

RECOGNIZING A STROKE
AND ACTING FAST

FINDING A FIX FOR
AGE-RELATED FRAILITY

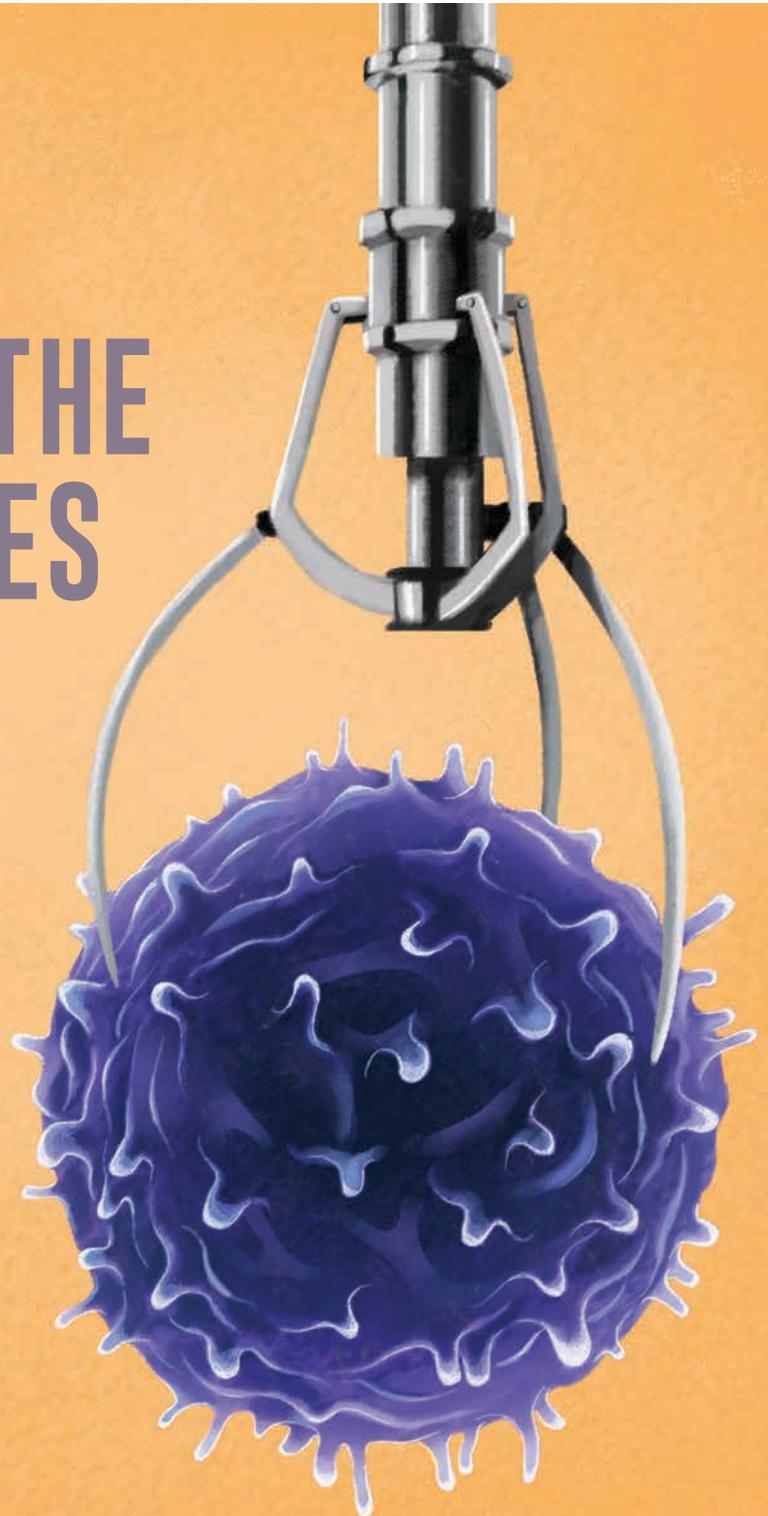
UCI Health

WINTER 2019

live well

SMARTER HEALTHCARE FOR SOUTHERN CALIFORNIA

**CAPTURING THE
COMPLEXITIES
OF CANCER**



A HIGHER LEVEL OF CARE FOR ORANGE COUNTY



Just as Orange County and the surrounding region has grown and changed dramatically in the past 50 years, so too has UC Irvine Medical Center. Now known as UCI Health — a system that encompasses our medical center in Orange and all of our many institutes and outpatient offices across the region — we have undergone a radical transformation. We are big, bold and have become a critical healthcare resource in Southern California.

Nowhere is our rise to prominence better illustrated than

with the cancer research programs underway at the UC Irvine Chao Family Comprehensive Cancer Center in Orange and on our UCI campus in Irvine. In this issue of *Live Well*, I invite you to read about the surge in studies, programs and clinical trials that are transforming how we think about and treat cancer (page 6). UCI Health scientists are leading a major new international trial of a treatment for a deadly type of brain cancer. We also are working to develop immunotherapy drugs that are effective not only for small numbers of patients but for most patients. And our longstanding systems biology program on the UCI campus is so far ahead of its time that the National Cancer Institute recently named us as one of just 13 research institutions nationwide that are charged with delving into the most complicated mysteries of the disease.

All Southern Californians benefit from these efforts. We offer state-of-the-art care as well as numerous cancer clinical trials that are testing promising new treatments. Clinical trials offer cancer patients with the most challenging types of disease a chance to try emerging therapies long before they are available elsewhere. Such trials are typically offered only at top national cancer centers.

You can take great pride in this progress. Patients who enter clinical trials push the pace of innovation. The thousands of people who have participated in or supported our annual Anti-Cancer Challenge to ride, run or walk also bring their enthusiasm and generosity to the fight against cancer.

Far from being followers of medical progress, we are leading the way. We're doing it for the health and well-being of the people in our region, as well as for cancer patients everywhere. ■

Kind regards,

Richard J. Gannotta, DHA, FACHE
Chief Executive Officer, UCI Health System

UCI Health

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The information contained in this magazine is not meant to replace the advice of your physician.

