

live well

SMARTER HEALTHCARE FOR SOUTHERN CALIFORNIA

GOOD AS NEW

Nonsurgical innovation
eliminates cancer,
preserves esophagus



MAKING HEALTHCARE ACCESSIBLE



As an academic health system, UCI Health has earned a reputation for innovative, leading-edge medical care and research. We are also charged with — and committed to — making this outstanding care and research accessible to all who need it. That is why I am delighted to announce plans to build a medical complex near the university campus in Irvine to meet the needs of residents in surrounding areas. This complex will further expand healthcare options beyond our existing medical center in Orange and our clinical facilities in Anaheim, Costa Mesa, Irvine,

Newport Beach, Orange, Santa Ana, Tustin and Yorba Linda.

The new Irvine facility — which will include a full-service hospital, outpatient medical and surgical services, emergency care and pediatric outpatient care — will build on the strengths that make us unique in the region. Our physicians rank at the top of their fields, with 90 recognized as Best Doctors in America®. Between our medical center in Orange and our research facilities on the university campus, we support many of the West Coast's top medical research laboratories. Each year, our physicians and researchers make scores of discoveries that advance medical care and improve lives, allowing us to offer our patients the very best healthcare available. This is why we attract and educate the brightest future doctors and researchers in America, incredible people we are proud to mentor.

We know our friends and neighbors in and around Orange County value our efforts, and we will need the community's support as we elevate healthcare in the years to come. UCI is embarking on a major philanthropic campaign to ensure that our university remains a top academic destination. A large portion of the funds raised will support the new UCI Health medical complex as well as health sciences research, programs and personnel. We invite you to join us in strengthening our medical and academic campuses to ensure that no resident ever has to travel beyond the county for world-class care.

In this issue of *Live Well*, you can read more about our commitment to excellence. On page 6, learn how our gastrointestinal doctors remove esophageal tumors without a single incision. We also include stories on important research to limit the effects of stroke, on the hype vs. hope of stem cell research, and about our physicians who selflessly help people most in need of care. We are proud of them and of the dedication all our employees bring to their jobs each and every day.

Sincerely,

Steve A.N. Goldstein, MD, PhD
Vice Chancellor of Health Affairs
University of California, Irvine

UCI Health

VICE CHANCELLOR, HEALTH AFFAIRS
Steve A.N. Goldstein, MD, PhD

EXECUTIVE MARKETING DIRECTOR
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PUBLIC INFORMATION OFFICER
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Moon Tide Media

PHOTO DIRECTOR
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ART DIRECTOR
Ajay Peckham

EDITOR
Shari Roan

COPY EDITOR
Laura Watts

BRAND PUBLISHER
Hannah Lee

For comments or questions, contact
UCI Health Marketing & Communications at
333 City Blvd. West, Suite 1250, Orange, CA 92868
714-456-5496

Information in this magazine is not meant to
replace the advice of your physician.

SUPPORT UCI HEALTH

Few things in life matter more than your health. As Orange County's only academic medical system, UCI Health is pushing the frontiers of life-saving research while improving health and wellness in our community and beyond.

We couldn't do it without you. With your partnership, we will make new medical breakthroughs, redefine patient treatment and the teaching of personalized healthcare, and empower our communities for mental and physical health. Become an active partner in charting UCI Health's future path.

To make a gift to support the expansion of UCI Health, to thank a provider or honor the memory of a loved one, call 714-456-7350 or visit ucihealth.org/giving. Gifts to UCI Health support UCI's Brilliant Future campaign.

BRILLIANT FUTURE
THE CAMPAIGN FOR UCI

USING STEM CELLS TO TREAT THE LONG-TERM EFFECTS OF A STROKE

WRITTEN BY NANCY BRANDS WARD

Stroke is the No. 1 cause of long-term disability in the United States. Each year, more than half of the 800,000 Americans who suffer an ischemic stroke are left with some lasting impairment.

The UCI Alpha Stem Cell Clinic is testing a promising new therapy aimed at regaining lost function after a stroke. As part of a national study known as PISCES III, UCI researchers hope to enroll six to 10 patients in the Phase 2b clinical trial. A total of 110 patients will participate across multiple U.S. sites.

Most strokes are caused when a clot blocks the flow of blood to the brain. Brain cells die when deprived of blood. The result of these ischemic strokes can be a range of disabilities, including problems with memory, language, thinking, emotions and motor control.

"Stem-cell therapy offers the potential to bring back some motor function," says Dr. Leonid Groysman, associate professor of neurology at UCI School of Medicine and the trial's principal investigator at the stem cell clinic, the clinical arm of the UCI Sue & Bill Gross Stem Cell Research Center. "The idea is that the implanted stem cells improve our own natural capacity to regrow brain cells."

In a single surgical procedure, the stem cell therapy drug or a placebo is injected into the affected area of the brain. Researchers then follow trial participants for 12 months to assess their medical condition and functional status.

The study is aimed at stroke survivors between ages 35 and 75 who have some residual arm movement and have been stabilized for six to 12 months after an ischemic stroke. Patients may be eligible if they still have moderate or moderately severe disability.

Earlier phases of the PISCES III trials, which were designed to test the safety of

modified progenitor cells, found no serious side effects from the therapy. The earlier studies were not designed to demonstrate functional improvement, but researchers were surprised when some participants showed significant improvements in arm and leg function over a 12-month period after the stem cell transplant.

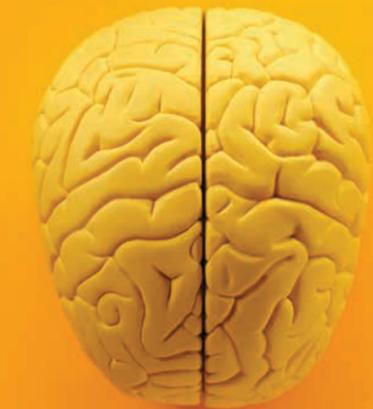
"This was a huge surprise to the researchers," Groysman says. "Patients continued to improve after a single injection. The feeling is that it set a regenerative process in motion. Our participation in this trial is exciting.

However, our scientific progress is still in the early stages. We are searching for the right cells, the right method of delivery and the right timing."

Stem cell therapies are showing promise for other pathologies — such as dementia and blindness — which gives Groysman hope that treatment to help stroke patients regain lost function may be just around the corner.

In recent years, clot-busting drugs and prompt medical intervention have shown some success in dissolving or removing clots when performed immediately after the onset of a stroke. Research at UCI and

BY THE NUMBERS: STROKE



No. 1
cause of
long-term
disability

More than
HALF
of patients
have reduced
mobility

2/3
of stroke
survivors
require
rehabilitation

Sources: strokecenter.org; CDC; NINDS

other universities show that post-stroke rehabilitation therapies can help improve function and doctors encourage lifestyle modifications to prevent future stroke.

