contribution of $104,672 to enable the purchase of a Digital Droplet PCR machine, which allows the highly sensitive and reliable detection of HIV in extremely small amounts of liquid. Such equipment is critical to advancing the Institute’s HIV-cure research.

Diane and Dave Steffy have given UCLA $1.3 million to advance innovative stem-cell research in idiopathic pulmonary fibrosis (IPF) conducted by Dr. Brigitte Gomperts. A member of the UCLA Broad Stem Cell Research Center faculty appointments in the UCLA Division of Pulmonary Medicine and the UCLA Department of Pediatric Hematology/Oncology, Dr. Gomperts is developing a novel disease model of IPF in order to understand how it progresses. She also is introducing new drug candidates in an effort to observe the impact these compounds have on the scarring of the lung. In addition to supporting the UCLA Broad Stem Cell Research Center, Mr. and Mrs. Steffy are generous donors to UCLA’s Division of Pulmonary Medicine in the hope that their philanthropy will lead to ongoing collaborations and partnerships resulting in a more-effective treatment for IPF.
It was a wonderful day for a health fair, I recall thinking, one of those gorgeous spring days in Los Angeles, with blue skies and white puffy clouds. This would be my third health fair since coming from Pittsburgh to UCLA as a medical student. Like the two previous fairs, I would be in charge of registering patients and recording vitals. I remember one young man and his family in particular. He was funny and joked about how my blood-pressure cuff wouldn’t be able to fit around his bicep, which was enormous. Well, it ended up fitting, and when I looked down at the reading, I was shocked. Being the naïve first-year medical student that I was, I automatically assumed I had done something wrong and quickly switched arms to take a repeat reading. Sure enough, the reading was almost identical to the first — 168/107.

“How’s my pressure, doc?” he asked. Although I had already explained to him that I’m just a medical student, if you have a white coat, no matter how short or long it is, patients nearly always call you doctor. I didn’t know how to respond to his question. As medical students, we aren’t able to give diagnoses or tell someone he or she has hypertension, although this man clearly did. I played it safe and said that his blood pressure might be high and that he should definitely talk about it with the doctor. I continued to talk with the man and found out that he hadn’t seen a physician in six years, other than at the occasional health fair, and was uninsured. I told him that he really needed to see a primary-care provider at least once (possibly more) per year. We went back and forth talking about the cost of health insurance, of seeing a doctor, of medication, and he always ended saying, “Besides, I’m too good-looking to get sick.” This man really was funny, in a graveyard-humor sort of way. Later that night, I couldn’t help but feel saddened by our encounter. This man clearly needed help, and I couldn't do anything more than tell him that he should get it.

To be perfectly honest, I didn’t know much about our healthcare system and even less about how health insurance works. I knew I had health insurance and that if I wanted to see my doctor, it costs $10 to do so, but that was about it. There is so much material to cover in the first two years of medical school, that it becomes almost impossible to squeeze in things like U.S. Healthcare 101. Many of us go through our first years of medical training without ever understanding the terms deductible, copayment and coinsurance.

For the remainder of the academic year and the summer, I tried to learn as much as I could about our healthcare system. I learned about the Affordable Care Act (ACA), and by the start of my second year, I knew that I wanted to be part of the movement to sign up people for affordable health insurance. I joined with two other like-minded medical students, Jeffrey Fujimoto and Brandon Scott, and along with Dr. Dylan Roby from the UCLA Jonathan and Karin Fielding School of Public Health as our faculty mentor, we created Connecting Californians to Care (CCTC).

We conceived CCTC for the purpose of providing outreach, enrollment assistance and education about healthcare opportunities that were made available by the ACA. We partnered with USC and various certified-enrollment entities, such as the Saban Community Clinic and the Venice Family Clinic, and soon became a diverse organization of more than 200 medical and public-health students across Southern California. Creating
I recall thinking, “Besides, I’m too good-looking to get sick.” This man really was funny, in a graveyard-humor sort of way. Later that night, I couldn’t help but feel saddened by our encounter. This man clearly needed help, and I did not know how to respond to his question. As a first-year medical student dealing with the funny man who possibly had stage 2 hypertension. It’s a good feeling to be able to help someone obtain health insurance, and it provides some peace of mind and intrinsic satisfaction that what I’m doing is making a difference.

Now when I go to health fairs on behalf of CCTC, I’m no longer in charge of registering patients and taking their vitals. Instead, I sit at another table with a sign that reads Sign up for Health Insurance through Obamacare, and I meet patients with the goal of connecting them to a steady source of care. The conversations I have now differ greatly from the one I had as a first-year medical student dealing with the funny man who possibly had stage 2 hypertension. It’s a good feeling to be able to help someone obtain health insurance, and it provides some peace of mind and intrinsic satisfaction that what I’m doing is making a difference. There are still times, however, when I meet with an undocumented immigrant, who, due to residency status, can’t purchase insurance through the health-insurance marketplace, or someone else, who, even with the federally provided premium subsidies, still can’t afford health insurance. I sympathize with these patients and try to help them the best I can. I don’t understand why obtaining access to healthcare has to be so complicated. It makes me wonder about possibly having a national healthcare system like in some other countries, where everyone is born with health insurance. After all, we are born with the right to an education, why shouldn’t we also have the right to healthcare?
While illness is considered unpleasant — something to be observed from a distance, avoiding close inspection — the Center for Educational Development and Research at the David Geffen School of Medicine at UCLA hopes images such as this in the exhibition Pain compel viewers to be drawn in closer and discover how it relates to the whole person.

Through shared decision making, patients and their physicians become true collaborators in determining the best course of care.

“"No decision about me without me”"