

Long and Winding Road |
Smell of Success | Out of the Ordinary

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2022
ISSUE ONE

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Check In



2022
ISSUE ONE

Vitals

2-7

Healing Through Poetry
Meet Our Staff
The Big Question



Examinations



COVER STORY

A Long and Winding Road

8

Natalie Ciebrant was ready to give up — until she met Keck Medicine of USC cardiothoracic surgeon Fernando Fleischman, MD, who could treat her safely while also respecting her faith.



12

The Smell of Success

Elodia Estrada thought she would never smell again until she found Keck Medicine of USC's Kevin Hur, MD.

14 No Such Thing as TMI

Explaining certain symptoms can provoke discomfort, embarrassment or even fear.



16

Out of the Ordinary

With a life-changing bladder augmentation performed by USC Urology's Evgeniy Kreydin, MD, Ricardo Sandoval begins a journey away from dialysis.



18

Early Warning Signals

A comprehensive breast cancer surveillance program at Keck Medicine of USC is saving futures, one person at a time.



Consultations

20-24

Keck Medicine of USC
Joint Venture with
Henry Mayo

USC-VHH Leadership
Updates

New Head and Neck
Center

CART-Cell Therapy

Newport Beach Opening

USC Norris Receives
Teaching Accolade

Clinical Trials

25

Labwork

26-27

Food Insecurity and
Liver Health

Smart Boot Study

Cure for Noise-Induced
Hearing Loss

Perspective

28

Locations

29



Keck Medicine of USC is one of only two university-based medical systems in the Los Angeles area. Its internationally renowned physicians and scientists provide world-class patient care at Keck Hospital of USC, USC Norris Cancer Hospital, USC Verdugo Hills Hospital and more than 40 outpatient facilities throughout Los Angeles, Orange, Kern, Tulare and Ventura counties.

Keck Medical Center of USC, which includes Keck Hospital and USC Norris Cancer Hospital, was ranked among the top hospitals nationwide on U.S. News & World Report's 2021-22 Best Hospitals and among the top three hospitals in Los Angeles and top five in California. The medical center was also nationally recognized among the top 50 in 12 medical specialties.

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Continued on page 2

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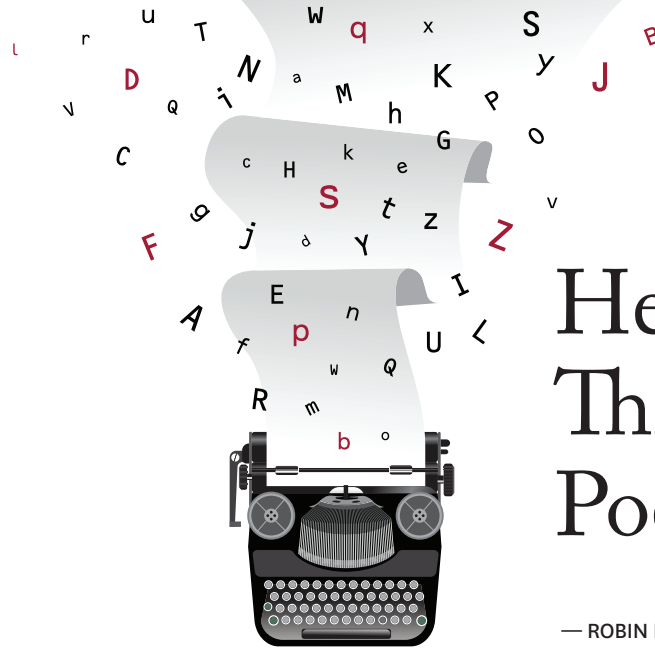
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Vitals



Healing Through Poetry

— ROBIN HEFFLER

To help overcome the stress and emotional trauma that can accompany cancer diagnoses and treatments, a clinician and an artist at the USC Norris Comprehensive Cancer Center have introduced an unconventional form of healing: customized poetry for patients.

Genevieve “Viva” Nelson is writing poems for cancer patients that she says, “celebrate their lives and help them see that they are so much larger than their diagnoses.” It’s the latest offering of Keck Medicine of USC’s Institute of Arts in Medicine (IAM). Formed in 2019 by oncologist Jacek Pinski, MD, PhD, clinical director, and Nelson, creative director, the institute seeks to improve cancer patients’ quality of life and possibly change their clinical outcomes through music, visual arts, and now poetry.

Dr. Pinski identifies patients likely to benefit from a personalized poem, then gathers information about their backgrounds and interests from them, their family members and caregivers. Nelson then uses his findings to create a poem tailored to each patient.

“We’re doing this to change cancer patients’ experience by surprising them with something that warms their hearts and makes them feel good,” says Dr. Pinski, associate professor of medicine at the Keck School of Medicine of USC. “The reactions have been very emotional and overwhelmingly positive.” Nelson adds that she tries to “incorporate children and spouses in the poetry to celebrate the patient’s family too.”

Nelson has written about 20 poems and is starting to help patients write their own. IAM also recently began research to explore the utility of creative interventions in lowering stress and anxiety among patients undergoing painful procedures such as bone marrow biopsy and lumbar puncture.

Patients interested in receiving or writing poems, and family and staff members interested in contributing to the program, should contact Nelson at genevieve.nelson@med.usc.edu.

Aging gracefully

Self-care can have a massive impact on your health. This is especially true for older adults, who can give their quality of life a serious boost by following a few simple tips.



Tips to stay healthy and happy in the years to come

Awake feeling rested

Older adults still need 7-9 hours a night, but mental stress and physical discomfort can lead to insomnia. Earlier circadian rhythms can also make sleep more difficult.

- Stick to a consistent sleep schedule.
- Put devices away and turn off the TV at least an hour before bedtime.
- Avoid alcohol and caffeine after dinner.

Strengthen your bones

Unfortunately, bones get weaker with age. Women are more prone to osteoporosis due to menopause, but men can experience it too, making people over 65 more injury-prone.