YOU MAKE THE DIFFERENCE

Few things in life matter more than your health. If you or someone close to you has experienced UCI Health's personalized, research-driven care, then you know how Orange County's only academic medical system is improving the lives of people in our community and beyond.

We couldn't do it without you. Your philanthropic support drives clinical innovations like the ones you'll read about in the following pages.

If you would like to make a gift to thank a provider, honor the memory of a loved one or establish a lasting legacy, call 714-456-7350 or visit ucihealth.org/giving

CURBING FRAILITY IN THE ELDERLY

Study tests whether stem-cell infusions can help the body repair itself.

WRITTEN BY NANCY BRANDS WARD

A slow and shuffling gait, hunched shoulders and the frustrating inability to open jars of food are just a few of the outward signs of frailty — a condition that too often characterizes daily life for people who live into their 80s and beyond. As frailty develops, so does the risk of hospitalization, dependency, disability and death.

Currently there are no approved treatments for this condition, which can lead to devastating declines in health. But UCI Health is recruiting participants for a tantalizing new clinical trial to investigate whether stem cell infusions can slow or reverse the descent into frailty.

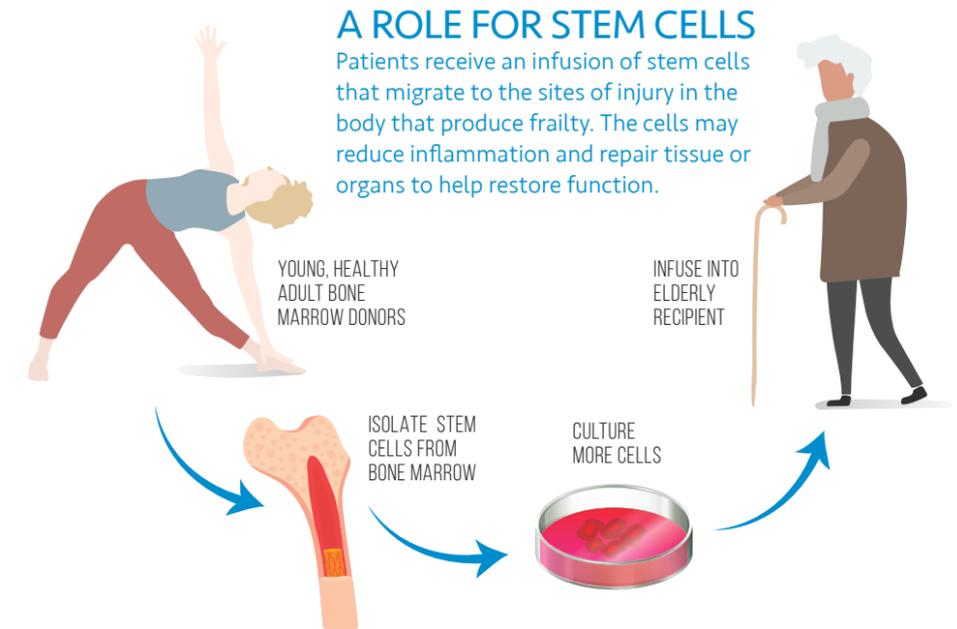
Dr. Lisa M. Gibbs, director of the UCI Health SeniorHealth Center, is principal investigator for the UCI arm of a national Phase 2b clinical trial taking place at a dozen universities and healthcare organizations across the country. Stem cells play a central role in aging, she says.

"As we age, our bodies produce fewer endogenous stem cells, which are cells that can develop into different types of cells and repair and regenerate tissue or organs," says Gibbs, professor and chief of geriatric medicine in the UCI School of Medicine's Department of Family Medicine.

It is this biological slowdown that triggers declines in physiologic health and functional ability. The study will test whether specially prepared stem cells harvested from adult donors will migrate to injured areas, reduce inflammation and begin repairs in patients exhibiting signs of frailty.

"If we can recognize frailty early, we can potentially slow the progression to disability and dependence," Gibbs says.

Frailty is characterized by unintentional weight loss, exhaustion, weakness, slow walking and low physical activity. It interferes with independent living,



makes it harder to recover from stress, may involve impaired cognition and often leads to needing help with daily activities. Frail people are at higher risk for falls, which is a leading cause of death among the elderly.

The study — run by the life sciences company Longeveron, which is developing biological solutions for aging and aging-associated diseases — aims to enroll 120 total subjects, 10 at UCI. Recruitment is underway at various U.S. study sites for people ages 70 to 85 with mild to moderate frailty who are able to walk 200 to 400 meters in six minutes.

Participants are randomly assigned to four groups of 30 participants each. Three groups will receive an intravenous infusion of varying amounts of stem cells, and the fourth group will receive an infusion of a placebo. It's a blind trial, so neither participants nor researchers will know who receives which treatments.

The functional status and medical condition of all participants will be evaluated at intervals from one month to a year.

About one-quarter to one-third of Americans over age 80 meet the frailty criteria, but potential subjects with an uncontrolled medical condition such as heart disease, hypertension and diabetes, dementia or a recent history of cancer would be excluded.

The research is a natural outgrowth of the SeniorHealth Center's mission to provide the region's best care for aging adults with its team of experts and comprehensive, patient-centered approach, Gibbs says. The center's experts are dedicated to developing new models of care and investigating how to help people live high-quality lives as they age.

"Early studies of stem cell safety showed promise in being able to improve frailty," she says. "Our goal is to keep people independent as long as possible." ■

To learn more about the SeniorHealth Center, visit ucihealth.org/seniors



UI HEALTH NURSES ACHIEVE MAGNET DESIGNATION

UC Irvine Medical Center has been honored for nursing excellence with its fourth designation as a Magnet®-recognized hospital. The designation is issued by the American Nurses Credentialing Center (ANCC). Magnet recipients must maintain rigorous standards as part of the four-year designation. The medical center is one of the first to receive a fourth recognition

since the program began in 1993.

