

FIVE YEARS OF INNOVATION IN
INTEGRATIVE HEALTH

NEW PROCEDURE MAKES GERD
A DISTANT MEMORY

UCI Health

SUMMER 2023

live well

EXCEPTIONAL HEALTHCARE FOR SOUTHERN CALIFORNIA

Pedaling Past Cancer

A woman and her UCI Health team
fight back and find success.



WE'RE PROUD TO BE OUR REGION'S GO-TO CANCER RESOURCE.



This year almost 2 million Americans will be diagnosed with cancer and more than 609,000 will die of the disease, according to recent national data. Despite these daunting numbers, U.S. cancer deaths fell 1.5% between 2019 and 2020 (the most recent statistics available) and a stunning 33% since 1991.

At UCI Health, we are proud to be in the vanguard of national efforts to reduce cancer deaths and help people achieve long-term survival. When the Chao Family

Comprehensive Cancer Center and Ambulatory Care facility opens next year at our new medical campus in Irvine, we will triple our space dedicated to cancer care.

Our cover story on page 6 illustrates this dedication to cancer cures. Our lung cancer experts received a referral from a community oncologist for a woman who was told she had inoperable, terminal lung cancer. The patient landed in the right place, the only Orange county-based National Cancer Institute-designated comprehensive cancer center. It has a long, impressive history of lung cancer treatment, helping investigate and bring to fruition several therapies targeting key genetic mutations. Our experienced surgeons and medical oncologists were able to treat the patient's disease and restore her health and hope.

Our research on investigational lung and other cancer therapies is part of a large and ever-evolving roster of clinical trials that offer UCI Health patients access to potentially lifesaving treatments before they are available to the general public. Our commitment to research is yielding results in many other areas of medicine. On page 3, learn about a promising new stem cell-derived therapy for a type of myasthenia gravis, a debilitating muscular disorder. On page 12, we feature another treatment in clinical trials that offers a potential cure for gastroesophageal reflux disease (GERD).

Our commitment to high-quality, leading-edge care goes beyond traditional treatments and research to address quality of life and wellness. Last fall, the Susan Samueli Integrative Health Institute opened the doors of its striking new home on the UCI campus, marking the five-year anniversary of a \$200 million contribution from the Samueli family to bring evidence-based integrative medical approaches to healthcare. On page 10, Dr. Shaista Malik, executive director of the institute, eloquently describes the impact of this transformative gift and how team-based, whole-person care is improving people's lives.

From clinical trials to hands-on healing therapies, we embrace a broad range of treatment methods for cancer and other chronic disorders. Moreover, as Orange County's only academic-based health system, our job is to study, analyze and share our knowledge. As the declining national cancer mortality rates suggest, we at UCI Health have an inspiring story to tell.

Sincerely,

Chad T. Lefteris, FACHE
Chief Executive Officer
UCI Health

UCI Health

VICE CHANCELLOR, UCI HEALTH AFFAIRS
Steve A.N. Goldstein

CHIEF EXECUTIVE OFFICER, UCI HEALTH
Chad T. Lefteris

DEAN, UCI SCHOOL OF MEDICINE
Michael J. Stamos

ASSISTANT DIRECTOR, MARKETING
Camila Hernandez

ASSISTANT DIRECTOR, COMMUNICATIONS
John D. Murray

MANAGING EDITOR
Kristina Lindgren

DESIGN & EDITORIAL CONTRIBUTORS
Moontide Agency

ART DIRECTOR
Yuiko Sugino

EDITOR
Shari Roan

COPY EDITOR
Laura Watts

For comments or questions, contact
UCI Health Marketing & Communications at
3800 W. Chapman Ave., Suite 2400, 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 lifesaving research while improving health and wellness in our community and beyond.

We cannot succeed without you. Please consider becoming an active partner in charting our future path. With your support, we will make new medical breakthroughs, redefine patient care, educate the next generation of health professionals and promote physical and mental well-being in our communities.

To make a gift supporting 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. Your gift also supports UCI's Brilliant Future campaign.

BRILLIANT FUTURE
THE CAMPAIGN FOR UCI

TARGETING ANTIBODIES TO TREAT A RARE FORM OF MYASTHENIA GRAVIS

WRITTEN BY NANCY SOKOLER STEINER

The UCI Health ALS & Neuromuscular Center is one of only five U.S. locations participating in an early phase clinical trial targeting a rare form of myasthenia gravis, an autoimmune disorder that causes weakness and fatigue in one or more muscle groups.

The chronic disease, which affects an estimated 36,000 to 60,000 Americans, is challenging to treat. Dr. Ali Habib, a neurologist with the ALS center, is investigating a cell therapy that selectively attacks immune system antibodies that cause this more severe form of myasthenia gravis (MG). He believes this approach may lead to more effective therapies for all types of the disease.