- Get plenty of vitamin D and calcium.
- Limit your alcohol intake.
- Try weight-bearing exercises like walking, tennis or dancing.

Relieve joint pain

Throughout our lives, regular wear and tear can lead to arthritis, which can cause pain, stiffness and even swelling.

- Strength train – stronger muscles give joints more support.
- Exercise regularly to prevent further deterioration and reduce pain.
- Medications and other therapies may help, so talk to your doctor.

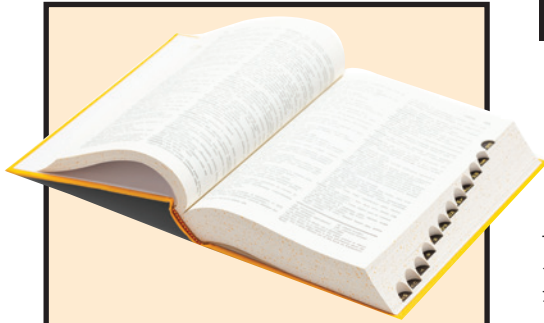
Avoid colds, the flu and other bugs

As we get older, our bodies gradually produce less immunity-related cells. It can take longer to fight infections and latent viruses can reactivate.

- Keep up with your immunizations.
- Eat a nutritious variety of foods.
- Manage stress with meditation, yoga or breathing exercises.

Staying healthy may require extra effort as we get older, but a little self-care can go a long way. If you're experiencing other age-related issues or need more tips, call (800) USC-CARE to make an appointment with an expert doctor.

MEET OUR STAFF



what's the
Word?

Cerumen

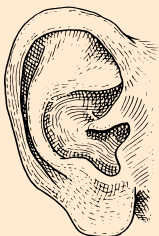
noun

/sə'roōmən/

A medical term for earwax, the colored, waxy substance meant to protect the ear canal in mammals.

"For most people, earwax is a completely harmless substance that will be expelled as part of a natural process," says Seiji B. Shibata, MD, PhD, an otolaryngologist who specializes in ear and hearing disorders at the USC Caruso Department of Otolaryngology – Head and Neck Surgery. "Over-the-counter products can help remove excess buildup of earwax, but patients should see a specialist if hearing loss, tinnitus, ear pain or drainage symptoms occur, because it could be a sign of more serious issues."

If you are concerned about your ear health, our expert physicians can help. Schedule an appointment by calling (800) USC-CARE or visit [KeckMedicine.org/ent](https://www.uscmedicine.org/ent).



Getting Back to Life

As the manager of USC Verdugo Hills Hospital's outpatient physical medicine and rehab department, Rashmi Bandekar, PT, DPT, is committed to caring for patients by getting them back to the activities they love. Every day she forms special relationships with her patients while helping them through a wide range of conditions — and shares in their joy when they're able to get the most out of life again.



Ricardo Carrasco III

What inspired you to become a physical therapist?

Most of the time our suffering is from not being able to participate in the things that bring us joy. That's exactly why I became a physical therapist. When I was growing up, I had my own injuries from soccer and spent almost two years in physical therapy. I realized how powerful a profession it was because it changed my life and helped me get back to playing sports.

What is your average day working at USC Verdugo Hills Hospital like?

My day involves about 50% patient care and 50% administrative tasks. My patient specialty is orthopaedic physical therapy and pelvic health physical therapy, which includes treating patients with pelvic pain, incontinence, those who are pregnant or

who have just given birth and others who experience issues with bowel/bladder or sexual functioning. I truly get the best of both worlds in my role — I get to treat patients while trying to build and grow our outpatient department to make it the best it can be.

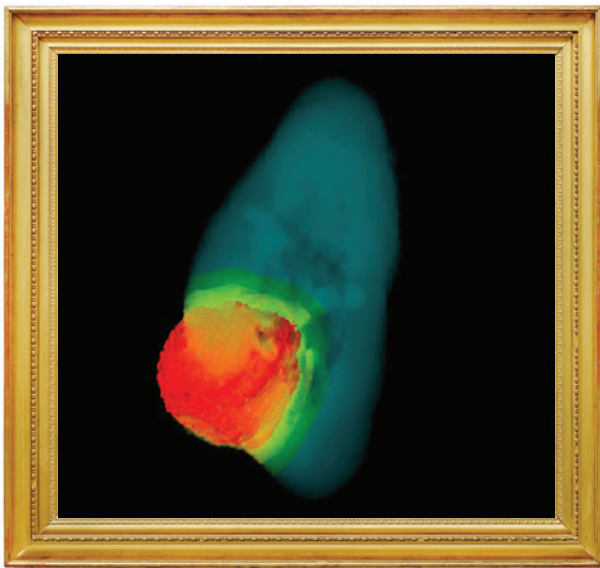
Tell us about your life outside of USC-VHH.

I enjoy spending time with my family and friends — including my little puppy, Arya. I love cooking and baking; I'm Indian and because of this my life really revolves around food and delicious flavors. Something that most might not know about me is that I like adventurous activities — I've rock-climbed, cliff-dived and I love water sports. In fact, I recently got my scuba diving certification.



The *Art* of Imaging

Many areas of medicine, from research to clinical diagnosis and treatment, use advanced technology to see things that the human eye can't — whether it's a patient's internal organs or bones, or something microscopic. Many times, these images can be beautiful as well as informative.



Augmented reality image of a kidney tumor (red) superimposed by yellow and green circles indicating surgical incision lines for partial nephrectomy. (Image by Inderbir S. Gill, MD, chair and Distinguished Professor of Urology, and Shirley and Donald Skinner Chair in Urologic Cancer Surgery at the Keck School of Medicine of USC, and director of USC Urology, part of Keck Medicine of USC.)