To receive the designation, the ANCC conducts a comprehensive review of patient outcomes and satisfaction linked to nursing practices. It also examines the medical center's environment and its ability to recruit and retain top talent. Magnet designation has become the gold standard for assessing nursing excellence and is taken into consideration when the



public judges healthcare organizations. "This recognition reflects our nursing team's commitment to sustaining a culture of excellence that drives better outcomes for our patients," UCI Health Chief Nursing Officer Pat Patton, RN, MSN, said.



Photographed by Rob Rosenfeld

MORE THAN 145 DOCTORS NAMED PHYSICIANS OF EXCELLENCE

The Orange County Medical Association (OCMA) has released its annual "Physicians of Excellence" list, recognizing 148 UCI Health doctors — more than any other Orange County hospital.

OCMA is a voluntary physician organization dedicated to protecting public health, promoting improvement of the medical profession and furthering the art and science of medicine. The 2019 Physicians of Excellence roster, which appeared in the January 2019 edition of *Orange Coast* magazine, includes about 475 physicians representing 65 specialties.

To be eligible for recognition, physicians are required to be certified by one of several medical boards, be in good standing, maintain a practice in Orange County for at least five years and have been in practice within his or her specialty for the last five years.

OCMA also requires physicians to make significant achievements in physician leadership, teaching and mentoring, medical or scientific advances or humanitarian service.

 [View the list of physicians at ucihealth.org/excellence](https://ucihealth.org/excellence)



HEARTY BEEF & BLACK BEAN CHILI

Soup or chili is a perfect winter dish — tasty, hot and filling. Our hearty beef and black bean chili is healthy, too, with an abundance of legumes and vegetables. The black beans provide a feeling of fullness without being high in fat or calories. They're also great for bone health, thanks to the calcium, phosphorous, magnesium, iron and zinc content. This recipe calls for yellow onions, which are high in fiber to help decrease the risk of diabetes, high cholesterol and colorectal cancer. Yellow onions have more antioxidants than any other type of onion.

INGREDIENTS (Serves 4)

- 2 teaspoons olive oil, separated
- ½ pound lean ground beef (10 percent or less fat)
- 2 yellow onions, chopped
- 2 celery stalks, chopped
- 1 carrot, chopped
- 1 red bell pepper, seeded and diced
- 10 ounces white mushrooms, quartered
- 2 garlic cloves, minced
- 2 (14.5-ounce) cans diced tomatoes
- 1 (15.5-ounce) can low-sodium black beans, drained and rinsed
- 3 cups low-sodium, fat-free vegetable broth
- 2 tablespoons tomato paste
- 1½ tablespoons chili powder
- 1 teaspoon ground cumin
- 1 teaspoon dried oregano
- ½ teaspoon salt
- ½ teaspoon pepper

DIRECTIONS

1. Heat a saucepan over medium-high heat. Add 1 teaspoon of olive oil and beef. Cook, breaking it up with a wooden spoon, until browned, about 3 to 5 minutes. Drain any fat and set beef aside.
2. Add remaining olive oil, onions, celery, carrot, bell pepper, mushrooms and garlic. Cook, stirring occasionally, until vegetables soften (about 8 minutes).
3. Add beef back to pot, plus the tomatoes, beans, broth, tomato paste and spices. Bring to a boil. Reduce heat and simmer uncovered, stirring occasionally, until the chili is thickened (about 45 minutes).

Optional: Add toppings of your choice, such as scallions, reduced-fat cream cheese, reduced-fat shredded cheese or baked tortilla chips.

NUTRITIONAL INFORMATION

- 325 calories
- 14.7 g fiber
- 8 g fat
- 26.3 g protein
- 40 g carbohydrates

The UCI Health Live Well blog has a library of recipes, many with videos, to help you eat healthier. Visit ucihealth.org/eatwell 

REDEFINING THE WORLD OF CANCER

New grants and studies are giving UCI researchers the chance to make a profound difference.

WRITTEN BY SHARI ROAN
ILLUSTRATED BY CHRISTINE GEORGIADES



With several large grants, UCI researchers are exploring promising theories on how cancers develop and how to best treat them.

More than a decade ago, UCI biology professor Arthur Lander, PhD, broadened the focus of his research. Instead of studying a particular biological molecule or specific cell type, he reasoned that biomedical researchers would learn more, at a faster pace, if they explored biological systems — how networks of molecules, cells, tissues, organs and environments work in concert.

Today that novel idea has helped launch UCI Health into the upper echelons of cancer research in the United States. Lander, the Donald Bren Professor of Developmental & Cell Biology, is part of a group of UCI scientists who have been awarded a \$10-million, five-year grant from the National Institutes of Health (NIH) for several groundbreaking cancer research projects centered on the field of systems biology.

“Arthur was very forward-thinking about this, years ago, in recognizing that systems biology would grow into a discipline that would catch the attention of the NIH,” says Marian L. Waterman, PhD, professor of microbiology and molecular genetics, director of the UCI Cancer Research Institute and a leader of the systems biology team. “It was Arthur who brought us all together. Earning this grant has been a team goal for about three years.”

The leadership team also includes John Lowengrub, PhD, the Chancellor’s Professor of Mathematics. These collegial researchers from vastly different fields — math, biology and genetics — are dedicated to pooling their training, resources and experience to solve some of the most complex mysteries of cancer.

“We worked so hard to get this grant,” Waterman says, noting that the trio labored over the application for months, often pulling all-nighters. “It’s the product of our high-quality cancer research and the very strong program in systems biology that we’ve had for years at UC Irvine. The NIH recognized that and rewarded it.”

That’s not the only national validation of UCI’s program in cancer research in the past year. Several other researchers have garnered prestigious grants or funding to launch innovative studies that promise to reveal some of the complexities of cancer and unleash new strategies for prevention and treatment.

Research is at the core of the UC Irvine Chao Family Comprehensive Cancer Center and its designation by the National Cancer Institute (NCI) as a comprehensive cancer center, says Dr. Richard A. Van Etten, the center’s director and a professor of hematology/oncology at the UCI School of Medicine. The NCI designation means the cancer center must conduct research across the spectrum, from basic and translational studies to clinical trials, as well as meet the highest standards for patient care and educate the next generation of cancer health professionals.