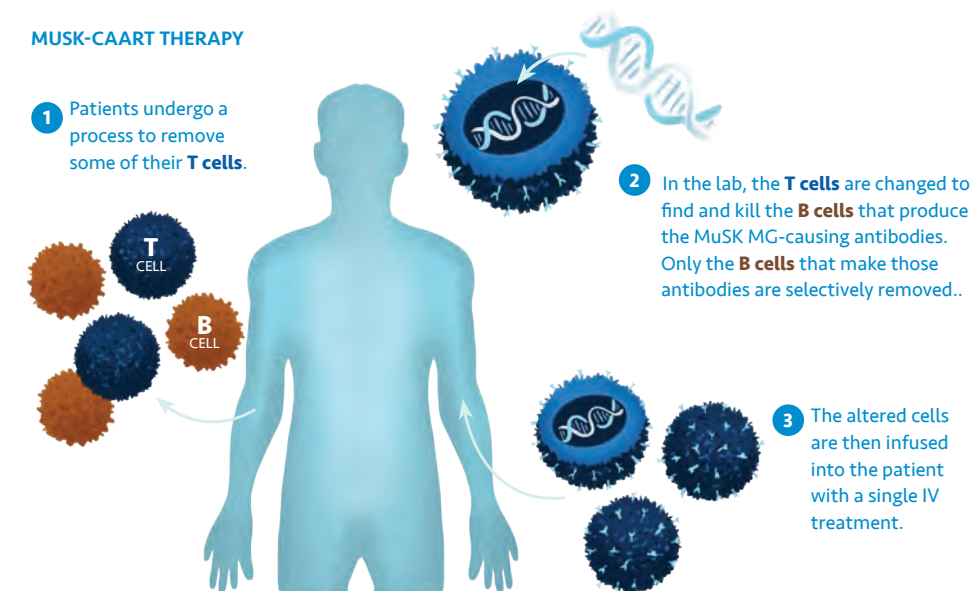
Muscle-specific tyrosine kinase myasthenia gravis (MuSK MG) affects muscles in the head and neck and can lead to difficulties speaking, swallowing and even breathing. MuSK MG flare-ups can be life-threatening. The few treatments available for MG involve suppressing the immune system but they don't work as well for MuSK MG as they do for other forms of the disease, Habib says.

Moreover, current treatments "are the equivalent of carpet bombing," he says. "They destroy the problematic immune cells but also ones that protect the body from bacterial infections and diseases such as COVID-19. This clinical trial involves destroying only the cells that cause the disease, which we hope will be associated with fewer and milder side effects."

MuSK-CAART, developed by Cabaletta Bio, is based on a cellular therapy called chimeric antigen receptor (CAR) T-cell therapy, which uses the body's disease-fighting cells to treat some types of cancer. CART involves removing white blood cells from the body, genetically

MUSK-CAART THERAPY

1 Patients undergo a process to remove some of their T cells.



2 In the lab, the T cells are changed to find and kill the B cells that produce the MuSK MG-causing antibodies. Only the B cells that make those antibodies are selectively removed.

3 The altered cells are then infused into the patient with a single IV treatment.

programming them to recognize and attack a specific type of disease-causing cell, then infusing the patient with the modified cells.

The MuSK-CAART therapy is even more precise. The extra "A" stands for autoantibody, the type of immune cell that causes MuSK MG. In this case, patient's white blood cells are modified to selectively remove only the cells that cause MuSK MG, leaving other immune cells intact.

"We are in the early stages, but our hope is to bring about improvement while limiting side effects and perhaps one day gain the ability to eliminate the disease," says Habib.

The trial is expected to enroll a total of 24 adults at UCI Medical Center in Orange and locations in Sacramento, Portland, Ore., Kansas City, Kan., and Chapel Hill, N.C. It is designed to test the safety and dosing of the therapy over a period of six years.

Habib is particularly proud that the ALS

& Neuromuscular Center is participating in the first-of-its-kind trial. "We are the only Southern California center involved in the trial and we have more than two decades of history conducting myasthenia gravis clinical trials. We also have amazing collaborations with our hematology, oncology and transplant medicine teams, which are very experienced with cell-based and CAR T therapies."

The ALS center also treats a range of neuromuscular disorders, including muscular dystrophy, Lou Gehrig's disease and myopathies. The center's specialists also are leading several other first-of-a-kind clinical trials for inherited muscle disorders such as Pompe disease, myotonic dystrophy and amyotrophic lateral sclerosis (ALS). ■

Learn more about treatment
for neuromuscular disorders at
ucihealth.org/ALScenter





**NATIONAL ACCREDITATION PROGRAM
FOR BREAST CENTERS
ACCREDITED BREAST CENTER**

**UCI HEALTH MEETS GOLD STANDARD
FOR HIGH-QUALITY BREAST CARE**

The UCI Health Breast Center has achieved accreditation for meeting rigorous quality measures set by the American College of Surgeons.

Recognition by the National Accreditation Program for Breast Centers (NAPBC) signals that UCI Health provides the highest quality comprehensive, multidisciplinary care for patients with breast disease. Patients also have access to information on clinical trials and new treatment options, genetic counseling and multidisciplinary patient-centered services including psychosocial support, rehabilitation services and survivorship care.

“Every member of the UCI Health Breast Center team is dedicated to providing our patients with compassionate care and the highest quality medical and surgical treatments,” says Dr. Kari J. Kansal, chief of breast surgery for UCI Health.

The UCI Health Breast Center is part of the Chao Family Comprehensive Cancer Center, the only National Cancer Institute-designated comprehensive center based in Orange County. This NCI designation reflects the university and health system’s deep commitment to advancing the scientific understanding of the causes of cancer through translational and clinical research to improve the standards of care and prevent the disease.

NAPBC accreditation applies to the breast centers in Orange and Costa Mesa, a designation achieved by only a handful of California centers. In 2024, UCI Health will open another breast center at the \$1.3 billion UCI Health — Irvine medical complex.

UCI Health, named one of America’s best hospitals by *U.S. News & World Report* for the 23rd consecutive year, also was:

- Recognized as one of the best U.S. hospitals for maternity care by *Newsweek* and *U.S. News & World Report*
- Named one of the best U.S. cancer hospitals by *Newsweek*
- Listed as one of the top U.S. oncology centers by *Becker’s Hospital Review*
- Recertified by the ASCO Quality Oncology Practice Initiative (QOPI), with the Chao Family Comprehensive Cancer Center achieving the highest recognition for providing quality clinical care.