However, no treatments have been found to reverse disabilities resulting from stroke. "Growing up watching my grandfather confined to his home after a stroke and realizing my inability to help him even with my medical training in neurology, I never thought that there would be a way for stroke patients to regain function," Groysman says. "Now maybe what we researchers were dreaming 20 or 30 years ago is coming true." ■

View more information on the PISCES III trial
at ucihealth.org/pisces3 or call 949-824-3990.

LARGE GRANTS FUND RESEARCH ON SKIN, CHILD DEVELOPMENT



The National Institute of Arthritis and Musculoskeletal and Skin Diseases has awarded nearly \$4 million to create the UCI Skin Biology Resource-based Center. Under the direction of Dr. Bogi Andersen, the center will be one of six in the nation to provide research infrastructure, shared facilities, services and resources to investigators studying skin biology and diseases.



In July a five-year, \$15 million grant from the National Institute of Mental Health was awarded to Dr. Tallie Z. Baram, an internationally renowned child neurologist and neuroscientist at UCI, to study how unpredictable parental and environmental signals influence an infant's vulnerability to cognitive and emotional problems later in life, including risky behaviors, addiction and post-traumatic stress disorder. Baram's previous research suggests that a baby's cognitive and emotional functioning develops from caregivers' signals, especially the mother's. The consistency, predictability, quantity and quality of those cues are key to the child's healthy neurological development.

DOCTORS TREAT MAN WITH RARE GENETIC DISEASE

UCI Health surgeons volunteered their services recently to successfully treat a man from Paraguay who was born with neurofibromatosis, a genetic disorder that causes uncontrollable skin tumors. In 2018, while participating on a medical mission with IMAHelps, UCI Health trauma surgeon Dr. Cristobal Barrios and plastic surgeon Dr. Mark Kobayashi met Enrique Galvan, 27, who had long suffered from the disorder despite efforts by local doctors to treat him. IMAHelps arranged for Galvan to come to UCI Medical Center in June for a 10-hour surgery to remove six pounds of tumors and excess skin from his chest, shoulder and back. Barrios returned to Paraguay in July and, with help from other U.S. volunteers, removed more growths from Galvan's neck, face and right ear. "I feel super good and my head feels lighter, just like my shoulder did with the earlier surgery," Galvan says. "I am very grateful."



UCI Health physicians successfully treated Enrique Galvan for a rare condition.

UCI MEDICAL CENTER: TOP 10 IN CALIFORNIA

For the 19th consecutive year, *U.S. News & World Report* has recognized UCI Medical Center as one of America's Best Hospitals. This year's report ranks UCI Medical Center No. 10 in California and No. 5 in the Los Angeles metropolitan area.

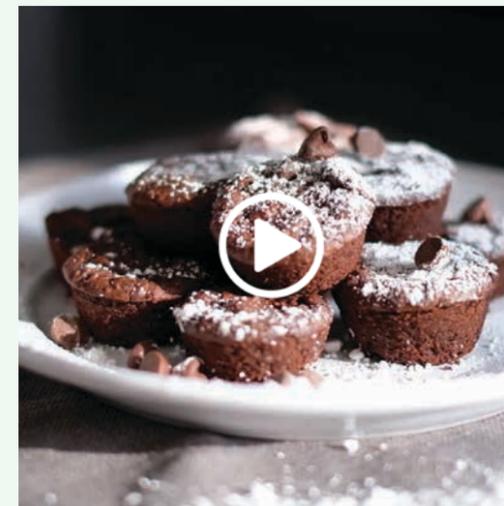
The annual rankings, which recognize hospitals that excel in treating the most challenging patients, also recognized specific UCI Health programs that are among the nation's best. These include gynecology at No. 20 (tie), gastroenterology and GI surgery at No. 36 and geriatrics at No. 42 (tie). Several other UCI Health programs were ranked as high-performing including cancer, diabetes and endocrinology, nephrology, neurology and neurosurgery, orthopedics, pulmonology and lung surgery, and urology.

"This 19th consecutive recognition as one of America's Best Hospitals reflects the excellence of our entire team of physicians, nurses, therapists and support staff," says Dr. Steve A.N. Goldstein, UCI vice chancellor for health sciences. "UCI Health plays a critical and unduplicated role in improving the health and wellness of our community, from managing complex cases to providing specialty care for any condition."

Over the past 20 years, UCI Medical Center is the only Orange County hospital consistently rated among America's best by *U.S. News*. The annual Best Hospitals rankings and ratings, now in their 30th year, are designed to assist patients and their doctors in making informed decisions about where to receive care for challenging health conditions or for common elective procedures. For the 2019–2020 report, *U.S. News* evaluated more than 4,500 medical centers nationwide in 25 specialties, procedures and conditions.



EAT LIKE A MEDICAL STUDENT



In culinary medicine classes at the UCI School of Medicine, future doctors learn how to cook healthy meals so they'll be able to advise their patients about diets to combat obesity, diabetes, heart disease and more.

Recipes like breakfast tacos with spinach teach them how to amp up nutrition value while making things tasty. Here's one for folks with a sweet tooth: black bean brownies.

This healthier take on mini-brownies is a gluten-free dessert that is also good — in moderation — for diabetics and anyone looking to reduce sugar in their diet.

Black beans and ground oatmeal replace wheat, making them great for anti-inflammatory diets. Add maple syrup and, yes, a little chocolate, and the result is fudgy deliciousness.

[View this video and recipe at ucihealth.org/brownies](https://ucihealth.org/brownies)

INGREDIENTS

(Serves 12, 2 mini-brownies each)

- ½ cup semisweet chocolate chips
- ½ teaspoon baking powder
- 1 teaspoon vanilla extract
- ¼ cup canola oil
- ½ cup maple or cane syrup
- 1/8 teaspoon kosher salt
- ½ cup quick oats
- 3 tablespoons unsweetened cocoa powder
- 1 ½ cups canned black beans, drained and rinsed

DIRECTIONS

Gather all ingredients and equipment (mini-muffin pan, blender or food processor, spatula, bowls). Preheat oven to 350 degrees F. In a blender, grind oats into fine powder. Pour ground oats to a medium-size bowl. In the same blender, combine all other ingredients. Blend until very smooth then add the ground oats. Mix well and transfer to a greased mini muffin pan. Fill cups to just below the top. Bake for 8-12 minutes until done.