The cancer center has the added benefit of partnering with colleagues on the UCI campus to bring every weapon to bear in the fight against cancer. With this award, UCI joins 12 other U.S. research institutions that are part of the NCI’s prestigious Cancer Systems

Biology Consortium.

"UCI Health is positioned to do all of this novel research because we are embedded within a great research university," Van Etten says. "Other hospitals that lack a university can do research. But we have the complete infrastructure to do this type of systems biology work."

A CAMPUS UNITED AGAINST CANCER

Systems biology is the study of complex biological environments. In cancer, that means looking beyond cancer cells and exploring the environment they live in and the forces that shape them. By studying the big picture, scientists hope to better understand cancer. Systems biology calls upon the diverse skills of many: mathematicians, computer scientists, engineers, chemists, geneticists and others.

"In the past when we've tried out different drugs or different ideas, we tended to have a simplified idea of the cancer cells. And then, during clinical trials, the idea fails," Waterman says. "The reason it fails is that the tumor and the environment surrounding it is much more dynamic and complex than our models of cancer cells growing in a dish. What we study (in systems biology) is more accurate."

The UCI team even includes an ecologist whose expertise is tide pools because he brings unique skills in the study of complex environments that contain a diversity of organisms. UCI is well known for its collaborative environment, Waterman notes. "There is a culture here to be interdisciplinary."

The NIH grant funds three projects. One, headed by Waterman, studies how colon cancer cells cooperate to survive all the stresses in the tumor micro-environment and communicate with each other. A second project focuses on melanoma — a type of skin cancer — and what happens when moles remain benign or turn cancerous. The third project, headed by Van Etten, is exploring chronic myeloid leukemia (CML) based on a new mathematical model of normal and malignant blood cell formation. It could lead to new treatment approaches for CML patients who fail to achieve optimal responses to the standard medication,

Gleevec, which Van Etten helped to develop early in his medical research career.

TAKING A LONG SHOT

Under Van Etten's leadership, the cancer center has also launched a yearly event to fund novel cancer research projects that might otherwise go unnoticed. Orange County residents and those from surrounding regions have been enlisted in this cause by participating in and raising funds for the Anti-Cancer Challenge — an annual run, walk and cycling event. The 2018 event raised over \$400,000 to fund 13 pilot projects. The 2019 Anti-Cancer Challenge will be held on June 8, 2019 at Aldrich Park on the UCI campus.

"These are high-risk, high-payoff studies that come out of our

from the 2017 Anti-Cancer Challenge. "It's a new approach to immunotherapy that has come entirely out of UC Irvine."

Immunotherapies harness the body's immune system to fight cancer, but they haven't been effective on all types of cancers. Demetriou and his post-doctoral fellow, Raymond Zhou, PhD, are working on a new type of immunotherapy that may have broad success against many different cancers. They created a technology called Glycan dependent T cell Recruiter (GlyTR — pronounced 'glitter'). The therapy is based on the fact that almost all proteins on the surface of cancer cells carry complex sugars called glycans, which are not found in normal cells.

In the past, researchers have had trouble making use of cancer-specific glycans to

"UCI Health is positioned to do all of this novel research because we are embedded within a great research university."

laboratories," Van Etten says. "These Anti-Cancer Challenge seed grants are designed to help an investigator provide critical preliminary data that will allow them to compete for extramural grants from the NIH and other foundations."

One seed grant recipient is already attracting notice. Last year Dr. Michael Demetriou, a professor of neurology, microbiology and molecular genetics, was awarded a \$3.4-million NCI grant as part of the Beau Biden Cancer Moonshot initiative. The grant will fund studies on a new class of cancer-killing immunotherapy drugs with the potential to revolutionize cancer treatment by creating one approach that can work on many types of cancers.

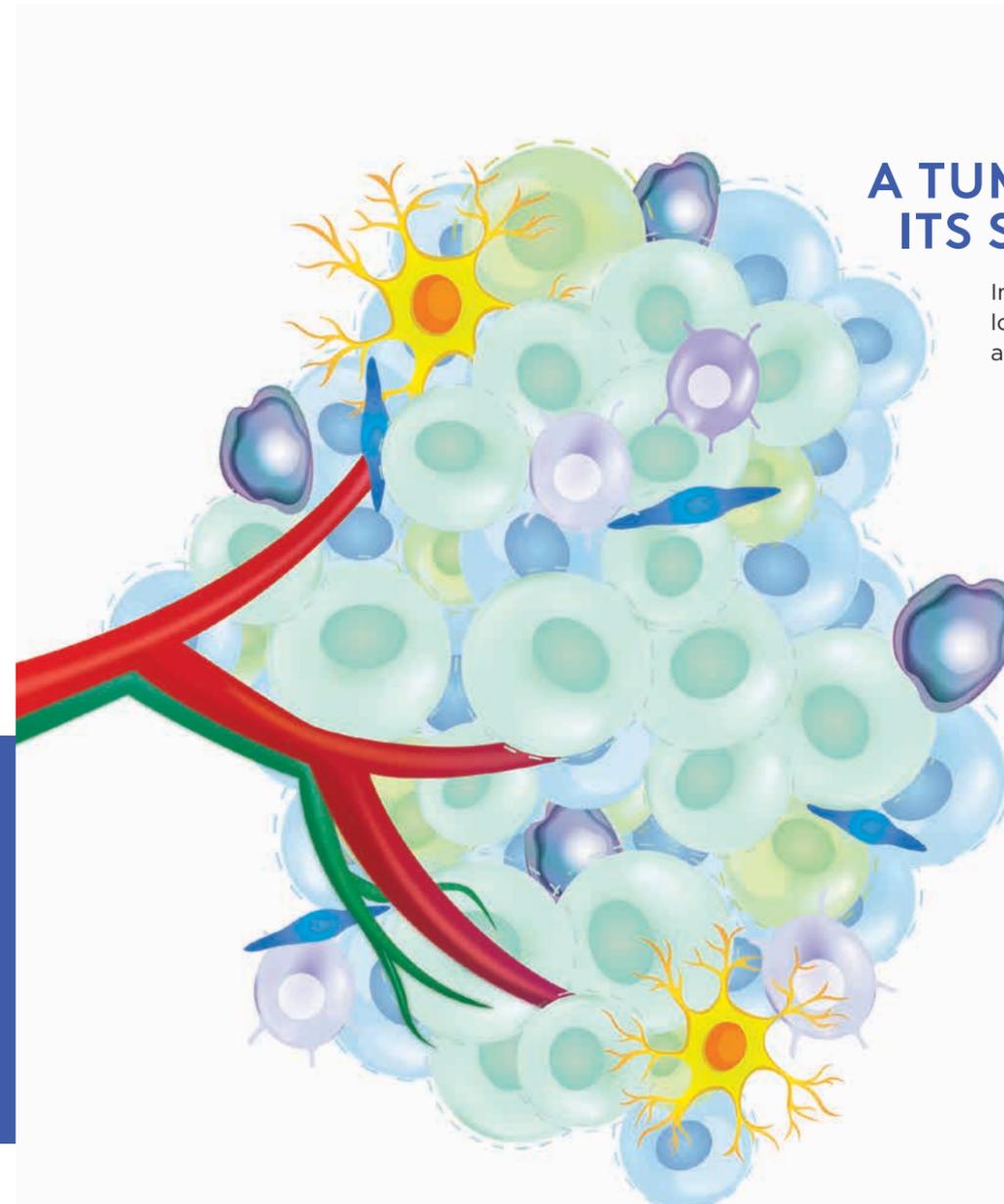
"We saw his data and said, 'Wow, this is something we want to support,'" Van Etten says of the Demetriou project, which initially was funded by proceeds