Class Notes

LEARN SOMETHING NEW WITH
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Infant CPR and Safety

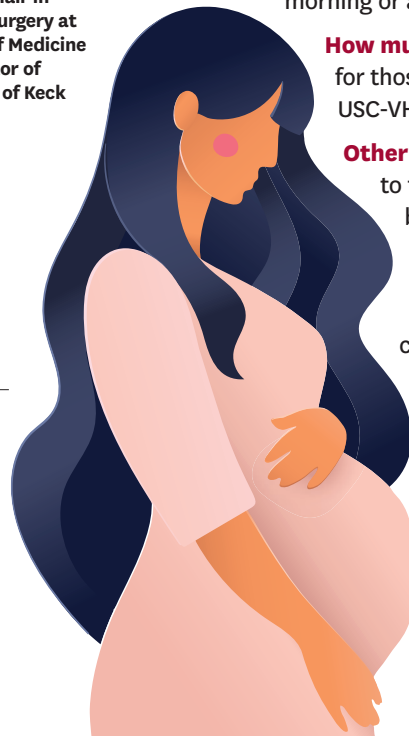
New or expectant parents, grandparents, babysitters or anyone who deals with infants up to a year old will learn about CPR, infant resuscitation, choking maneuvers, poison prevention, electrical safety and household hazards in this two-hour class.

Where: USC Verdugo Hills Hospital

When: Twice a month, on a Saturday morning or a Monday evening

How much: \$30 per person, for those delivering at USC-VHH; \$35 for others

Other info: The ideal time to take this class is between the sixth and eighth months of pregnancy. For more information, contact Teri Rice at (818) 952-2272 or Teri.Rice@vhh.usc.edu.



The number of liver, kidney, pancreas, heart and lung transplants performed by USC Transplant Institute physicians at Keck Hospital of USC during the 2021 calendar year, a new single-year record.

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Know your numbers!

Does your heart soar, sing or skip a beat? Emotions can make your heart “flutter,” but how do you know if the heart muscle is actually healthy?

About the size of your fist, the heart pumps blood throughout your body. In order to keep your heart healthy, it's important to know a few key numbers: your cholesterol (LDL and HDL), triglycerides, blood pressure and body mass index (BMI). What do these numbers mean? The experts of Keck Medicine of USC have some advice on how to interpret your results — and what to aim for to improve heart health.



LDL cholesterol:

LDL — or low-density lipoprotein — is commonly known as “bad cholesterol.” LDL transports the cholesterol that blocks your arteries, putting you at risk for heart attack, stroke and other problems.

Ideal number: Below 100 mg/dL



HDL cholesterol:

HDL — high-density lipoprotein — is often called “good cholesterol.” HDL is effective at removing the bad cholesterol from your arteries, helping to prevent blockages and other possible complications.

Ideal number:

Above 45 mg/dL for men and 55 mg/dL for women



Triglycerides:

This form of lipoprotein can raise your risk for heart disease, especially if you're a woman. It is the most common fat in your body and can be affected by diet and medications.

Ideal number:

Below 150 mg/dL



Blood pressure:

This is how forcefully your blood flows through your vessels. When it's too high, it can lead to serious issues such as a heart attack, heart failure or stroke. Eating healthy, getting plenty of exercise and managing stress can all help keep your blood pressure in a healthy range.

Ideal number: Below 120/80.

Body mass index (BMI):

Your BMI is calculated by dividing your weight by your height and is used to estimate the amount of fat your body carries. It can help doctors determine if your weight is dangerously low or excessively high, which could put you at risk for heart issues and other health problems.



If your numbers for any of these indicators start to fall into an unhealthy range, there are treatment options that can help improve them. It's wise to discuss your options, which could range from lifestyle changes to medication, with a doctor. To learn more or to schedule an appointment, call (800) USC-CARE or go to [KeckMedicine.org/cardiovascular](https://www.KeckMedicine.org/cardiovascular).

The Big Question

Medical decisions, especially after a new diagnosis, can feel overwhelming and isolating. Whether you are facing a life-threatening illness or an elective procedure, one way to ensure you feel confident in your doctor and treatment plan is to look for a specialist to review your case. Two physicians from Keck Medicine of USC weigh in on the Big Question:

When should I get a second opinion?



A second opinion in medicine is a valuable option, especially for complex, non-routine medical conditions or if you are offered a major invasive procedure. Although you may imagine that all medicine is guided by evidence-based principles and standardized recommendations, you may be surprised to discover the variability in recommendations offered by physicians and surgeons, even among leading centers.

In my academic neurosurgical practice treating brain tumor patients, for instance, a recommendation may involve not only how an operation is performed, but perhaps even more critically whether surgery is necessary or indicated in the first place, and what the urgency or timing should be. At the very least, a second opinion from an academic center may offer a different perspective, especially if presented to a multidisciplinary panel of experts (e.g., our weekly USC Brain Tumor Board Conference) so a unified recommendation may be offered. Most importantly, you should have trust in your physician and team, and if this is not the case a second opinion should definitely be considered.

Gabriel Zada, MD, MS
Neurosurgeon
Director, USC Brain Tumor Center



For elective and non-urgent medical issues, patients should not hesitate to get a second opinion when they feel unsure about a treatment plan discussed with their doctor. Providers should take the time to answer all questions related to the diagnosis and treatment plan so the patient feels involved and confident in the joint decision-making with their physician.

Most physicians and surgeons are comfortable and not offended when a patient gets a second opinion; however, those providers that are offended may be a “red flag” for the patient. As medicine becomes further subspecialized, seeking a provider with significant subspecialty expertise and experience — such as the physicians at tertiary and quaternary referral centers like Keck Medicine of USC — provides the patient with the greatest likelihood of an outstanding outcome.