NUTRITIONAL INFORMATION

- 180 calories
- 3 g protein
- 8 g fat
- 25 g carb
- 3 g fiber
- 45 mg sodium



Alwyn Kong, with his dog Shaggy, opted for a nonsurgical procedure to treat esophageal cancer.

QUALITY OF LIFE PRESERVED

A UCI Health doctor does the unimaginable:
removes esophageal cancer without a single incision.

WRITTEN BY SHARI ROAN

PHOTOGRAPHED BY KRISTIN ANDERSON

When Alwyn Kong, 59, learned he had esophageal cancer, the stunned Foothill Ranch man was faced with a grim picture of the next few months of his life.

He would undergo two operations. The first would include inserting a feeding tube into his stomach to provide nutrition over the challenging weeks ahead. During the second operation, doctors would insert instruments into the abdomen to remove the tumor as well as part of the esophagus and upper stomach, with the surgeon bringing the upper stomach into the chest area to connect it with what remained of the esophagus.

“Even the amazing esophageal cancer surgeons at UCI say the only thing worse than having esophageal cancer is having esophageal cancer surgery,” says UCI Health gastroenterologist Dr. Jason Samarasena, associate professor of medicine at the UCI School of Medicine.

That Kong woke up from his surgery in late June 2018 without a single incision on his body, no feeding tube, his tumor gone and his stomach where it belonged is a testament to the wonders of medicine and the immense talent of the medical team at the UCI Health H.H. Chao Comprehensive Digestive Disease Center (CDDC).

Not content with the status quo, the digestive disease team at Orange County’s only academic medical center has, over the past several years, mastered a challenging procedure called endoscopic submucosal dissection (ESD), which allows them to remove some

types of digestive tract tumors through the mouth.

"At the time I was diagnosed, they had to give me the worst-case scenarios," Kong recalls. "It was a horrific rundown of what the procedure looked like. After the surgery, I realized I just avoided something unbelievable."

The CDDC has been striving to avoid "worst-case scenarios" since its founding in 1993, says CDDC Director Dr. Kenneth Chang, an endoscopic gastroenterologist and a professor at the UCI School of Medicine. The center provides care for benign and cancerous tumors of the colon, rectum, stomach, pancreas and esophagus, as well as treatment for gastrointestinal reflux disease (GERD) and a precancerous condition caused by GERD called Barrett's esophagus. A major focus is performing minimally invasive treatments whenever possible.

"We have the first and only endowed chair in the country that is devoted to treating cancer with endoscopy," Chang says. "Care at the CDDC starts with a passion, a philosophy and that focus. Gastrointestinal oncology has always been central to our origins."

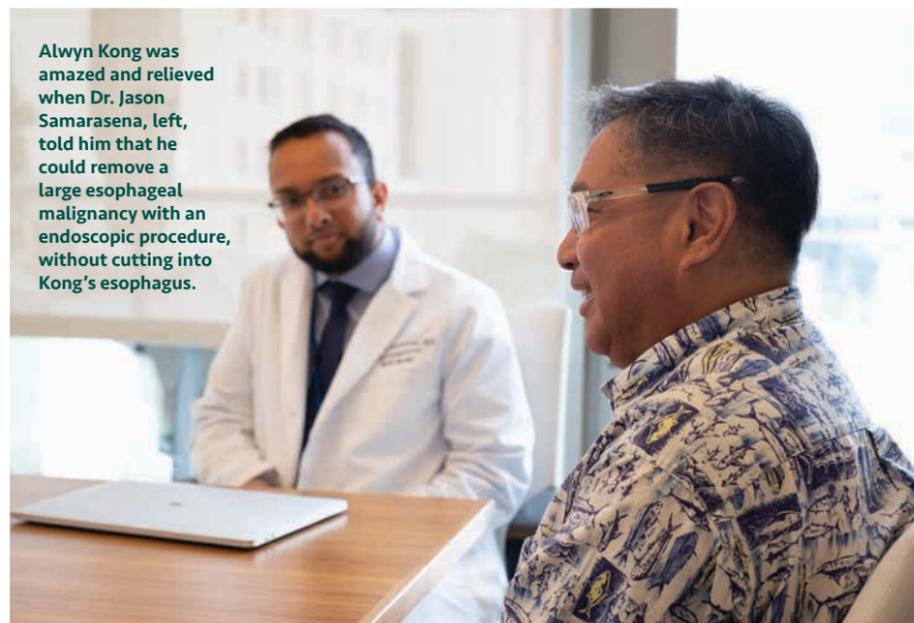
HAVING ANOTHER OPTION

Being diagnosed with a gastrointestinal cancer was not what Kong expected when he saw his gastroenterologist in June 2018 for a routine colonoscopy. It had been a difficult time for the human resources executive. His adopted son had recently died after a seven-year battle with lung cancer. Kong's mother died suddenly a month later.

When Kong went in for his colonoscopy, his doctor suggested he also undergo an upper-GI endoscopy, a procedure in which the doctor inserts a camera through the mouth into the esophagus to look at the health of the esophageal lining. The physician was concerned because Kong had been taking medication for acid reflux, which can cause inflammation and damage to the esophageal lining.

"I kept telling him, 'I feel fine,'" Kong recalls. "But he said he would do it during the colonoscopy, and I wouldn't feel a thing. Finally I said, 'Yeah, you're right.' It was the craziest thing; I had no symptoms so I almost didn't do it."

His choice was fortuitous. The results,



Alwyn Kong was amazed and relieved when Dr. Jason Samarasena, left, told him that he could remove a large esophageal malignancy with an endoscopic procedure, without cutting into Kong's esophagus.

"CARE AT THE CDDC STARTS WITH A PASSION, A PHILOSOPHY AND THAT FOCUS. GASTROINTESTINAL ONCOLOGY HAS ALWAYS BEEN CENTRAL TO OUR ORIGINS."

including a biopsy, showed a small malignant tumor deep in the esophagus. Kong's doctor promptly referred him to UCI Health surgeon Ninh T. Nguyen, MD. Nguyen described the typical esophageal cancer surgery to the stunned Kong.

"I felt overwhelmed," Kong says of the diagnosis. "I was trying to process everything. It was going in one ear and out the other. I felt good that the doctors were trying to be slow and patient, but the emotional side takes over. I really just sat there dumbfounded."

Presurgical tests were ordered, including an endoscopic ultrasound conducted by Samarasena, to determine the tumor's size and precise location. That's when the CDDC's reputation for innovation became a reality for Kong. Studying images of the tumor, Samarasena saw an opportunity to use ESD and spare Kong from the traditional surgery because the mass was confined to the submucosal layer of the esophagus and had not penetrated the muscle wall.