target and destroy tumors because it's difficult to attach antibodies — substances that recognize the cancer cell — to glycans. But Demetriou and Zhou have developed a clever way around that problem by engineering an artificial protein, called a bispecific protein. The protein is "antibody independent," and because it recognizes a common cancer glycan, it can work on different types of cancers.

"I think immunotherapy is the wave of the future for cancer treatment," Demetriou says. "The impact of this grant is enormous. We've been working on this since 2015, but on a shoestring. This grant takes it to a whole different level."

FROM THE LAB TO THE BEDSIDE

Demetriou hopes to see their research move into clinical trials in a few years. Impacting the lives of cancer patients



A TUMOR AND ITS SURROUNDINGS

In cancer, systems biology research looks not just at cancer cells but also at their entire environment.

-  **Cancer cells**
-  **Immune system cells** (macrophages, natural killer cells and T cells)
-  **Dendritic cells** (cells that boost immune function)
-  **Stromal cells** (connective tissue)
-  **Blood vessels**
-  **Lymph vessels**

as quickly as possible is also the goal of Dr. Daniela Bota, a UCI Health neuro-oncologist and internationally recognized expert on brain cancer. Bota was recently named chief U.S. investigator on an international clinical trial testing a new drug, a proteasome inhibitor called marizomib, for glioblastoma — the most deadly type of brain cancer.

The test will combine marizomib with the standard treatment for glioblastoma, temozolomide chemotherapy and radiation therapy. Bota was among the first in the world to begin studying marizomib, and much of the initial work clarifying its potential for glioblastoma

took place in her lab. Her early research showed the compound could not only cross the blood-brain barrier, but also is not toxic to patients.

"Celgene, the company that has ownership of this drug, is sponsoring the Phase 3 clinical trial, and UCI will be the main U.S. center," Bota says. "The reason we do this work here is we want our patients to have access to treatment that is only available at academic cancer centers like ours."

UCI cancer researchers universally praise Southern California residents who have participated in the Anti-Cancer Challenge or who enroll in clinical trials as partners in

elevating cancer research at UCI Health.

"Patients cannot be guaranteed benefit in clinical trials," Van Etten says. "However, very frequently we already know that a new treatment is beneficial versus the standard treatment. We wouldn't offer it otherwise."

"But patients understand that when they participate in a trial, it's for the greater good — to help move the field forward. That's what we're all trying to do." ■

 **Learn more about cancer treatment and research at ucihealth.org/cancertreatment**



UCI Health child development expert Sabrina Schuck, PhD, uses therapy dogs Bristol, a golden retriever, and Kiwi, a Maltese-poodle mix, to work with kids who have ADHD.

DOGGED DETERMINATION

A novel UCI study shows therapy dogs can benefit children with attention-deficit/hyperactivity disorder.

WRITTEN BY NANCY BRANDS WARD | PHOTOGRAPHED BY SHANE O'DONNELL

Concerned that at least 5 percent of U.S. children are diagnosed with attention-deficit/hyperactivity disorder (ADHD), UCI child development specialist Sabrina E.B. Schuck decided to seek therapies besides medications to calm children and help them focus. In a first-of-its-kind randomized trial, Schuck and her colleagues found therapy dogs to be effective in reducing some of the symptoms of ADHD in children.

Schuck, who holds a doctorate in education and a master's degree in clinical psychology, is an assistant professor of pediatrics and executive director of the UCI Health Child Development Center. Beyond ADHD, her research interests include the human-animal bond and school-based interventions. *Live Well* asked about her team's research that was recently published in the American Psychological Association's Society of Counseling Psychology's *Human-Animal Interaction Bulletin*.

What made you think therapy dogs could help children with ADHD?

There is a lot of anecdotal evidence about the effectiveness of therapy dogs. Our founding school program director brought a therapy dog, Teddy, to school every day. Others have studied child development and the human-animal bond, but until recently, there were no large or randomized and controlled trials. Adapting those studies to ADHD work done here at UCI over the past two decades, we proposed a complex clinical trial to see if animals like Teddy make a difference for these children.

Whom did you study and how did the study work?

Over five years, we looked at seven cohorts of 12 children — a total of 88, ages 7 to 9 — who'd been diagnosed with ADHD. None had started medication. All received "dog-themed"

psychosocial skills-based training and coaching on how to care for and be safe around a dog. Their parents also received behavioral training. But only half the children actually worked with the dogs.

How did the children interact with the dogs?

During two weekly sessions, kids had semi-structured time to bond with the dogs. They rotated among separate activity stations, throwing a ball or Frisbee, grooming the dogs, working with them on agility or other activities. Children then participated in didactic lessons to build social skills. Whenever the kids contributed to the sessions, they were rewarded by being able to sit or lie down next to the dog. They also wrote letters and stories to the dogs, and on Saturdays they practiced dog-training techniques.