**MAJOR GRANT TO FUND
ANTIBIOTIC RESISTANCE IN
NURSING HOMES**

A team led by the UCI School of Medicine and UCI Health has been awarded a \$13.7 million grant by the National Institute of Allergy and Infectious Diseases to address the rise in multidrug-resistant organisms (MDROs) in nursing homes throughout the United States.

Six antibiotic-resistant MDROs deemed as serious and urgent national health threats will be studied by a national team of investigators led by UCI Health infectious diseases expert Susan S. Huang, MD, MPH.

The study will examine one of the world’s largest compilations of specimens from healthcare facilities: 16,000 samples collected for previous and future studies from residents and environmental surfaces of 50 U.S. nursing homes. It is the first time all six major MDROs will be investigated using multiple scientific methods at the same time.

“Despite having a large number of residents at risk for multidrug-resistant organism spread and disease, nursing homes remain understudied and effective interventions are needed,” says Huang, medical director of epidemiology and infection prevention at UCI Health and principal investigator of the five-year study. She is one of the nation’s leading researchers seeking ways to reduce MDRO spread and infection in healthcare settings.

MDROs are a serious problem for the 1.4 million people living in the nation’s 15,000 nursing homes. Huang says an estimated 65% of them harbor MDROs, four to six times what is seen in hospitals. Collectively, these MDROs cause about 590,000 infections and 26,000 deaths in the U.S. every year.

The study seeks to identify the best detection methods, sources and drivers of MDROs’ spread, major risk factors for colonization, infection and hospitalization, as well as develop infection prevention policies and reduce hospitalizations and deaths.



Dr. Susan S. Huang



The Anti-Cancer Challenge has raised more than \$3.7 million for home-grown research projects.

**ANTI-CANCER CHALLENGE AWARDS
\$1.1 MILLION FOR BREAKTHROUGH RESEARCH**

Participants, donors and supporters of the UCI Anti-Cancer Challenge raised more than \$1.1 million in 2022, helping to fund a diverse range of innovative cancer research projects at the UCI Health Chao Family Comprehensive Cancer Center and its pediatric cancer affiliate, Children’s Hospital of Orange County.

Since 2017, the Anti-Cancer Challenge has awarded grants to 28 pilot studies and early phase clinical trials, reaching a remarkable milestone of 100 funded projects. This seed money has helped launch innovative research that has attracted larger grants, says Dr. Richard A. Van Etten, director of the cancer center and founder of the UCI Anti-Cancer Challenge.

“Since 2017, awardees have leveraged over \$3.7 million in UCI Anti-Cancer Challenge grants to secure an additional \$33.3 million in extramural funding,” he says. “This substantial funding has provided researchers with the necessary resources to accelerate their progress, making significant strides in cancer research that will lead to improved therapies and treatments for cancer patients everywhere.”

Among the latest awards is renewed funding to continue exploring the potential of adding a statin medication to improve the effectiveness of an existing therapy for acute myeloid leukemia. This phase 2 clinical trial builds on work by David Fruman, PhD, from the UCI School of Biological Sciences, and Elizabeth Brém, MD, from the UCI School of Medicine, research that subsequently was awarded a U.S. Department of Defense grant of \$1.3 million.



**UCI HEALTH
HONORED FOR
ENVIRONMENTAL
INITIATIVES**

UCI Health has once again been recognized as a national leader in environmental sustainability by Practice Greenhealth. The academic health system earned two Circle of Excellence Awards and the Greenhealth Emerald Award for a second time. It was also honored for the first time with a Greening the OR Award Recognition.

“This is absolutely an across-the-board team effort and only validates and confirms what we are trying to do here,” says UCI Health CEO Chad T. Lefteris.

Practice Greenhealth is the nation’s leading organization dedicated to environmental sustainability in healthcare. Its Circle of Excellence Awards recognize up to 10 hospitals in 11 categories. Hospitals chosen are sustainability high performers that have made a demonstrable impact and reached target metrics in their awarded categories. UCI Health was awarded in the energy and climate categories.

Since 2022, UCI Health has reduced anesthetic gas emissions by 25% and has committed to further reductions. UCI Health — Irvine will be the nation’s first all-electric, carbon-neutral hospital when it opens in 2025. The seven-story, 350,000-square-foot hospital will be powered by a 45,000-square-foot central utility plant that uses no natural gas.

Beating Cancer at the Genetic Root

A woman diagnosed with terminal lung cancer finds hope and recovery from her UCI Health oncology team.

WRITTEN BY NANCY BRANDS WARD
PHOTOGRAPHED BY MICHAEL DER

Michelle Helm's lung cancer journey began as a frustrating, frightening ride through multiple misdiagnoses. Then she found UCI Health specialists who wouldn't accept the worst-case scenario other doctors had painted for her.

Today, the 57-year-old parenting coach is thriving, she says, because she was referred to the lung cancer specialists at the UCI Health Chao Family Comprehensive Cancer Center, where she benefitted from their arsenal of advanced therapies and surgical expertise.

"Before I got to UCI Health, I was feeling lost and frustrated," says Helm. "Nobody was listening to me. I felt that nobody was on my team."

Lung cancer is the leading cause of U.S. cancer death for men and women, and it is too often detected at an advanced stage. "It's not the most common cancer, but it's the deadliest," says Dr. Ali Mahtabifard, director of thoracic surgery at UCI Health and a member of the lung cancer team.