Joshua Gary, MD
Orthopaedic Trauma Surgeon
USC Orthopaedic Surgery

To make an appointment, call (800) USC-CARE or visit KeckMedicine.org

Examinations

A Long and Winding Road

BY LEX DAVIS

After hitting multiple roadblocks to get care for her aneurysm, Natalie Ciebrant was ready to give up — until she met Keck Medicine of USC cardiothoracic surgeon Fernando Fleischman, MD, who could treat her safely while also respecting her faith.

When Fernando Fleischman, MD, met Natalie Ciebrant, she had already been diagnosed with an aneurysm and seen physicians at two major hospitals. Despite the gravity of her condition, she couldn't find a doctor who would treat her. But within two weeks, Dr. Fleischman and the team at Keck Medicine of USC — which includes the USC Comprehensive Aortic Center and offers transfusion-free services — were able to bring Natalie back to the recovery room to begin the rest of her life.

Natalie is a Jehovah's Witness, which means that she could not receive a blood transfusion and stay true to her faith. For many surgeons, this is beyond their expertise, but Keck Medicine offers a full program dedicated to providing patients with advanced care and without blood transfusions.

"Had I known that Keck Medicine has a program like this, they would have been my number one pick," Natalie says.

A Sudden Diagnosis

In January 2021, Natalie was rushed to an emergency room in Upland with trouble breathing and high blood pressure. She was terrified because she was at the hospital in the middle of a pandemic surge and coronavirus precautions barred her husband Ray from going in with her. After a CT scan, the surgeon told her she had a large aneurysm and needed surgery that very day. When Natalie explained that she couldn't receive a blood transfusion and stay true to her faith, "He threw up his hands," she remembers.

The surgeon told her that the procedure would be impossible without a blood transfusion and that she would die without it. He told his staff to get her blood pressure down and when she was discharged the next day, they told her to avoid salty foods.

"To be told you're not going to live is the scariest thing," she says. "No surgeon in my area could take this on."

After a transfusion-free open-heart surgery at Keck Hospital of USC, Natalie Ciebrant was able to get back to doing the things she loves — shopping, watching movies and cooking.



A Program for All

Keck Medicine of USC's Transfusion-Free Surgery and Patient Blood Management Program was started in 1997 with Jehovah's Witnesses in mind. Southern California has a substantial Jehovah's Witness population, and transplant physicians didn't like seeing them get turned away. But what started as a niche program grew to include a full range of services that reduce or eliminate the need for blood products. The reason is simple: In many cases, the protocols for transfusion-free procedures offer the safest option for any patient, regardless of their beliefs.

"Even if you're getting a transfusion from someone of the same blood type, the body sees that as an invader — you might get an immune reaction," explains Randy Henderson, director of Keck Medicine's Transfusion Free-Program. "The transfused blood can suppress your immune system while your body is trying to recover." Banking and storing your own blood carries risks as well.

Other medical centers do perform transfusion-free surgeries, but on an individual basis. "It's not the same as our formalized program," Henderson says. "We have protocols in place from admission to discharge, and we have experienced team members who offer responsive, understanding care. Patients who have transfusion-free procedures at other facilities and then come to us can't believe it. It's a completely different experience."

For more information, go to
[KeckMedicine.org/transfusionfree](https://www.KeckMedicine.org/transfusionfree).

When she received a referral to a surgeon who could repair her aneurysm without a transfusion, it took nearly three months just to get all the insurance approvals. In the meantime, Natalie's circulation became extremely poor.

"I knew I was dying," Natalie says. "I can take a lot of pain, but for almost a whole year, people told me my skin was blue."

Natalie finally was scheduled for an initial procedure with the other surgeon in April 2021, but because the surgeon was the only one at the hospital who could perform the procedure, it was canceled the day before, three times in a row.

"I wanted to give up," Natalie says. "I had no energy. I said, 'I'm going to die. Just let me go.'"

But her husband Ray had no intention of letting her go, and in the meantime they learned

include a full range of surgical procedures, with caregivers who are trained for and experienced with transfusion-free protocols.

Ray called Alexander Perez, the manager of transfusion-free services at Keck Medicine. Perez has worked with many patients who are Jehovah's Witnesses and is knowledgeable about their needs. He worked to get Natalie into Keck Medicine's USC Cardiac and Vascular Institute, where she could be seen by the clinicians at the USC Comprehensive Aortic Center quickly.

As it was, though, Natalie was exhausted. "I couldn't breathe. I couldn't walk. I thought we had waited too long," she says.

But the USC Comprehensive Aortic Center's Sophia Lam, MSN, CNS, ACNP-BC, wouldn't let her give up.

"Sophia was like my little conscience on my shoulder," Natalie says. "I was scared, but

**"Dr. Fleischman is the best doctor!...
He told me, 'You're going to make it.
You're going to feel good again.'"**

Natalie Ciebrant

about the transfusion-free program at Keck Medicine — a full, integrated program with staffers who are experienced in transfusion-free procedures.

Meeting Their Needs

The transfusion-free program was started 25 years ago with Jehovah's Witnesses in mind. Initially, the program was for transplant recipients, but the program has grown to

she kept saying that I could do this, and I was going to get better. She said I had such a good doctor, and that I would be all right. Everyone in the office was so wonderful."

When Dr. Fleischman, co-director of the USC Comprehensive Aortic Center and associate professor of clinical surgery at the Keck School of Medicine of USC, first saw Natalie, he knew it could be



Fernando Fleischman, MD



Kremer Johnson Photography

a challenging case. But the center has a dedicated team of specialists who treat all aspects of aortic disease, including aneurysms and emergencies like aortic dissections. The center's caregivers are used to taking complex cases from other institutions across Southern California.

Dr. Fleischman's expertise allowed him to discover something the other doctors had not: Natalie's aortic root was damaged. It was under pressure and pulling away from her heart, which was why Natalie felt like she couldn't breathe — her

condition was drastically reducing her blood flow.