Didn't the dogs distract the children?

On the contrary, it takes a lot to engage kids who are hyperactive when doing activities they don't necessarily prefer. Working with the dogs seems to motivate children to participate in tasks they would otherwise avoid.

How long did the study last?

Each cohort was studied for 12 weeks of treatment, then again six weeks later. For the first nine weeks, the groups with therapy dogs learned how to train the animals. In the last three weeks, the kids created their own lesson plans to teach basics like sit, stay and come. Then they tried to train puppies, a task that requires considerable patience and self-control.

What did your study find?

Children who interacted with the dogs experienced a reduction in inattention and improvements in social skills and self-esteem when compared to the groups without dogs. There was no effect, however, on hyperactivity and impulsivity. We saw the same results in a follow-up measurement six weeks after the interaction with the dogs ended. These findings are important because hyperactivity and impulsivity tend to decline with age, while problems with attention tend to persist through life and are the most challenging to treat.

Can this intervention take the place of medication?

I would never say that kids always need medicine or don't need it. Medications are very effective at reducing symptoms for many children with ADHD. But we also need to learn who benefits from animal-assisted interventions and how we can measure its effectiveness with or without medicine.

What's next?

We want to understand who benefits from these strategies most and why. We also want to examine how to feasibly implement animal-assisted interventions, particularly in schools, to complement or provide alternatives to other



Nine-year-old Bristol was trained as a puppy to work with ADHD children in clinical trials.

therapies we know work. Our main goal is to see how we can safely and effectively implement this program to help motivate children to learn and participate in school.

What surprised you about this study?

This project was so much fun. I loved seeing kids lined up at the school gate right on time because they couldn't wait to get in to start therapy. The children in the dog groups were always on time. ■

Learn more about the UCI Health Child Development School at ucihealth.org/childdevelopment



Timely Treatment

UCI Health's rapid-response team saves a young father's life.

WRITTEN BY
TRAVIS MARSHALL

PHOTOGRAPHED BY
SHANE O'DONNELL

As an annual passholder to Disneyland, Edgar Cenicerros loves making regular trips to the Anaheim theme park with his wife, Brittani, and their two children. But one day in January 2017 as they walked into the park, the young father began experiencing a painful headache that soon left him on the brink of a coma.

"We were interacting with the turtle from *Finding Nemo* when I started getting dizzy — everything went fuzzy," says Cenicerros, a 34-year-old La Habra resident who works as a service manager for a Mercedes Benz dealership. "I tried to brush it off, but then I started limping, feeling numbness and having trouble moving on my right side. That's when I started to realize something was wrong."

What happened next is a blur. Cenicerros and his family soon made their way out of the park, and his wife pointed their car toward a local emergency room. "All I can remember is that I wasn't making sense," he says. "Thankfully my wife stopped the car and called 911." He was unconscious by the time the ambulance arrived minutes later.

Fortunately the first responders recognized he was having a stroke, and instead of taking him to a local ER they brought him directly to UC Irvine Medical Center, Orange County's only Level I trauma center and home to the UCI Health Comprehensive Stroke & Cerebrovascular Center, which is recognized by The Joint Commission and the American Heart Association/American Stroke Association for its expert stroke care.

Cenicerros was immediately treated by neurosurgeon Dr. Li-Mei Lin, who specializes in endovascular and neuro-interventional surgery.

"Most people wouldn't expect a person this young to have a stroke," says Lin, an assistant professor of neurological surgery at the UCI School of Medicine. "This type of situation highlights how important it is for first responders to bring potential stroke patients to a Joint Commission-designated comprehensive stroke center that has the tools and expertise to respond quickly."

The amount of brain damage a person suffers from a stroke depends largely on how fast they get treatment. Every second counts. That's why comprehensive stroke centers have rapid response procedures in place to quickly evaluate patients, provide them with clot-busting medication and any other appropriate treatments within minutes.

Lin says learning how to recognize stroke symptoms early and knowing where the nearest comprehensive stroke center is located are the best ways to prevent disability and death.

"There's still a huge lack of public awareness and public education, so the more we can educate the public and first responders the better," she explains.

When Cenicerros arrived, the care team found that he had an arterial dissection — a tear in an artery at the back of his neck that can lead to a stroke-causing clot. Though strokes are unusual in younger patients, arterial dissection is one of the most common reasons when they do happen.

Lin moved quickly to start an interventional endovascular treatment called an embolectomy, which uses a catheter-deployed stent to remove clots from blood vessels in the brain.

"It took several attempts to completely remove the clot and make sure it didn't come back — ultimately he was discharged with minimal deficits and had an amazing outcome," she says. "It's a team approach, from the ER to the neurointerventional team. And the after-care in our ICU unit for neurological patients is equally important."

After waking up in the hospital, Cenicerros had some trouble moving on the right side of his body. But rehabilitation helped him regain full function within six weeks. Two years later — aside from taking an aspirin daily to help prevent future clots — he's back to normal and roughhousing with Giuliana, 8, and Madden, 6.

"I felt impaired for about a month, but I slowly started to regain feeling and movement," he says. "I was able to go back to work a month and a half later. I don't even want to think about where I'd be now if I hadn't gotten to UCI's stroke center so quickly." ■



TIME IS OF THE ESSENCE TO PREVENT BRAIN DAMAGE WHEN TREATING A STROKE.

The sudden onset of any of these symptoms could indicate a stroke:

- Numbness or weakness of the face, arm or leg, especially on one side of the body
- Confusion, trouble speaking or understanding
- Trouble seeing in one or both eyes
- Difficulty walking, dizziness, loss of balance or coordination
- Sudden, severe headache with no known cause

Call 9-1-1 immediately if you or someone you know experiences these stroke warning signs.

 To learn more about stroke treatment and care, visit ucihealth.org/stroketreatment

2018 HOPE & HELP GALA

Friends of The UC Irvine Center for Autism & Neurodevelopmental Disorders attended the 2018 Hope & Help Gala, "Growing Strong Together." The event raised more than \$340,000 for innovative clinical care, education, training and research to help those whose lives are affected by autism spectrum disorder, ADHD and other neurodevelopmental disorders.