Helm's odyssey began in April 2021 when she found herself coughing and struggling for breath, her heart beating wildly a few hours after eating conch — a shellfish delicacy — on a Florida vacation. After returning home to Mission Viejo, her condition worsened. Her cardiologist sent her to a lung specialist who said she had asthma. The steroid inhalers he prescribed made it harder to breathe and triggered a yeast infection in her throat, making her cough worse.

With the COVID-19 pandemic still raging in spring 2021, it took almost four months to get a second opinion. A CT scan revealed abnormal white lines in the upper lobe of one lung. The new pulmonologist suggested a bronchoscopy to investigate further.

Afraid it was cancer, Helm asked for a lung biopsy. The biopsy surgeon told her the tissue looked odd, "very spongy." At her daughter Tanna Bettendorf's urging, she asked that a sample be sent for genetic testing. Bettendorf, a chemist, had helped develop a promising drug to target a gene called BRAFV600E linked to many types of cancer.



Told she had only months to live, Michelle Helm instead got advanced drug therapy targeted at her lung cancer mutation at UCI Health.

SIX MONTHS TO LIVE

In early August, she met with a community hospital oncologist who reviewed the biopsy results. "I walk in, he sits me down and tells me I have terminal lung cancer, that surgery isn't an option and that I have, at best, six months to live."

Helm's daughter asked him about the genetic test results. Unaware of that test, he said her records didn't show any indication of a genetic mutation.

Stunned, they went home and gathered the family together to share the devastating news. The phone rang an hour later. The oncologist said he'd made a mistake. He found the test, which showed her cancer did have the BRAFV600E mutation, but he didn't know how to treat it. He vowed to refer her to "the best oncologist."

"It was like I'd been punched in the gut," Helm says.

Three days later, she saw UCI Health medical oncologist Dr. Sai-Hong Ou,

a nationally recognized expert in complex lung conditions. He brought in Mahtabifard, the thoracic surgery director.

After reviewing her case and newly ordered lung scans, the doctors thought they could help. If they could kill the cancerous tissue in her right lung, she could undergo surgery and improve her chances for long-term survival.

"We offer alternatives when the standard of care is exhausted," Ou says, explaining why doctors throughout the region often send their most challenging cases to the cancer center.

TEAM MICHELLE

Finally, Helm had a medical team in her corner. "Once I got to UCI Health, I felt like I was on a bullet train of hope," she says. "I didn't have to wait for anything. They knew if they didn't move quickly, I would die."

Genetic mutations are common in lung cancers, especially among nonsmoking patients like Helm.

Identifying which one is essential because several game-changing therapies have been developed to target specific mutations, says Ou, a UCI School of Medicine professor of hematology/oncology and the Hamoui Salous Endowed Chair for Thoracic Oncology Research.

"We look for different mutations to make sure we exhaust treatment options," Ou says. "We check for all of them using the most advanced tests available. We can pick up mutations that other institutions may have missed or got wrong."

At stage III, Helm's cancer was advanced but localized. Ou started her on an oral medication designed to target primary lung cancers with certain genetic mutations. Three months later, there was no sign of active tumor growth.

On Dec. 8, 2021, Mahtabifard removed the top third of Helm's right lung. It was a difficult surgery, he says, complicated by scar tissue from the earlier operation and

"Once I got to UCI Health, I felt like I was on a bullet train of hope."

residual tumor tissue that had turned the consistency of concrete.

Thoracic surgeries have grown exponentially at UCI Health since Mahtabifard was recruited in 2018 to head the program. Before his arrival, the health system averaged 14 lung surgeries annually. Today, he and fellow thoracic surgeon Dr. Hari B. Keshava perform close to 300 a year. A third surgeon is expected to join the team this fall.

Next, Helm underwent four weeks of radiation in early 2022. At Ou's direction, she has continued oral medication targeting gene mutations like hers to protect against recurrence. A recent scan in April found no sign of cancer activity.

NOT JUST ONE CANCER

"Lung cancer is not just one cancer," says Ou, who has participated in high-profile clinical trials that have led to numerous therapies approved by the U.S. Food and Drug Administration.

"It's like buying a car. You have the model, specifications and options. Lung cancer is the same. There are different types based on the mutation and survival depends on finding a treatment for that mutation."

This approach is often called precision medicine because it targets the biological underpinnings of the specific gene mutation that spurs cancers to grow.

"There are now at least 10 different mutations for which there is an FDA-approved targeted therapy for lung cancer," Ou says. "If you have a mutation, we can give you targeted therapy pills instead of chemotherapy."

Lung cancer may still be the No. 1 cause of cancer deaths, but the prognosis for patients is "changing before our eyes," says Mahtabifard. "These immunotherapies are allowing many patients with advanced stage disease to live long and fulfilling lives."



Helm wears these red sequined slippers to every medical visit and procedure.

A SECOND CHANCE

Reflecting on her winding path from an unfortunate shellfish dinner to a terminal diagnosis to recovery, Helm is grateful for the expert care she received. She still arrives for each visit and procedure wearing sequined ruby red slippers sent to her in a care package by a friend whose Red Slipper Warrior Project supports women and girls fighting cancer. She even awoke from her lung surgery to find them still on her feet in the recovery room.

Today she feels healthy and her prognosis is good. She continues to work as a parent educator and she stays active, riding her electric bike — named Spicy Red Dog Warrior — to the beach and zipping up and down the hills of Mission Viejo.

Helm is also getting in shape for the UCI Anti-Cancer Challenge on Oct. 7, the cancer center's seventh annual bicycle ride, run and walk to raise awareness and funds for critical cancer research. The community-based event at UCI's Aldrich Park will feature 5K and 10K runs and

walks, and bicycle rides of 14- to 100-mile distances. For the first time, there will also be a mountain bike trail ride.