Natalie's case was serious, especially under transfusion-free constraints. "Heart surgery is by definition a blood-intensive surgery," Dr. Fleischman explains. But he was also moved by Natalie's story, which is typical of Jehovah's Witnesses, who often get turned away from several hospitals before they are able to find advanced care.

"I knew she was high-risk," he says, "But I also knew that I have the skills and experience to do a procedure like this, and

I have our whole program here to support me. Not everyone has that. If I turned her down, where was she going to go?"

"Dr. Fleischman is the best doctor!" Natalie says. "He was so calm. He told me, 'You're going to make it. You're going to feel good again.'"

Dr. Fleischman walked Natalie through the procedure and gave her an exact list to go through with her church elders to make sure every aspect was in line with her beliefs. Natalie also completed

Natalie is grateful to Dr. Fleischman for taking her on as a patient and respecting her faith, while also saving her life.

Continued on page 25



Kremer Johnson Photography

The Smell of Success

BY HOPE HAMASHIGE

After a decade of not being able to clear her stuffy nose, Elodia Estrada thought she would never smell again. That is, until Keck Medicine of USC's Kevin Hur, MD, was able to find the true culprit behind her "allergies."

Nasal congestion is a common affliction that, just as commonly, disappears with allergy medication or a nasal spray. For others, like Elodia Estrada, nothing that her primary care doctor suggested could clear up the stuffy nose that plagued her constantly for more than a decade.

"The doctor gave me allergy medications, sprays, antibiotics and nothing worked," she says, adding that she assumed she had a bad cold when she first raised this with her primary care doctor.

It took almost a decade for her to reach Keck Medicine of USC and find the right diagnosis.

The Right Diagnosis

What Elodia's doctors failed to realize is that her problem was not allergies but nasal polyps. Polyps form when the lining in the sinuses swells and forms sacs shaped like tiny grapes. Though not dangerous, these polyps can become large enough to obstruct nasal passages. To the patient, this can feel like congestion and is often accompanied with a runny nose and other symptoms that mimic allergies or even the common cold.

By the time Elodia was referred to Kevin Hur, MD, a rhinologist with the USC Caruso Department of Otolaryngology – Head and Neck Surgery, part of Keck Medicine, her nasal polyps had been making her life extremely difficult for years. Elodia had such difficulty breathing, she endured years of sleepless nights, frequently awaking because she wasn't able to breathe. Even eating and drinking were challenging because she couldn't breathe through her nose while she chewed. She completely lost her sense of smell.

Dr. Hur says that many patients with nasal polyps assume they have allergies. Likewise, he says, many primary care physicians mistakenly treat their patients for sinus infections, allergies and colds when what they really have is nasal polyps.

"You usually can't see nasal polyps with a typical physical exam, so most doctors assume their patients have a cold or allergies," says Dr. Hur, who is an assistant professor of clinical otolaryngology – head and neck surgery at the Keck School of Medicine of USC. "If it doesn't

get better, then they are more likely to refer their patient to an ENT for further evaluation."

Otolaryngologists find polyps one of two ways: They either have their patient undergo a computerized tomography (CT) scan of their sinuses or use an endoscope to examine the nasal passages. When they find them, the polyps can be removed surgically.

Ready for Change

Though the idea of surgery gave Elodia pause, she realized after meeting Dr. Hur that this was going to be the answer to her years of suffering. "I had seen so many doctors and didn't think anyone was going to be able to help me," she says, "but after meeting Dr. Hur, I knew things were going to change. I knew he was going to fix this."



On a recent trip to Glendora Gardens Nursery, Elodia Estrada noted that, before she saw Dr. Kevin Hur and had a procedure to remove nasal polyps, she would not have been able to visit the grounds without suffering.

The minimally invasive procedure involves using an endoscope in one hand and small instruments in the other to carefully remove the polyps through the patient's nostril.

"It's important to remove the polyps without damaging the surrounding structures," Dr. Hur says, noting that many general otolaryngologists do not perform the surgery because the polyps make it hard to see vital structures in the nasal cavity. "You must know where you are at all times when performing this procedure."

Dr. Hur underwent fellowship training in rhinology, specifically to master these types of procedures. He added that while doctors with fellowship training in rhinology are not common, there are three at Keck Medicine.

**"After meeting
Dr. Hur, I knew
things were going
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I knew he was
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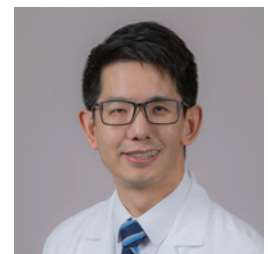
Elodia Estrada

"It is one reason many community physicians feel comfortable referring their patients to Keck Medicine," he says.

Dr. Hur told her the procedure was probably going to change her life and it has. She can eat and drink normally and is back to sleeping through the night and can smell coffee brewing, one of her favorite smells, for the first time in many years.

"It feels like a miracle," Elodia says. "I feel like a normal person for the first time in years, and I thank God for sending Dr. Hur to me."

To learn more or to make an appointment, call (800) USC-CARE or go to [KeckMedicine.org/smellofsuccess](https://www.KeckMedicine.org/smellofsuccess).



Kevin Hur, MD

No Such Thing as TMI

BY ROBIN HEFFLER

Sometimes when patients go to doctor appointments, the thought of explaining certain symptoms can provoke discomfort, embarrassment or even fear. These emotions can then affect how they communicate with their care providers and whether they get an accurate diagnosis and the help they need.

Three Keck Medicine of USC physicians share the symptoms that their patients are most reluctant to bring up or describe, why good communication is so important, and how patients can overcome their feelings. Hear from dermatologist Ashley Crew, MD, director of the Dermatology Residency Training Program and clinical associate professor of dermatology at the Keck School of Medicine of USC; urogynecologist Tanaz Ferzandi, MD, MBA, director of the division of urogynecology and pelvic reconstructive surgery and associate professor of obstetrics and gynecology at the Keck School; and family medicine physician Katina Murray, MD, medical director of the Department of Family Medicine and clinical associate professor of family medicine at the Keck School.