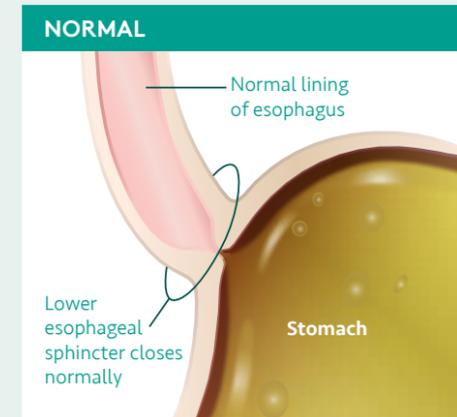
"Dr. Sam looked at the data, consulted with the other doctors and called me," Kong says. "He said he thought I was a good candidate for something experimental. He said, 'It's possible we can cure you without cutting you open. What do you think?' I was scared, but he sounded excited. I could hear the confidence in his voice."

EMBRACING INNOVATION

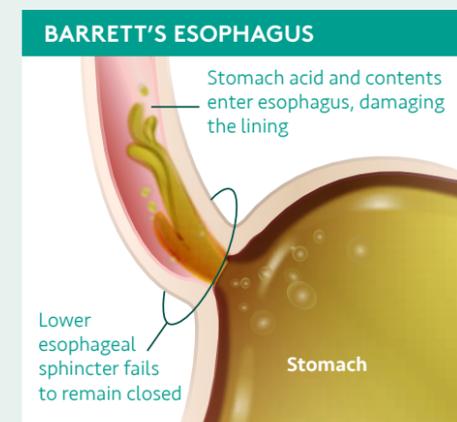
During ESD, the patient is given general anesthesia and the endoscope is passed through the mouth. Then the surgeon injects fluid into the submucosa to float the tumor away from the esophageal wall. The surgeon then carefully cuts it out and removes it through the patient's mouth.

"It's a relatively new procedure in the United States, but it has been around many years in Japan where the surgery was created to treat stomach cancer," Samarasena says. "In the U.S., we don't have much stomach cancer so we've never needed the expertise and training

EXPLAINING BARRETT'S ESOPHAGUS



Normally, the lining of the esophagus is smooth and healthy because the sphincter between the esophagus and stomach closes properly.



People with Barrett's esophagus have a sphincter at the low end of the esophagus that does not close normally, allowing stomach acids to enter the esophagus and damage the lining.

- Barrett's esophagus is often caused by gastrointestinal reflux disease (GERD).
- Left untreated, Barrett's esophagus can lead to esophageal cancer.

programs to learn that skill."

Eventually, uses for ESD expanded to other areas of the GI tract. It can be used for early esophageal cancer — which has increased in incidence in the United States in the past two decades — as well as stomach cancer, some colon cancers and precancerous colon polyps, Samarasena says.

The first ESD procedure done at UCI was in 2005 when a trainee of Chang's learned the technique in Japan and brought it back to his mentor. The CDDC now has one of the busiest ESD practices in California, performing the procedure at least once a week. "This is an organ-sparing procedure that can be applied anywhere there is a GI cancer," he says.

An ecstatic Kong went home the day after surgery. Other than a sore throat that made it difficult to eat for a few days,

he was as good as new.

"On day three after surgery, Dr. Sam called and told me pathology confirmed that he had cut all the way around the tumor with clear margins [the tissue around the tumor was cancer-free], and the cancer was 100% gone," Kong says. At 5 centimeters by 3 centimeters, it also was larger than they originally thought because almost half the tumor was obscured by a fold in his esophagus.

Kong wasn't finished with UCI Health, however. Samarasena next delved into the reasons why he may have developed the cancer — gastric reflux — and sought to make sure new tumors wouldn't form.

A few months later, Kong was treated for Barrett's esophagus to remove precancerous cells via another endoscopic procedure called radiofrequency ablation to heat and destroy the abnormal tissue.

He has had two more treatments in the last year to remove additional growths and expects to have more checks to remove growths that could become cancer. "I tease Dr. Sam that we're going to know each other for the rest of our lives," Kong says with a laugh.

In addition, Samarasena referred him to Dr. Maria Victoria Peralta, a UCI primary care physician, who is addressing Kong's cardiovascular health, nutrition and psycho-social issues related to the deaths he experienced.

"The level of care I'm getting right now at 59 years old is amazing. I'm so far ahead of things," says Kong, who's delighted that he is able to keep up with Shaggy, his late son's energetic and much beloved dog. "I know what I'm going to need to focus on in the next 20 years. I'm not afraid to go to the doctor, and I love these people like my own friends."

THE RAPIDLY CHANGING GI FIELD

Meanwhile, ESD surely won't be the last innovation at the CDDC. As an academic health system with a National Cancer Institute-designated comprehensive cancer center, UCI Health is charged with performing the research and development that leads to more cures, less-aggressive treatments and better quality of life for patients.

"There has been a lot of innovation in the last few years," Samarasena says. "This area of minimally invasive detection of GI cancers has been one of the biggest breakthroughs. The scope and instrument technology has gotten more and more refined. We're able to do things so meticulously. When I finished my training eight years ago, none of this stuff was around."

It still isn't offered everywhere. But Kong didn't have to go far to find state-of-the-art care near his Orange County home. "I knew nothing about UCI Health before this," he says. "But I have had an amazing experience all the way around. I swear by UCI. No one else is going to touch me." ■

To learn more about research, treatment and care at the CDDC, visit ucihealth.org/cddc





Look for a doctor who inspires your confidence, says UCI Health primary care physician Dr. D. Sajee Lekawa.

YOU'VE GOT CHOICES

During open enrollment, pick the health plan and primary care doctor that are right for you.

WRITTEN BY MELANIE ANDERSON | PHOTOGRAPHED BY MONICA OROZCO

When it comes to choosing a healthcare plan, we each have different needs and priorities. Many employers and insurance companies offer an enrollment period each fall to renew or revise your health plan for the coming year. This period is an opportunity to consider whether or not you're satisfied with your current plan and what you want from your health provider. *Live Well* asked Dr. D. Sajee Lekawa, a UCI Health primary care physician, what to keep in mind when selecting your healthcare coverage plan for 2020.

Should people reconsider their health insurance and provider each year?

Yes, you want to make sure that you've been happy with the care you've received in the previous year. Be proactive about changing if you haven't been satisfied. You have choices and you want to do everything possible to pick the provider who is right for you and your family.

What should I consider when choosing a health plan?