"I love that the money all goes to research at the cancer center," she says. "If it wasn't for UCI Health, I would be dead. Dr. Ou and Dr. Mahtabifard saved my life — they're my heroes."

Helm recently had a conch shell tattooed on her ankle, a reminder that her lung cancer might not have been found in time if not for her reaction to eating the shellfish. She also makes it a practice to give other women cancer warriors a pair of red slippers as encouragement to "stay strong and fight this horrible disease," she says.

"I got a second chance at life. I do have a miracle story." ■

Learn more about
lung cancer services at
ucihealth.org/lungcancer



During her treatment, Helm often found herself at the Oso Creek Trail prayer garden, seeking strength and courage.



Dr. Shaista Malik, executive director of the Susan Samueli Integrative Health Institute, plans to expand research at multiple sites across the country to assess integrative health outcomes.

TREATING THE WHOLE PERSON

The Susan Samueli Integrative Health Institute celebrates five years of progress.

WRITTEN BY SHARI ROAN | PHOTOGRAPHED BY KIMBERLY PHAM

The new home of the Susan Samueli Integrative Health Institute opened on the UCI campus in October 2022, just five years after philanthropists Susan and Henry Samueli donated \$200 million to UCI's College of Health Sciences to combine scientifically informed integrative approaches such as acupuncture and meditation to improve healthcare. We asked Dr. Shaista Malik, the institute's executive director, to describe the progress in integrative health over the last five years and how treating the whole person is becoming an important part of the UCI Health approach to patient care.

What was the goal in founding the Susan Samueli Integrative Health Institute five years ago?

In 2017, when Susan and Henry Samueli made this

transformative gift, it was to establish integrative health as an important mission for health sciences at UCI. Our partnership with UCI Health enables us to deliver the nation's highest volume of integrative healthcare. The aspiration was to bring all the things we've learned in integrative health over the years into current clinical practice. The best of integrative health that we practice daily is really a differentiator — not only in Orange County but regionally and nationally.

How has the institute evolved in the last five years?

We didn't realize five years ago how much interest there is in integrative health, not only from patients who come to UCI Health but also among our clinicians and healthcare practitioners who want training in integrative approaches. That has led us to

create more training programs, including integrative health tracks in medical residency and nursing programs. With the support of UCI Health, we launched integrative nursing in 2020, a month before the pandemic began, hoping that 20% of the workforce would be interested. More than 90% of our nurses completed integrative training modules because they found the material to be so relevant to bedside care. Our primary care doctors offer care enhanced with integrative medicine and our specialists have embraced integrative health as part of a team-based approach. Our integrative health programs for medical students and residents attract trainees from a wide variety of primary and specialty care disciplines. And our culinary medicine and other integrative health electives now draw students from all disciplines within the Susan & Henry Samueli College of Health Sciences.

How does the new building support your programs and goals?

Our new flagship location offers unique spaces for interdisciplinary teaching and research collaborations, community education and innovative, whole-person care. Under one roof, patients learn how to improve their health in one-on-one appointments with our clinicians and health practitioners, group medical visits and a variety of classes in mindfulness and food as medicine. All our indoor and outdoor spaces, including our herb garden and cooking kitchen, were designed to provide a calming environment and promote wellness.

How do you support patient education?

To support patients on their health journey, we provide resources to assist them with behavioral and lifestyle changes. We offer group medical visits in integrative cardiology, integrative cancer care, healthy weight and long COVID-19. Our wellness coaches also partner with patients to help them achieve their health goals.

What initiatives are you planning for the future?

In coming months, we'll be offering biometric and functional assessments to support our patients on their journey toward whole health. These high-touch exams may include body composition analysis, balance, cardiometabolic and cognitive testing to develop personalized health plans. We're expanding our team of clinicians and caregivers and partnering with specialty services to incorporate integrative health approaches for all UCI Health patients. Our research team is growing and we are recruiting endowed chairs within the schools of medicine, nursing, public health, pharmacy and pharmaceutical sciences.

How have your initiatives influenced the UCI Health approach to healthcare?

It is exciting to see the innovative models UCI Health is using to adopt a whole-person approach as an integral part of patient care. Integrative health is about seeing patients as unique individuals and recognizing that their health is affected by many things, including emotional, mental, physical, social and environmental factors. It won't be long before integrative care is incorporated across all UCI Health services.



Exercise physiologist Efrain Cerrato talks with Malik, a leading UCI Health cardiologist, at the institute's new cardiac rehabilitation facility.



Malik admires the abundant crop of herbs and vegetables growing in the institute's garden with acupuncturist Heather L. Rice, left, and integrative family medicine physician Dr. Miki Purnell, right.

A LONG TRADITION OF INTEGRATIVE HEALTH

For more than 20 years, UCI has received National Institutes of Health (NIH) funding for integrative medicine studies. In 2001, a \$5.7 million dollar gift established the Susan Samueli Center for Integrative Medicine. In 2017, the institute was created as part of the transformational \$200 million dollar gift for the Susan & Henry Samueli College of Health Sciences. Today, the institute is setting national benchmarks for integrative health research, training and clinical care.

Integrative health impacts for fiscal year 2021-2022:

- \$11.97 million in NIH grants for integrative health research
- 92% of UCI Health nurses trained in integrative nursing
- 207 UCI School of Medicine students trained
- 7,822 inpatient acupuncture treatments
- 12,492 integrative nursing interventions

Learn more about integrative healthcare at ucihealth.org/samueli-institute



Savoring a Cup of Coffee and More

A new procedure for GERD associated with hiatal hernias is a winner for the right patients.