What are patients most hesitant to share?

- Genital rashes, lesions or infections
- Excessive sweating
- Dropping of the uterus and pelvic floor weakness
- Incontinence for urine or feces
- Unusual bowel movements
- Hemorrhoids
- Sexual dysfunction
- Bad breath
- Injury caused by violence or abuse

Tips to Keep in Mind



- Write down a list of your symptoms and bring it to your appointment.
- A family member or friend can accompany you to provide support, information or advocacy.
- Keep in mind that your physician has probably heard your symptoms many times before. They're trained to be helpful without judgment and are focused on having a positive impact on your quality of life.
- Your physician should either know how to treat you or be able to refer you to someone who does.
- If your doctor recommends a treatment with which you're not comfortable, or says that nothing can be done, seek a consultation with another physician or a specialist.
- To have good outcomes, you and your doctor need to make decisions about treatment options together as a team.



Listen to Your Doctors

Complaining is a good thing

“There are a lot of misconceptions and a lack of understanding about the conditions we treat. Much of this has to do with the fact that these conditions are socially embarrassing and kind of taboo for women to talk about,” says Dr. Ferzandi about the pelvic floor/organ prolapse and urinary incontinence she often sees. “But there are ways to manage these with devices or surgery. Older patients may shrug it off as, ‘this happens with age and I just have to live with it.’ But they should be complaining about it and getting care, or a family member can advocate for them.”

A mechanic for the skin

During dermatology visits, patients can be uncomfortable not only when they are worried about genital rashes, lesions or sweating problems, but also during routine total-body skin exams, Dr. Crew says. “Sometimes patients will mention that they forgot to shave their legs or get a pedicure,” she says. “As physicians, we are not concerned about cosmetic issues when we are doing a skin check for skin cancer surveillance. We are working to identify potentially dangerous lesions and issues that, if addressed, can improve a patient’s quality of life. I sometimes tell patients in a slightly joking way that they can consider me a mechanic for their skin.”

Concerns across age groups

When Dr. Murray sees patients of all ages in her family medicine practice, many of them have a hard time discussing “concerns about male or female sexual dysfunction, screening for sexually transmitted infections, hemorrhoids, hair loss and vaginal or penile discharge,” she says. “If they’ve been a long-time patient, they’re more likely to bring up sensitive things. If they’re new, they may tell a nurse or bring it up at the end of a visit. I remind patients that, as their primary care physician, it’s my job to treat the whole person.”

To learn more or to schedule an appointment, call (800) USC-CARE or go to [KeckMedicine.org](https://www.KeckMedicine.org).



Ashley Crew, MD



Tanaz Ferzandi, MD, MBA



Katina Murray, MD

Ricardo Sandoval wakes up each day by 5 a.m., brimming with energy. After an hour-and-a-half of exercise — a three-mile walk, cardio workout and calisthenics — he makes breakfast for his two boys and takes them to school. Then he opens the doors to his thriving school uniform business. Evenings, he makes dinner and goes for a walk or bike ride with his family.

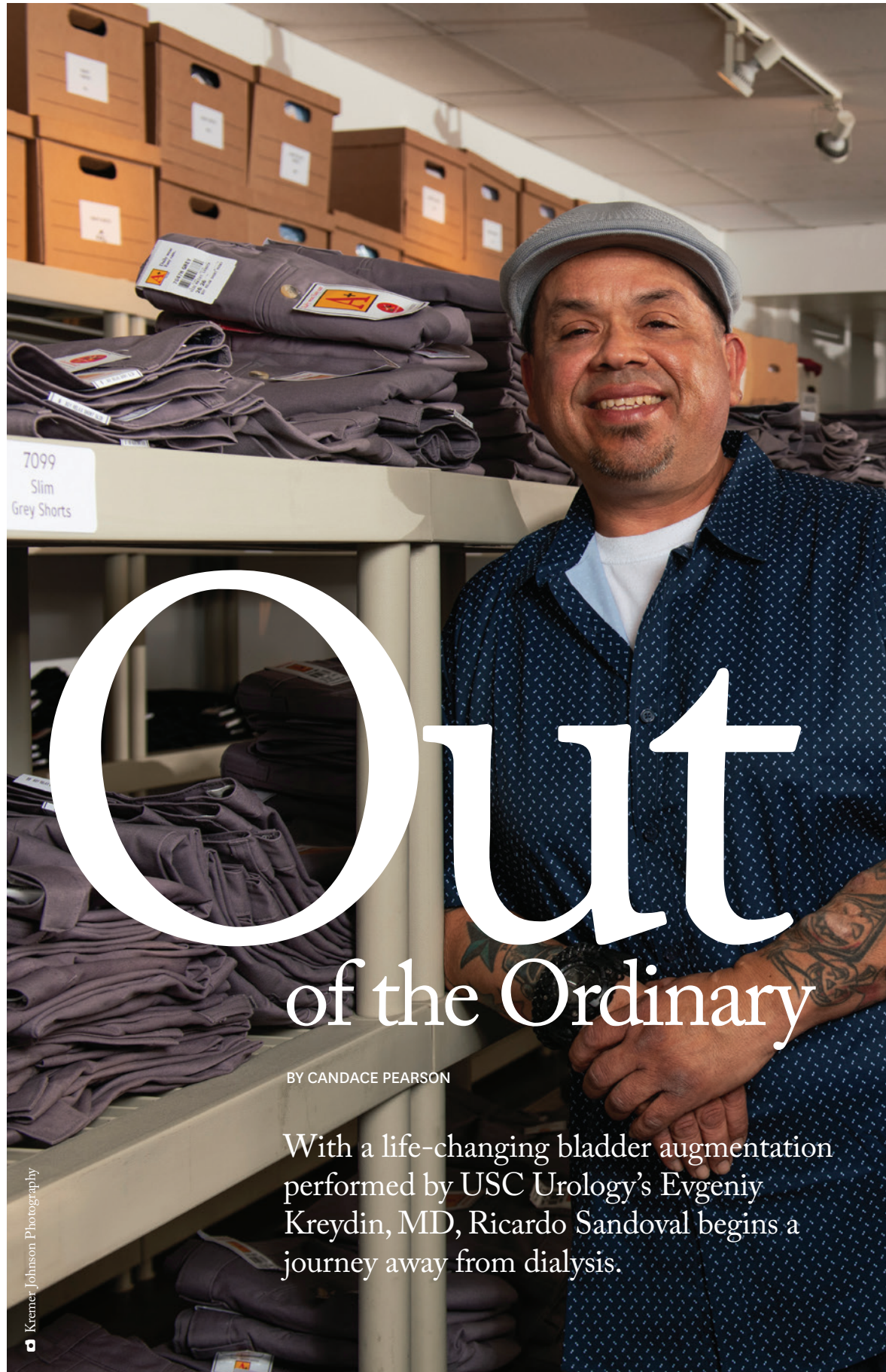
This seemingly ordinary day is remarkable for one reason: only a short time ago, Ricardo had end-stage renal disease. He was so weak he couldn't climb the stairs to his house. Every night he hooked himself up to a dialysis machine, which removed waste from his blood because his kidneys could no longer do the job.