Prioritize what you want in a primary care physician and in

a healthcare network. Do you want your provider to be close to your work or home? Will you want an array of specialists to choose from? The most important thing is to choose a primary care doctor who understands you and makes you feel at ease, because this will be the physician you'll see first and most often.

What should I consider if I'm a first-time Medicare beneficiary?

More than just selecting a primary care network, you will want to look at your specialty care network and the hospital these physicians are affiliated with. You should feel comfortable going to the facilities and doctors who will provide you the best care. If you already see specialists and you're happy with them, make sure they're in your network.

Why do I need to choose a primary care provider during open enrollment?

Your primary care provider is your go-to person. You need to make sure you have good and timely access to the physician you'll see for acute problems and the one who'll coordinate all your care. If you were feeling sick and found that you couldn't see your

IMPORTANT DEADLINES

OPEN ENROLLMENT PERIODS FOR 2020 HEALTH PLAN COVERAGE ARE:

- **Medicare:** Oct. 15–Dec. 7, 2019 (First-time beneficiaries have a seven-month initial enrollment period to sign up for Part A and/or Part B).
- **Insurance through your employer:** Check with your employer because open enrollment dates vary.
- **Covered California:** Oct. 15, 2019–Jan. 15, 2020



doctor for a few weeks, it may be time to consider switching to a different primary care provider. Remember, though, you can change your doctor within a network before the 15th of the month at any time during the year. You can only change your health insurance plan during open enrollment.

What qualities should patients look for in a primary care provider?

The No. 1 thing to consider is that they connect with you and make you feel confident they're caring for you in the way you want.

What are the benefits of choosing a primary care provider who is part of UCI Health?

We provide access not only to primary care services but also to UCI Health specialty care providers. With our referral process, you don't have to call individual specialists. Instead, the patient is contacted to schedule an appointment. Some of our UCI locations provide on-site specialty care, diagnostic procedures, lab tests, X-rays, MRIs and mammograms.

What does it mean to receive care at an academic medical center?

UCI Medical Center is Orange County's only academic center, and home to its only Level 1 trauma center and only National Cancer Institute-designated comprehensive cancer center. It is where other hospitals send their most difficult cases. It is where community physicians send patients who need more complex, specialized care. Through UCI Health's network of specialists, you also have access to this higher level of care. It is where the future doctors of Orange County are trained.

WHY CHOOSE UCI HEALTH?

As an academic health system, patients have access to:

- NCI-designated comprehensive cancer center
- Best Hospitals recognition
- National Leapfrog recognition for hospital safety
- Magnet nursing recognition
- Dedication to research, innovation and clinical trials
- State-of-the-art facilities
- Convenient outpatient offices throughout the region

What else separates UCI Health from other networks?

Because we are part of an academic medical center, I have patients who are enrolled in clinical research trials, studies of new therapies that are not offered at other nearby hospitals and medical centers.

What's the best way to learn more about UCI Health?

Our website, ucihealth.org, offers news and feature stories highlighting our new treatments, research, awards, honors and where you can find us. We are expanding to serve more people throughout Orange County. ■

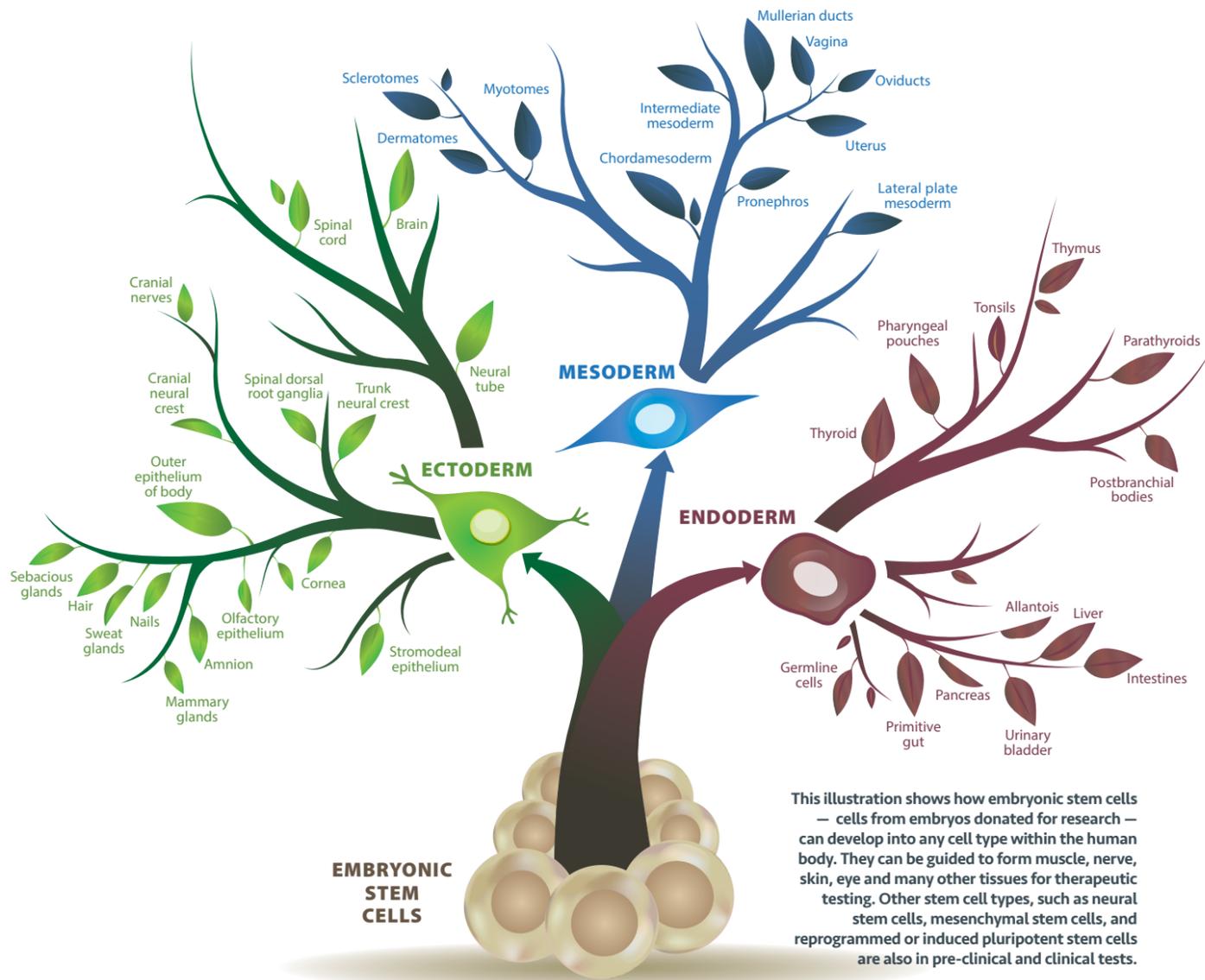
For more information on how to choose UCI Health, visit ucihealth.org/choose



THE PROMISE AND PERIL OF STEM CELL THERAPY

With legitimate research slow to pay off, unproven remedies flood the marketplace.