WRITTEN BY PATRICK J. KIGER
PHOTOGRAPHED BY MICHAEL NEVEUX

When psychiatrist Gerald Maguire was in medical school decades ago, he began to experience “a horrible discomfort” in his chest. He first thought it was the result of long nights studying and working, and a poor diet. Over-the-counter antacids didn’t help.

A few years later when he was a resident, Maguire was diagnosed with gastroesophageal reflux disease (GERD), a condition that affects millions of Americans. It occurs when stomach acid flows back into the esophagus — the tube connecting the mouth and stomach — and irritates the esophageal lining.

Zantac and proton pump inhibitors such as omeprazole gave him some relief but he still had to prop himself with pillows to sleep. He also avoided anything spicy or too acidic. Over time, those measures became less effective. Finally, a doctor treating Maguire’s father for a hiatal hernia suggested Maguire get checked to see if he had one, too. Sure enough, a diagnostic endoscopy in February 2022 revealed a sliding hiatal hernia that allowed the top of his stomach to push through a 4- to 5-centimeter opening in his diaphragm, the thin muscle that separates the chest and abdomen. This was the cause of Maguire’s GERD.

While hiatal hernias are sometimes left untreated, Maguire didn’t want to face several more decades of pain and

possible cancer risk like his late father.

He turned to Dr. Kenneth Chang, executive director of the UCI Health Digestive Health Institute, who has developed a state-of-the-art surgical procedure called concomitant transoral incisionless fundoplication (cTIF). For patients who don’t get adequate GERD relief from medication and behavior modification — weight loss, exercise and diet — surgery to reconstruct and strengthen the esophageal valve is a good option.

The most common surgical procedure, laparoscopic Nissen fundoplication (LNF), entails wrapping the top of the stomach around the esophagus. It is quite effective but has potential downsides because it tightens the esophageal opening to the stomach more than is normal, Chang says. A normal valve can prevent excess acid from refluxing into the esophagus, yet allow gas to vent from the stomach and intestine and regurgitate when necessary. This is why some LNF patients have good GERD control but are unable to burp to relieve gas or to vomit.

The cTIF procedure, which combines laparoscopic hiatal hernia repair with endoscopic transoral incisionless fundoplication (TIF), only partially wraps the esophagus. There’s less risk of a too-tight fit causing unwanted side effects because cTIF “restores the valve as close to

its natural functioning as possible,” he says.

Another advantage is that cTIF allows easier access to strengthen the esophageal valve a decade or two later if it loosens. Redoing an LNF requires taking apart the old fix and rewrapping the stomach around the esophagus. With cTIF, if the hernia hasn’t recurred, the valve can be tightened endoscopically, which is easier and less invasive, Chang says. “We don’t have to take everything down in order to tighten it.”

Chang worked with UCI Health gastrointestinal surgeon Dr. Ninh T. Nguyen to pioneer cTIF. Over the last few years, they have performed about 300 of these procedures.

Maguire underwent cTIF last September and was sent home the next day after a confirmatory upper GI X-ray. He followed a careful diet for six weeks, starting with liquids then gradually transitioning to soft and solid food. He now enjoys dishes that were strictly off-limits, such as “spicy pasta sauces, garlic and even coffee,” he says. “I used to get some reflux, but now I can enjoy a cup of coffee in the morning!”

Maguire is delighted that he no longer needs medication to control his reflux. “My quality of life is so much better. I’m able to enjoy a nice meal and a glass of wine with my wife and daughter.” ■

Learn more about GERD treatments at ucihealth.org/gerd



After 30 years of suffering with GERD, Dr. Gerald Maguire no longer has to worry about painful acid reflux after eating.



A crowd of construction workers and UCI Health leaders cheer as a crane lifts the final structural beam to the roof of the new hospital at UCI Health — Irvine.

PHOTOS BY KAREN TAPIA

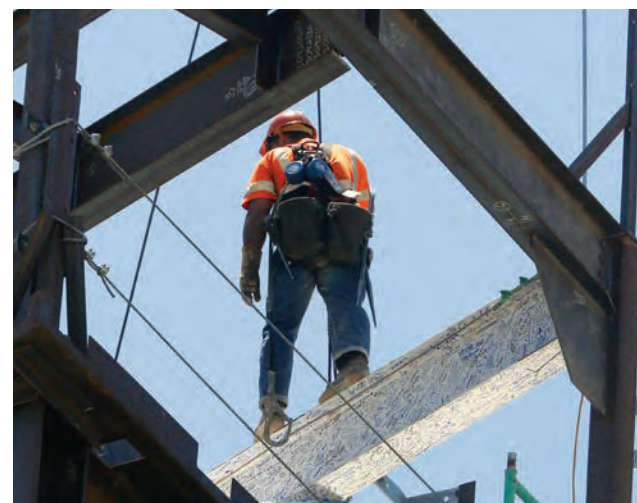
The “topping-off” ceremony, a tradition begun centuries ago in Europe, completes the framework of the third and final building of the \$1.3 billion project, which includes the Chao Family Comprehensive Cancer Center and Ambulatory Care building as well as the Joe C. Wen & Family Center for Advanced Care. Both will open in 2024.

During the ceremony, UCI Health CEO Chad T. Lefteris thanked the assembled construction crews for their dedication to the construction project, which will usher in a new era in healthcare for hundreds of thousands of future patients.

Then Lefteris and UCI School of Medicine Dean Dr. Michael Stamos — each capturing the event on their mobile phones — watched in awe along with hundreds of crew members and UCI Health employees as the beam was lifted into the air and guide into place on the hospital’s roof.