Then a complex surgery called bladder augmentation at Keck Medicine of USC set the stage for Ricardo to receive a kidney transplant, and “my world changed completely,” he says.

A Fortuitous Meeting

The turning point came three years ago, when Ricardo met Evgeniy Kreydin, MD, a urological surgeon at Keck Medicine's USC Urology. Dr. Kreydin determined that Ricardo had a “neurogenic” bladder, in which a person lacks bladder control due to a brain, spinal cord or nerve condition. About 15 years earlier, Ricardo had been the victim of a gunshot to the back.

In a healthy bladder, the internal pressure stays steady as it fills. “The bladder is



BY CANDACE PEARSON

With a life-changing bladder augmentation performed by USC Urology's Evgeniy Kreydin, MD, Ricardo Sandoval begins a journey away from dialysis.

Keener Johnson Photography



elastic. As the volume goes up, the pressure doesn't," says Dr. Kreydin, assistant professor of clinical urology at the Keck School of Medicine of USC.

But Ricardo had a persistent "high-pressure bladder" that had lost its elasticity. He felt a constant, often painful pressure to urinate. His bladder also contracted unexpectedly, causing leakage. Without a solution, it could jeopardize any kidney transplant.

Expanding Options

"Patients with neurogenic bladder didn't have a lot of options until about 15 years ago," Dr. Kreydin says. At that time, the drug Botox was

**"I'm blessed, so very blessed...
I plan to live a long, long time."**

Ricardo Sandoval

introduced, with its ability to block chemical signals from nerves, including muscle contractions.

For many people, one injection is sufficient to decrease bladder pressure and stop leakage. From his office at USC Verdugo Hills Hospital, Dr. Kreydin administered Botox to Ricardo. But, in this case, it didn't work. Ricardo's only option was surgery.

USC Urology is a center of excellence for bladder



Ricardo Sandoval credits Dr. Evgeniy Kreydin for setting him on the path to full health, which allowed him to open his business, Schoolware Uniforms, with his wife, Robyn.

reconstruction, in which a whole new bladder is created, typically for patients with bladder cancer. "USC is also a center of excellence for bladder augmentation," Dr. Kreydin adds, "a less common procedure."

Dr. Kreydin drew a picture showing how he would use Ricardo's own bowel tissue to expand his existing bladder and lower the pressure. Amazed, Ricardo told him, "Go for it."

Fortunately, Ricardo was in shape to handle the complex procedure. A year into dialysis, he decided, "I want to be healthy." He took charge of his disease and stuck to his renal diet. Over a few years, he lost 120 pounds from his peak weight of 320.

Ricardo had another advantage: a loving, supportive family — wife Robyn, daughters Stephanie and Cerissa and sons Louis and Zion.

A New Day

In August 2019, in a seven-hour operation, Dr. Kreydin enlarged Ricardo's bladder. He then built a channel from Ricardo's intestinal tissue to allow him



Evgeniy Kreydin, MD

to empty his bladder from his abdomen via a catheter, bypassing his damaged urethra.

With his bladder repaired, Ricardo could look forward to a new kidney. His transplant took place in February 2021 at Keck Hospital of USC.

Dr. Kreydin, a member of the USC Neurorestoration Center, is determined to help more patients like Ricardo through research. "We want to get the spinal cord working again so the bladder starts working again, too."

"I'm blessed, so very blessed," says Ricardo, who turns 48 this year. "I plan to live a long, long time."

To learn more or to schedule an appointment, call (800) USC-CARE or go to [KeckMedicine.org/outofordinary](https://www.KeckMedicine.org/outofordinary).

Early Warning Signals

A comprehensive breast cancer surveillance program at Keck Medicine of USC is saving futures, one person at a time.

BY CANDACE PEARSON

As a kid, Christine Ysabal, JD, LLM, thought “doctors’ appointments were only for when you were ill,” she says, not for preventing future health problems. She had routine vaccinations but never saw anyone in her family get an annual checkup or screening.

So when she turned 40 and people told Christine she should start having a yearly mammogram, she put it off. A busy mom and wife, she was studying for her master’s degree and working full-time as a contracts and compliance administrator in the Department of Radiology at Keck Medicine of USC. “Everything got prioritized ahead of my own health,” she says.

Christine finally made time for her first mammogram at age 46, and everything was fine. With that good report and no family history of breast cancer, Christine didn’t schedule another screening until four years later in October 2020.