Steve and Danielle Reindl

UCI HEALTH DIABETES CENTER RECEPTION

The UCI Health Center for Diabetes Treatment and Research hosted its 12th annual "Celebrate the Center" reception, paying tribute to the Chao family for their longtime support of high-quality diabetes care and research to improve treatment. Pictured (from top left): Lee-Hwa Chao, Phylis and David Hsia, (from bottom left): Christopher Smith, Fred and Diana Kong.



FRIENDS OF THE 20/20 SOCIETY CELEBRATION

Friends of the 20/20 Society celebrated their shared commitment to transform vision care and eradicate preventable eye diseases at the UCI Health Gavin Herbert Eye Institute.

Event speakers reflected on all that has been achieved since the institute's campus opened in 2013.

The 20/20 Society's contributions are enabling groundbreaking research that leads to sight-saving advances in vision treatment.



David and Molly Pyott and featured speaker Tom Sullivan.

QUEEN OF HEARTS FOUNDATION

The Queen of Hearts Foundation has donated \$435,000 to expand the services of UCI Health Ann's Clinic to south Orange County and to fund promising ovarian cancer treatment studies. Ann's Clinic, which screens and cares for women at high risk for developing ovarian cancer and other gynecologic malignancies, is a collaboration between the foundation and UCI Health.



Queen of Hearts Foundation board members Caren Walley Edler, Cristen Walley Lebsack, Lori Hunter (co-founder), ovarian cancer specialist Dr. Leslie Randall, Queen of Hearts Foundation manager Sandi Hanscom and gynecologist Dr. Michael Krychman.

DONATE LIFE

The UCI Health Pancreas and Kidney Transplant Services team turned out in force for the 16th annual Donate Life Run/Walk held at Cal State Fullerton. The team had more participants and raised more money for organ donations than in previous years.



BRAIN AND SPINE TUMOR PROGRAM

Members of UCI Health's Comprehensive Brain and Spine Tumor Program supported their patients and families at the annual Orange County Brain Tumor Walk, held at Angel Stadium of Anaheim. The event raised more than \$230,000 to fund programs that help improve the lives of people affected by brain tumors.



HEALTH CLASSES

Learn how to improve your health or prevent disease by taking our classes. Most are free, but some do have fees. All classes are held at UC Irvine Medical Center, located at 101 The City Drive South, Orange, CA 92868.

Please note: There is a small fee to park at UC Irvine Medical Center, which is part of UCI Health.

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

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

ADVANCE DIRECTIVE

Feb. 14, May 9 | 11 a.m.-12:30 p.m.
Building 22A, Room 2105-06
Notary available from noon to 12:30 p.m. at no charge

BREASTFEEDING

Feb. 7, March 7, April 4, May 2, June 6 | 6-9 p.m.
Building 53, Room 121

HEART FAILURE

Feb. 4, May 6 | 2-3:30 p.m.
UC Irvine Douglas Hospital
Building 1, 3rd floor, Room 3005

JOINT REPLACEMENT, HIP OR KNEE

**Every Thursday, except holidays
11 a.m.-noon**
UC Irvine Douglas Hospital
Building 1, 3rd floor, Room 3001



MEDITATION FOR HEALTH SERIES (four classes)

March 4, 11, 18, 25 | 6:30-7:30 p.m.
June 3, 10, 17, 24 | 6:30-7:30 p.m.
UC Irvine Douglas Hospital
Building 1, 3rd floor, Room 3005

MEDITATION: BREATHING

May 13 | 6:30-7:30 p.m.
UC Irvine Douglas Hospital
Building 1, 3rd floor, Room 3005

MEDITATION: BODY SCAN RELAXATION

April 15 | 6:30-7:30 p.m.
UC Irvine Douglas Hospital
Building 1, 3rd floor, Room 3005

NEWBORN CARE

Feb. 15, March 8, April 12, May 3 | 6-9 p.m.
Building 56, Room 113

PREPARED CHILDBIRTH (five classes)

Wednesdays | 7-9:30 p.m.
Feb. 13, 20, 27, March 6, 13
April 10, 17, 24, May 1, 8
May 22, 29, June 5, 12, 19

Thursdays | 7-9:30 p.m.
Feb. 14, 21, 28, March 7, 14
April 11, 18, 25, May 2, 9
May 23, 30, June 6, 13, 20
Building 56, Room 113

PREPARING FOR SURGERY – MIND, BODY AND SPIRIT

Feb. 4, March 4, April 8, May 6, June 3
Noon-1:30 p.m.
UC Irvine Douglas Hospital
Building 1, 3rd floor, Room 3005



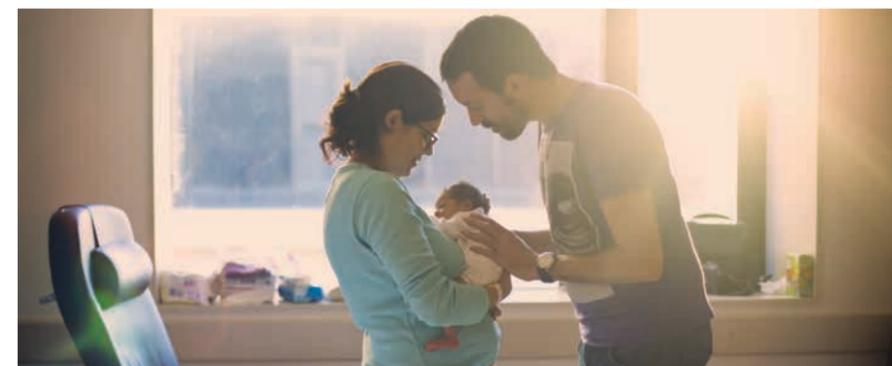
ONLINE HEALTH EDUCATION VIDEOS

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 information on additional 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 a conference, listen to a lecture or take the challenge.

NEWPORT BEACH LIBRARY LECTURE MEDICINE IN OUR BACKYARD SERIES

Learn about your health from these UCI Health physicians.