UCI Health CEO Chad Lefteris, left, and Dr. Michael Stamos.



FINAL BEAM TOPS NEW HOSPITAL

In an event filled with anticipation and camaraderie, UCI Health leaders and construction team members cheered as the last structural beam “topped” the seven-story acute care hospital at the new UCI Health — Irvine medical campus under construction in Irvine. Before the massive girder was hoisted atop the hospital tower on July 13, it was signed by more than 100 UCI Health co-workers and Hensel Phelps construction crews eager to leave their mark on what will be a major addition to Orange County’s healthcare landscape when it opens in 2025.

JOINING THE CALL TO END GUN VIOLENCE

UCI Health caregivers commemorated National Gun Violence Awareness Day on June 2 in a ceremony at UCI Medical Center to remember those who lost their lives to gun-related injuries. On the lawn in front of UCI Douglas Hospital, Orange County’s leading trauma center, UCI Health trauma team members and co-workers gathered as a flag was raised calling for an end to gun violence. Flanked by a display of 157 orange flowers to mark each Orange County life lost to firearm-related injuries in 2022, trauma surgeon Dr. Theresa Chin called it day to reflect on how to collaborate as a community to create a safer future, one that ensures no one is hurt by gunfire.



Dr. Theresa Chin, center, reflects on lives lost to gun violence.

HEALTH CLASSES

Improve your well-being and prevent disease with our health classes. Nearly all are free, but some do have fees. Most classes are being held online via Zoom.

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

Visit ucihealth.org/events or call 657-282-6357 for more information.

ACUPRESSURE FOR LABOR PAIN

Sept. 14, Oct. 12, Nov. 9, | 7-8 p.m.

ADVANCE DIRECTIVES

Sept. 7, Nov. 2 | Noon-1:30 p.m.

BARIATRIC SURGERY & WEIGHT LOSS

Sept. 19, Oct. 17 | 6-7 p.m.

BREASTFEEDING

Sept. 7, Oct. 5, Nov. 2, Dec. 7 | 6-9 p.m.

HEALTHY LIVING

Aug. 29, Sept. 12, Sept. 26 | 3-4 p.m.

LIVING WELL WITH HEART FAILURE

Sept. 12, Dec. 12 | 4-5:15 p.m.

PREPARING FOR SURGERY — MIND, BODY AND SPIRIT

Sept. 5, Oct. 2, Nov. 6, | Noon-1:30 p.m.

PLANT-BASED COOKING WORKSHOP

Sept. 6 | 5:15-6:30 p.m.

STROKE PREVENTION

English: Sept. 27, Nov. 29 | 4-5 p.m.
Spanish: Sept. 26, Nov. 28 | 4-5 p.m.
To register, call 866-STROKE-3 (866-787-6533).



MEDICARE OPTIONS FOR 2024

Join one of our free virtual Medicare Insurance Plan Option classes to learn about plans accepted at UCI Health in 2024 and information to help decide the coverage that best suits your needs.

Sept. 13; Oct. 4, 11, 18, 25; Nov. 2, 8, 16, 29 | 5-6:30 p.m.

Classes will cover basic Medicare, Medicare supplemental plans and Medicare Advantage PPO plans.

For questions or to register, call 714-456-2210. Registration is required to receive the Zoom link. All classes are hosted by a UCI Health representative.

EVENTS

UCI Health and UCI are proud to sponsor community events and lectures that offer information about a variety of health issues. Most lectures and events are now being held in person.

UCI ANTI-CANCER CHALLENGE

Learn what's new in cancer care at our UCI Anti-Cancer Challenge webinars. Get links to the free 1 p.m. online presentations at anti-cancerchallenge.org

Aug. 16 | Advances in Minimally-Invasive Urologic Care and Genitourinary Malignancies — Roshan Patel, MD, director, UCI Health Kidney Stone Center

Sept. 13 | Early-onset Colorectal Cancer: Insights and Innovations in Diagnostics and Treatments — Kenneth Chang, MD, executive director, UCI Health Digestive Health Institute

INTEGRATIVE HEALTH SYMPOSIUM

The UCI Susan Samueli Integrative Health Institute will host its inaugural symposium to showcase the latest research and trends in whole-person care.

The event will be held Oct. 12 from 9 a.m. to 3 p.m. in the Sue Gross Auditorium at the Susan & Henry Samueli College of Sciences, 856 Health Sciences Road, Irvine. Admission is free. Register at bit.ly/ssihi-ihs2023 by Oct. 2.

NEWPORT BEACH LIBRARY 'MEDICINE IN OUR BACKYARD' LECTURE SERIES

Learn the latest in healthcare from these UCI Health practitioners:

Sept. 25 | Managing Pain: How do I know What's Right for Me? — Shalini S. Shah, MD, and Richard Harris, PhD

Oct. 23 | Healthy Aging: Boosting Your Health as You Age — Lisa M. Gibbs, MD

Presentations begin at 7 p.m. at Newport Beach Central Library, 1000 Avocado Ave., Newport Beach. Doors open at 6:30 p.m. A Q&A will follow the presentation. Visit nbplf.foundation/programs/medicine-in-our-backyard to register for these free lectures.

SUE & BILL GROSS COMMUNITY STEM CELL SEMINARS

Learn about the latest advances in stem cells from these researchers:

Sept. 5 | DNA Damage Repair in Huntington's Disease — Leslie Thompson, PhD

Oct. 3 | The Circadian Clock and Diseases of the Skin — Bogi Andersen, MD

Nov. 7 | Neural Stem Cell Fate in Development and Repair — Medha Pathak, PhD

Presentations begin at 7 p.m. at Gross Hall, 845 Health Sciences Road, Irvine. To register, email stemcell@uci.edu or call 949-824-3990.