WRITTEN BY TRAVIS MARSHALL



Stem cell therapies are among the most exciting medical advancements of the 21st century. Harnessing the power of stem cells — the basic building blocks of the human body — may help unlock treatments that slow or reverse the effects of such devastating diseases as amyotrophic lateral sclerosis (ALS) or repair brain function in people with traumatic brain injuries, among many other uses.

But the promise of stem cells has been co-opted by unscrupulous clinics in the United States and around

the globe that are offering unproven, even fraudulent, therapies. “People read about stem cells in the news and presume that therapies must already be available,” says Brian Cummings, PhD, professor and vice-chair for research in physical medicine and rehabilitation at the UCI School of Medicine. “They find a clinic and go without knowing they’re being taken advantage of.”

Clinics advertise treatment for Alzheimer’s disease, Parkinson’s disease, multiple sclerosis, diabetes and cancer, among other conditions, for hefty prices that

aren’t covered by insurance — without offering scientific evidence that they work, says Daniela A. Bota, MD, PhD, the UCI School of Medicine’s senior associate dean for clinical research and chief scientific officer for its Center for Clinical Research.

The problem is so pervasive that California passed a law requiring such stem cell clinics to post warnings that their treatments are unapproved and to provide the same statement to each customer before treatment begins.

However, legitimate research and promising results also abound. The California Institute for Regenerative Medicine (CIRM) was established in 2004 through the voter-approved Proposition 71 to help fund the establishment of stem cell research centers, including the UCI Sue & Bill Gross Stem Cell Research Center (SCRC). That effort has made the state a global hub for stem cell research. To date, CIRM has funded more than 55 clinical trials to study stem cell treatments for conditions

EVALUATING STEM CELL CLINICAL TRIALS

Patients considering investigational stem cell therapies should first educate themselves to make sure a clinical trial is legitimate, says Dr. Daniela A. Bota, senior associate dean for clinical research at UCI School of Medicine.

Check clinicaltrials.gov: But use caution. Legitimate clinical trials are listed on this website, which is maintained at the National Institutes of Health, but not every trial listed is legitimate. “Just because a trial is registered on the site does not mean the government has actually vetted it.”

Ask about informed consent: Investigators of legitimate trials provide an informed-consent document that fully explains the treatments and the risks involved. “It’s very important you’re given enough time to ask questions and to be fully informed about the nature and risks of a treatment.”

Get independent confirmation:

- Is the study approved by a review board? The FDA requires institutions engaging in human trials have a review board that assures the protection of the subjects’ rights and welfare.
- Is early research data available in peer-reviewed publications?
- Is the trial FDA-authorized?

“It’s extremely important to seek information from sources outside of the clinical trial,” Bota adds.

“Patients need to be well-informed to protect themselves from scams and fake studies.”

ranging from cancers and HIV/AIDS to diabetes and blindness.

So far the U.S. Food & Drug Administration (FDA) has vetted and approved only eight stem cell therapies as effective and safe — and only for the treatment of blood malignancies, says Cummings, an SCRC faculty member who in July received a \$4.8-million CIRM grant to address traumatic brain injury.

While it may seem that stem cell research is moving slowly to patients and the general public, Cummings says the pace of change actually has been rapid considering the regulatory challenges of working with human tissue and the complexities inherent in launching a new field of research. “We had to build research facilities, establish research training programs, then we had to do the basic science of learning how to harvest the cells and how to direct them.”

With more than 1,200 patients enrolled in CIRM-supported clinical trials around the state, many investigators are on the cusp of major breakthroughs in treatments for blindness, blood diseases and cancer. Promising stem cell studies also are underway at UCI for amyotrophic lateral sclerosis (ALS) and diabetes, as well as CIRM-supported research in retinitis pigmentosa, Huntington’s disease and brain injuries.

But California’s future as an international leader in stem cell research isn’t set in stone. Because Proposition 71 funding is nearly spent, supporters of CIRM are planning a 2020 ballot initiative to ask voters to authorize \$5 billion to continue supporting leading-edge stem cell science.

“If CIRM funding gets renewed, there will be new burst of research efforts,” Cummings says. “I can’t overemphasize how important it is that scientists have the freedom to explore and work together with others to make connections that will take us down new, unexpected paths.”

In the meantime, consumers should be wary of claims touting stem cell cures. The risks of untested or fraudulent stem cell therapies can range from scam treatments that do nothing to the injection of stem cells that haven’t been properly programmed — potentially leading to harmful, perhaps even deadly, side effects.

“Stem cells are designed to divide and propagate, and they can form a tumor if you haven’t figured out their growth characteristics,” Cummings says. “Unlike a drug, you can’t remove the stem cells if you have an adverse reaction.”

Cummings recommends looking closely at a clinic’s language describing a therapy. It should say “FDA-approved,” which means a treatment has gone through years of required preclinical and clinical testing to prove that a treatment or drug is safe, does what is claimed and is available as a prescription.

Patients can find a much wider range of stem cell therapies being tested in the world of clinical trials — the research studies that are a core part of the FDA approval process. Eligible patients can join these trials and gain access to experimental stem cells therapies. Know who is conducting the trial, though.

“No reputable trial would ask patients to pay for experimental treatments, except for maybe travel costs in some cases,” Cummings says. “If you’re being asked to pay out-of-pocket for a stem cell treatment, it’s not a legitimate clinical trial.” ■

To learn more about UCI stem cell research, visit stemcell.uci.edu



ANTI-CANCER CHALLENGE

More than 185 teams and 2,800 participants helped raise funds for cancer research June 8 at the third annual UCI Anti-Cancer Challenge. The cycling and run/walk events, held this year at Aldrich Park on the UCI campus, raised money for research at the UCI Chao Family Comprehensive Cancer Center. At least 18 promising cancer studies and early-phase clinical trials will move forward as a result of the event, which raised \$635,000.