Feb. 25 | Chronic Heartburn? Painful GERD? Get relief – Dr. Kenneth Chang and Dr. Brian Smith

March 25 | Bioidentical Hormonal Restoration – Dr. Marcela Dominguez

April 22 | Update on Breast Cancer Screening and Treatment – Dr. Freddie Combs and Dr. Erin Lin

May 20 | New in Newport Beach: Men's Health – Dr. Faysal Yafi

Lectures 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.

Feb. 25 | 7-8 p.m. Myopia Progression in Childhood – Dr. Charlotte Gore

March 25 | 7-8 p.m. Eye and Brain Interaction – Dr. Chantal Boisvert

April 8 | 7-8 p.m. Annual Eye Exams: New Lens Technologies – Patricia Elbeck, RDO, and Marcial Torrez-Jimenez, ABOC

May 13 | 7-8 p.m. Cataracts – Dr. Marjan Farid and Dr. Sameh Mosaed

June 10 | 7-8 p.m. Actor and inspirational speaker Tom Sullivan on the emotions of losing vision

Lectures are held at the institute, 850 Health Sciences Road, Irvine. To RSVP, contact ghei@health.uci.edu or 949-824-7243.

UCI ANTI-CANCER CHALLENGE

June 8 | 6:30 a.m.-4 p.m.
Join the UCI Anti-Cancer Challenge at Aldrich Park on the UCI campus in Irvine. When you participate, we are one step closer to finding cancer cures. Learn more and sign up at anti-cancerchallenge.org

SUE & BILL GROSS STEM CELL CENTER COMMUNITY LECTURE SERIES

Feb. 26 | 7 p.m. The Brainstorm Stem Cell Trial to Treat ALS – Dr. Tahseen Mozaffar and Dr. Namita Goyal

March 26 | 7 p.m. Stem Cell Therapies for Stroke – Lisa Flanagan, PhD, and Dr. Leonid Groysman

April 30 | 7 p.m. Aging, Alzheimer's & Frailty – Mathew Blurton-Jones, PhD, and Dr. Lisa Gibbs

All lectures are held in the 4th floor conference room at Sue & Bill Gross Hall, 845 Health Sciences Road, Irvine. Email aharness@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

PANCREATIC CANCER SUPPORT GROUP
714-456-7057

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

TRIGEMINAL NEURALGIA ASSOCIATION SUPPORT GROUP
714-944-3044



Cathy Jensen copes with Parkinson's disease by supporting research and traveling the world.

Photographed by Shane O'Donnell

GET MOVING, LIVE LIFE

Cathy Jensen had a thriving career as a criminal and civil rights litigator. The mother of two young children, she was diagnosed with diabetes while in law school 40 years ago. Under the care of UCI Health endocrinologists, she was able to get off an insulin pump and controlled her diabetes with diet, exercise and oral medication. After a spinal cord injury 20 years ago, she closed her practice rather than work in a wheelchair. Three years ago she was diagnosed with Parkinson's disease, an incurable neurodegenerative condition that compromises balance and coordination while diminishing mental function. During her treatment for Parkinson's at UCI Health, Jensen has become a committed advocate — for research to prevent the disease and treatment to enhance the quality of patients' lives.

“About three years ago when I was seeing my UCI endocrinologist Dr. Andrew Reikes for diabetes, he said, ‘Cathy, you don't seem to be as bubbly and bright as usual.’ He was quite concerned and referred me to movement disorders specialist Dr. Nicolas Phielipp. When you're first diagnosed with Parkinson's disease, I don't think you realize the significance of what you're hearing. Parkinson's varies so much between individual patients; and even in the same patient, the condition varies from day to day.

I decided I had better get moving and live life to the fullest. Dr. Reikes, who is one of my heroes, said, ‘Cathy, get as many stamps on your passport as you can while you can still travel.’ I'm about to leave on a 38-day cruise of the North Atlantic Ocean. Last year, I went to Venice and invited all of my best friends to stay with me. It was great. Italians have a wonderful saying: *Il dolce far niente*, which means ‘the sweetness of doing nothing.’

But the fact is, people with Parkinson's know they are always losing ground. The ability to improve is something we almost take for granted in society. I think it's important to educate people to understand that. It's such a privilege to have a condition or disease you can rehabilitate from and become better. The people who love me have to watch my deterioration. With this disease you disappear from the scene. It's hard to get out in wheelchairs. It's hard to use public transit. So we have to get the word out to help people with Parkinson's disease.

Eventually I think there will be treatments for Parkinson's that will be up there in importance with the invention of antibiotics. The quality of life for people with the disease will be so much better. But today we're the ones who are going to have to make a difference. We must go into our own checkbooks and write checks to fund research. We have to teach the world about Parkinson's disease.

— Cathy Jensen

UCI Health

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Introducing our new state-of-the-art medical facility in Yorba Linda, opening Feb. 4, 2019

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- Breast Health
- Cardiology
- Dermatology
- Imaging
- Integrative Health
- Neurology
- Pain Management
- Physical Medicine and Rehabilitation
- Urology

For unmatched expertise and innovation, look no further than UCI Health — Orange County's only academic health system.

To make an appointment, visit ucihealth.org/yorba-linda or call 714-790-8600



Our Locations

-  UCI Health — Yorba Linda Multispecialty (Opening February 2019) 18637 Yorba Linda Blvd.
-  UCI Health — Yorba Linda Primary Care 19871 Yorba Linda Blvd.



UCI Health

333 CITY BLVD. WEST, SUITE 1250
ORANGE, CA 92868-2990

CONNECT WITH US

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RIDE. RUN. WALK. VOLUNTEER. DONATE.

No matter how you get involved with the UCI Anti-Cancer Challenge, your participation advances lifesaving cancer research at the UC Irvine Chao Family Comprehensive Cancer Center.

Join us for the third annual UCI Anti-Cancer Challenge on Saturday, June 8, 2019 at Aldrich Park on the UCI campus. Invite your friends, family and coworkers to join you on a team.

Register today at www.anti-cancerchallenge.org

UCI Anti-Cancer
Challenge