GAVIN HERBERT EYE INSTITUTE COMMUNITY LECTURES

Learn the causes, symptoms and treatments for eye-related conditions.

Sept. 12 | My Aging Eyes: When Should See a Doctor? — Kavita K. Rao, MD

Oct. 10 | Strabismus and Children's Vision — Charlotte Gore, MD

Visit ophthalmology.uci.edu/events to register for these free online lectures, which begin at 7 p.m. To learn more, please email ghei@uci.edu or call 949-824-7243.

SUPPORT GROUPS

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

ADVANCED HEART FAILURE & VAD
714-456-7514

BARIATRIC SURGERY
714-456-6185

BLADDER CANCER
714-456-2846

BRAIN INJURY
714-509-2524

BURN SURVIVORS
714-456-7437

CHRONIC LYMPHOCYTIC LEUKEMIA
tevans@cillsociety.org

DIABETES
diabetessupportgroup@uci.edu

GLIOBLASTOMA
714-456-5812

HEAD AND NECK CANCER
714-456-2846

INFLAMMATORY BOWEL DISEASE
714-456-7057

KOREAN WOMEN'S CANCER SUPPORT GROUP
714-456-8319

LIVER DISEASE
714-456-7642

MULTIPLE MYELOMA
800-452-2873, ext. 233

NORMAL PRESSURE HYDROCEPHALUS (NPH)
714-456-6966

OSTOMY ASSOCIATION OF ORANGE COUNTY
714-637-7971

PANCREATIC CANCER
714-456-7057

PARKINSON'S DISEASE
blagasse@hs.uci.edu

STROKE
866-STROKE-3 (866-787-6533)

TRIGEMINAL NEURALGIA ASSOCIATION
714-944-3044

YOUNG ADULT CANCER
714-509-6311



For emergency department nurse Thien (Tim) Do, caring for the sickest of the sick is a calling, despite the risks.

PHOTO BY MICHAEL DER

SURVIVING ON THE FRONTLINES OF COVID-19

Thien (Tim) Do brings a unique perspective to his work as an emergency department (ED) nurse at UCI Medical Center. He'd earned a college degree in computer engineering but became a licensed vocational nurse after the internet bubble burst in 2000. The married father of three then earned an RN degree and joined UCI Health in 2013.

When news of a mysterious virus later named COVID-19 began to circulate in early 2020, Do paid close attention. He and his ED colleagues began to educate themselves and prepare as best they could. Then in late April 2020, he fell gravely ill. Do survived but today he worries that society is taking the disease and its lessons too lightly.

He knows the pandemic has led nurses to leave the profession in droves, but he still loves the job. Yes, working in the ED is a hazard. That's why he advises nurses in training to take all precautions to protect themselves and their family — and to get every vaccine available.

“When the first COVID-19 cases began to appear in our ED, we were all on pins and needles. We knew the onslaught was going to come, but we didn't know how to prepare or to prevent getting it. In late April, I developed flu symptoms. It got to the point where I couldn't get out of bed. I couldn't walk 10 feet without having to hold onto something. My pulse oxygen level dropped to 82. Anything 80 or below, you need to get to the ED. By that time, I'd been sick for about a month. We didn't have any treatment that worked yet.

I'd been following COVID-19 statistics closely. With my symptoms and low pulse oxygen rate, I knew if I went to the ED I would be automatically intubated. I'd read that only 10% of the people in New York City who were intubated made it through. I decided to take my chances. I told my wife, 'If I'm going to die, I'd rather it be in my own bed.'

Was that ever scary! I could barely breathe. One night, I called my family in. I told them if I didn't last the night, I wanted to say how much I love them. I told my wife to keep an eye on the pulse oxygen level; if it went below 80, to call the paramedics. My kids were 17, 12 and 10 at the time. I don't think they realized how close to death I was. I told myself, it's in God's hands now. He let me survive. But it took almost four months to get to the point where I could function. It took me a year to get my breathing back.

It wasn't just me who got sick at work. We were dropping like flies. We had lots of traveling nurses filling in. It's definitely hard work. But in the ED, we basically just soldier on. My wife got sick too. I don't know that people realize healthcare workers put their lives on the line. I'm not saying we're heroes or anything, but you put yourself and your whole family at risk.

Nursing is a calling. I think God put me here for a reason: to take care of people. I could certainly move on and do something else, but I still love being in the ED, helping to get people stabilized.

— Tim Do, RN

UCI Health

Expert care within reach.

No matter who you are or what you need, we are here for you with the groundbreaking care you deserve.

From primary care to specialty care and clinical trials, UCI Health offers compassionate, evidence-based care delivered by world-renowned experts who are part of Orange County's only academic health system.

[Learn more at ucihealth.org](https://ucihealth.org)



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UCI Anti-Cancer Challenge

LEAD THE CHARGE AGAINST CANCER.

On Oct. 7, ride, run or walk with your friends and family and enjoy a day dedicated to supporting life-saving research. Every participant-raised dollar directly funds pilot studies and early phase clinical trials at the UCI Health Chao Family Comprehensive Cancer Center that aim to develop new insights into cancer prevention, treatment and cures — to save lives.

CHALLENGE DAY

Oct. 7, 2023 | UCI Aldrich Park

REGISTER NOW!

To learn more, visit anti-cancerchallenge.org

BRILLIANT FUTURE
THE CAMPAIGN FOR UCI