TEACHING KITCHEN GRAND OPENING

A demonstration by chef Jessica VanRoo was the highlight of the grand opening of the Lois Eisenberg Teaching Kitchen at the UCI Health Family Health Center in Santa Ana on July 19. The nearly 1,100-square-foot, state-of-the-art teaching kitchen will be used for group cooking sessions for patients and nutritional education programs for the surrounding community. The teaching kitchen was made possible by the support of the community and an estate gift from Lois Eisenberg, the late mother of Orange County philanthropist Susan Samuelli, who established the UCI Health Susan Samuelli Integrative Health Institute.

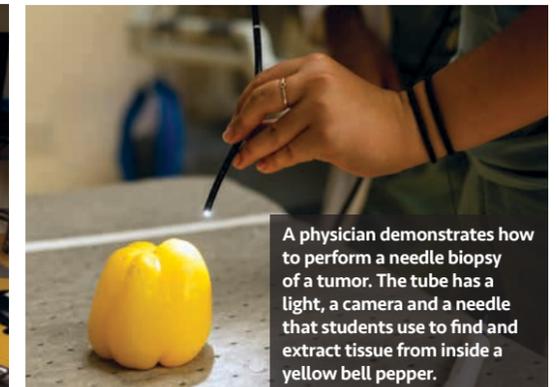


SUMMER SURGEONS

The UCI School of Medicine's Department of Urology held a Summer Surgeons program to teach local high school students about basic surgical skills, such as suturing wounds and needle biopsies. The students also observed live surgeries and earned certification in CPR.



Urology department chair Dr. Jaime Landman (center, back row) poses with the Summer Surgeons class. The 24 students are from high schools in Orange County and across Southern California.



A physician demonstrates how to perform a needle biopsy of a tumor. The tube has a light, a camera and a needle that students use to find and extract tissue from inside a yellow bell pepper.



Dr. Nimisha Parekh supervises as SHE program students practice suturing skills.

TEEN GIRLS SUMMER PROGRAM

The UCI Summer Health Experience (SHE) program gave 36 high school girls an up-close look at careers in medicine and healthcare. The one-week immersive experience exposed the students to some of the skills they would learn in medical school. Launched in 2014, the program seeks to empower young women to navigate the challenges of careers in medicine and healthcare by giving them practical tools and mentorship from women physicians.



SHE program T-shirt given to each participant



High school girls from across California learn to use robotic arms to grasp objects.



Dr. Jaime Landman looks on as students in his Summer Surgeons program try out robotic arms that doctors use to perform minimally invasive surgeries.

DR. EDWARD NELSON HONORED BY ACS

The American Cancer Society presented Dr. Edward Nelson, chief of hematology/oncology at UCI Medical Center, with the Medical Honoree award at its recent Celebration of Life — Drive Against Cancer gala in San Diego. The award recognizes community leaders who attack cancer from every angle, launch breakthrough research and enable local communities to support people who are affected by cancer.



Dr. Edward Nelson, center, is flanked by Kristen Strauch, the society's area executive director, and Tad Heitman, the society's regional council chair.

HEALTH CLASSES

Improve your health and prevent disease by taking our classes. Most are free, but some do have fees. All classes are held at UCI Medical Center, located at 101 The City Drive South, Orange, CA 92868.

Parking: There is a small fee to park at UCI Medical Center, which is part of UCI Health. When attending classes at the 200 Building, please park in a numbered patient space and provide the number to the desk concierge.

Registration is required for all classes. All classes are one session unless otherwise noted.

For more information, visit ucihealth.org/events or call 657-282-6357.

ADVANCE DIRECTIVE
Nov. 14 | 11 a.m.–12:30 p.m.
 Building 22A, Room 2105-06
 Notary available noon–12:30 p.m. at no charge

BREASTFEEDING
Oct. 3, Nov. 7, Dec. 5 | 6–9 p.m.
 Building 53, Room 121

HEART FAILURE
Nov. 12 | 2–3:30 p.m.
 Primary Care Services
 Pavilion 3, Building 29

JOINT REPLACEMENT, HIP OR KNEE
Every Thursday, except holidays
11 a.m.–noon
 UCI Douglas Hospital
 Building 1, Room 3001

MEDITATION FOR HEALTH SERIES
(four classes)
Oct. 28, Nov. 4, 18, 25 | 6:30–7:30 p.m.
 Building 200, Room 211
 200 Manchester Ave., Orange



MEDITATION FOR HEALTH: BREATHING
Oct. 21 | 6:30–7:30 p.m.
 Building 200, Room 211
 200 Manchester Ave., Orange

MEDITATION SPECIAL TOPIC: BODY SCAN RELAXATION
Dec. 9 | 6:30–7:30 p.m.
 Building 200, Room 211
 200 Manchester Ave., Orange

NEWBORN CARE
Nov. 8 | 6–9 p.m.
 Building 200, Room 211
 200 Manchester Ave., Orange

PREPARED CHILDBIRTH
(five classes)
Wednesdays | 7–9:30 p.m.
Oct. 23, 30, Nov. 6, 13, 20

Thursdays | 7–9:30 p.m.
Oct. 24, 31, Nov. 7, 14, 21
 Building 200, 8th floor, Classroom B
 200 Manchester Ave., Orange



PREPARING FOR SURGERY – MIND, BODY AND SPIRIT
Oct. 7, Nov. 4, Dec. 2 | Noon–1:30 p.m.
 UCI Douglas Hospital
 Building 1, Room 3005

ONLINE HEALTH EDUCATION VIDEOS
 Learn how to protect your health with our free, on-demand videos. Topics include:

- Cholesterol
- Diabetes diet
- Diabetes management*
- Diabetes blood-sugar testing
- High blood pressure
- Prevent stroke
- Stop smoking

**Also available in Spanish*

For more video topics and to request an internet access code, please call UCI Health Patient Education at 714-456-8434.

EVENTS

UCI Health is proud to sponsor community events that support a variety of health conditions. Attend one of these useful and interesting lectures.

NEWPORT BEACH LIBRARY “MEDICINE IN OUR BACKYARD” LECTURE SERIES
 Learn about your health from these physicians and scientists.

Oct. 28 | Health equity: Why the U.S. is lagging behind other countries.
 Cynthia Haq, MD

Nov. 18 | Is depression in older adults a normal part of getting older?
 Robert Bota, MD

Jan. 27 | The secret power of music for dementia. Joshua Grill, PhD

Presentations begin at 7 p.m. at the Newport Beach Central Library, 1000 Avocado Ave., Newport Beach. Seating is limited. Doors open at 6:30 p.m. Audience members have the opportunity to speak with the doctors after their presentations.

GAVIN HERBERT EYE INSTITUTE COMMUNITY LECTURE SERIES
 Learn the causes, symptoms and treatments of eye-related conditions.

Nov. 4 | Uveitis: What you and your rheumatologist should know about eye inflammation. Sanjay Kedhar, MD

Lectures are held at 7 p.m. at the eye institute, which is located at 850 Health Sciences Road, Irvine. To RSVP, contact ghei@health.uci.edu or 949-824-7243.



SUE & BILL GROSS STEM CENTER COMMUNITY LECTURE SERIES

Oct. 29 | Chronic lung disease in premature babies: Babies learning to breath. Muhammad Aslam, MD, and Aileen Anderson, PhD

Nov. 19 | Skin regeneration, trauma & burns: Skin without scars. Maksim Plikus, PhD, and Victor Joe, MD

Jan. 14 | Stem cells to study inherited heart disease: Mending a broken heart. Michael Zaragoza, MD, PhD, and Anna Grosberg, PhD

Jan. 30 | Neural stem cells. Sally Temple, PhD

Most lectures are held at 7 p.m. in the conference room at Sue & Bill Gross Hall, 845 Health Sciences Road, Irvine. Email quyenbd@uci.edu for more information.

SUPPORT GROUPS

To learn more about our support groups, call the numbers listed or visit ucihealth.org/events

AGE-RELATED MACULAR DEGENERATION
 888-430-9898

ART FOR THE SOUL
 714-456-2846

BARIATRIC SURGERY SUPPORT GROUP
 888-717-4463

BRAIN TUMOR EDUCATION/ SUPPORT GROUP
 714-456-5812

BURN SURVIVORS SUPPORT GROUP
 714-456-7437

HEART FAILURE SUPPORT GROUP
 714-456-7514

INFLAMMATORY BOWEL DISEASE SUPPORT GROUP
 714-456-7057

KOREAN WOMEN'S CANCER SUPPORT GROUP
 714-456-5057

MULTIPLE MYELOMA SUPPORT GROUP
 800-452-2873, ext. 233

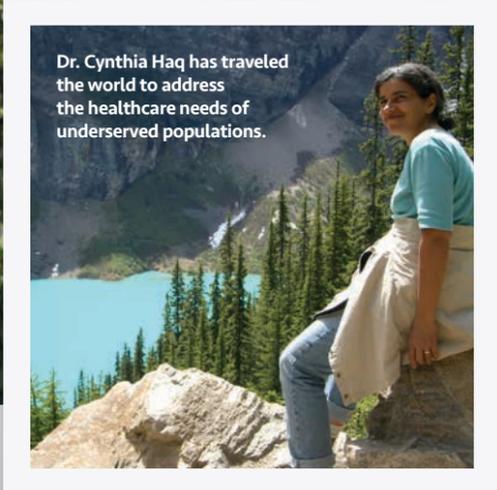
NORMAL PRESSURE HYDROCEPHALUS (NPH)
 714-456-6966

PANCREATIC CANCER SUPPORT GROUP
 714-456-7057

SUPPORT FOR ORAL, HEAD AND NECK CANCERS
 714-456-2846

TRIGEMINAL NEURALGIA ASSOCIATION SUPPORT GROUP
 714-730-1600

UNITED OSTOMY ASSOCIATIONS OF AMERICA, ORANGE COUNTY CHAPTER
 714-637-7971



Dr. Cynthia Haq has traveled the world to address the healthcare needs of underserved populations.

Photo: Montica Orozco

THE POWER OF COMMUNITY

Dr. Cynthia Haq is a professor and chair of the UCI School of Medicine's Department of Family Medicine. A longtime advocate for global health, she has focused her career on helping poor and medically underserved communities both in the United States and abroad. As a former professor of family medicine and population health sciences at the University of Wisconsin, she created and directed TRIUMPH, a program to train future physicians to provide healthcare in low-resource urban neighborhoods. She was also instrumental in establishing the first family medicine residency programs in Pakistan, Uganda and Ethiopia. Her work as physician, teacher, researcher and humanitarian has garnered her numerous awards, including two Arnold Gold Foundation Humanism in Medicine awards. Today she is committed to providing excellent healthcare and promoting health equity and medical education in Orange County.

“ Because my father was born in India and my mother in Indiana, I grew up in two very different cultures. This enabled me to value equity, diversity and inclusion and helped me develop flexible communication skills.

My seminal professional experience was promoting child survival in Uganda at the end of its civil war in 1986. The economy and health system had collapsed; there was no running water or electricity. The clinic in Uganda where I worked as medical director was a bombed-out shell; 1 in 3 children died before the age of 5. Yet dedicated health center staff members did their best to care for a half-million people. Before I arrived, the clinic had not had a doctor in 10 years. I learned about the power of community to promote health. Being a good clinician was important but insufficient to save many lives. I learned how to become a team member and an advocate to improve the health of populations.

I joined UCI's Department of Family Medicine because of its commitment to serve our entire community and to train the next generations of family physicians and geriatricians. We work closely with the community to understand and respond to our patients' needs. Our family physicians and geriatricians see patients across Orange County. We train our residents in federally qualified community health centers (FQHC) in Santa Ana and Anaheim. We believe everyone has the right to high-quality healthcare. Many of our patients live below the poverty line and struggle to make ends meet. We care for them regardless of their financial status. At least half our FQHC board members are patients and community members.

Diversity and inclusion are also important to me. Women and under-represented minorities in medicine bring valuable perspectives, yet they continue to face many barriers. While women represent 50% of U.S. medical students, only 15% of medical school department chairs are women. As a mother and grandmother, I want to help others transcend the glass ceiling and become effective leaders. Throughout my career, I've been able to pursue my passions and provide services that benefit other people. I hope to see more women and people from underrepresented groups enjoy these same opportunities.

— Dr. Cynthia Haq

LIVE YOUR HEALTHIEST LIFE



Start by choosing a UCI Health doctor

We will stop at nothing to give you the care you deserve. By choosing a UCI Health primary care doctor, you gain access to more than 500 specialists with Orange County's only academic health system. They work together to provide you and your family with compassionate, science-based care.

Your convenience matters, too. With locations across the region and the ability to message your doctor 24/7, we are here to help you become a healthier you.

Visit ucihealth.org/choose or call 844-310-9750.

UCI Health

To learn more, visit ucihealth.org/familymedicine

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At UCI Health, we are first for our patients and among the top 10 hospitals in California, nationally recognized for excellence in gastroenterology & GI surgery, geriatrics and gynecology by *U.S. News & World Report*.

With more Best Doctors in America® than any health system in Orange County, we touch hundreds of thousands of lives at locations throughout our region. Our relentless pursuit to advance care, find cures and improve health sets us apart from the rest.

Visit us at ucihealth.org/best-hospitals



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