A Lifesaving Image

At that time, USC Norris Comprehensive Cancer Center diagnostic radiologist Mary Yamashita, MD, ordered a 3D mammogram for Christine due to her dense breast tissue. In any mammogram, dense breast tissue appears white on the image. The problem? “Breast cancer also appears white, making it more difficult to find small cancer in women with dense breast tissue,” Dr. Yamashita says.

The 3D mammogram technology produces multiple X-ray images from multiple angles, then reconstructs them into one-millimeter slices. Evaluating the breast 1 mm slice at a time can

allow clinicians to detect cancers hidden by overlying dense breast tissue. Keck Medicine has offered 3D mammograms — also known as digital breast tomosynthesis — since its approval by the U.S. Food and Drug Administration in 2011.

“We’re able to identify more cancer and smaller cancers as a result,” says Dr. Yamashita, a clinical associate professor of radiology at the Keck School of Medicine of USC. She recommends that every woman — whether at average risk or high risk for breast cancer, with dense breast tissue or fatty tissue — get a 3D mammogram.

For Christine, the technology was a lifesaver. In the detailed images, Dr. Yamashita saw something that concerned her: a suspicious-looking lesion. “I don’t know how I missed the lump,” Christine says. A follow-up diagnostic ultrasound focused on the area of concern seen on the mammogram revealed an abnormal mass, as Dr. Yamashita suspected.

“Put yourself first. Get screened.”

Christine Ysabal, JD, LLM

A needle biopsy then confirmed that Christine had a “precancerous” tumor that could develop into cancer.

“Breast screening enables us to find cancers before you can feel it,” Dr. Yamashita says. Since 1989, when mammograms became widely available in the U.S., through 2015, the breast cancer death rate has dropped 43%. “We want every woman to get screened because breast cancer when detected early is curable,” she adds. “And you require less treatments, less surgery, and less toxic chemotherapy.”

In 2020 and early 2021, under the cloud of COVID-19, some women postponed their mammograms. “In a few cases, we found cancer and wondered if we would have caught it smaller if the women had come in the year before,” Dr. Yamashita says.

Making Regular Appointments

In November 2020, Christine had a lumpectomy, a surgical procedure to remove





Kremer Johnson Photography

Examinations

the lump from her breast. Because the lesion was not cancerous, Christine didn't need additional treatment.

For the foreseeable future, she will have yearly checkups with a breast surgeon and two imaging studies annually — a mammogram and magnetic resonance imaging (MRI). These regular exams will ensure any future tumors will be caught early, such as the benign mass that was removed in April 2022.

Which type of imaging is recommended — mammogram, ultrasound, and/or MRI — depends on the individual patient's risk factors. "This goes beyond personalized medicine," Dr. Yamashita says. "This is precision medicine."

Recently, Dr. Yamashita led Keck Medicine's participation in a multi-center clinical trial studying fully automated breast ultrasound for women with dense breast tissue, which won FDA approval to broaden cancer surveillance options.

Christine advises others: "Put yourself first. Get screened." She is determined to be a positive role model for her daughters: Isabella, 12, and Samantha, 32. "I want to be around and healthy in their lives for a long time."

To learn more or to schedule an appointment, call (800) USC-CARE or go to [KeckMedicine.org/warningsignals](https://www.KeckMedicine.org/warningsignals).



Mary Yamashita, MD

Christine Ysabal put off her annual screening for years before a 3D mammogram caught the attention of Mary Yamashita, MD, who found a precancerous lesion that could develop into cancer.

Christine is now an advocate for regular screenings, because she wants to model good health behavior for her daughters, Isabella and Samantha.

Consultations

Keck Medicine of USC enters into joint venture with Henry Mayo Newhall Hospital

Henry Mayo Newhall Hospital and Keck Medicine of USC are collaborating to bring advanced health care services directly to the Santa Clarita Valley and surrounding areas.

“By working with Henry Mayo Newhall Hospital, a revered member of the Santa Clarita Valley Community, we can better serve patients with a broader spectrum of services at a convenient location they already trust,” said Rod Hanners, CEO of Keck Medicine of USC. “Keck Medicine is thrilled to embark on this venture and looking forward to the opportunities ahead.”

The collaboration launched with the opening of a USC Norris Comprehensive Cancer Center Radiation Oncology clinic on the Henry Mayo campus. Henry Mayo and Keck Medicine also are planning to provide a comprehensive program for inpatient and outpatient oncology services, encompassing radiation, medical oncology and surgical oncology subspecialists, as well as supportive services, to provide a local one-stop destination for world-class cancer care.

“Together, we will offer a range of exceptionally high-quality medical services right on our campus, providing cutting-edge care to our patients where and when they need it the most,” said Henry Mayo President and CEO Roger E. Seaver. “We are excited about collaborating with one of the world’s leading health care institutions, offering our patients access to expert physicians and cutting-edge research, and bringing new subspecialist expertise to the local community.”

Henry Mayo and Keck Medicine also are collaborating to bring colorectal surgery and certain specialty orthopaedic services to Santa Clarita, giving patients the opportunity to receive specialized care without having to leave the Santa Clarita Valley.

The USC Norris Comprehensive Cancer Center radiation oncology location is in suite 110 on the first floor of the Outpatient Surgery Center Building on the Henry Mayo Campus. The street address is 25751 McBean Parkway, Valencia, CA 91355. The phone number is (661) 839-1801. The Colorectal Surgery location is in suite 220 of the same building. The Orthopaedics location is at 23929 McBean Parkway, Suite 205, Valencia, CA 91355. The phone number is (661) 600-1740.

The Outpatient Surgery Center Building, at 25751 McBean Parkway in Valencia, houses a radiation oncology location and colorectal surgery location affiliated with the USC Norris Comprehensive Cancer Center.



USC Verdugo Hills Hospital announces its newest leadership updates

USC Verdugo Hills Hospital recently announced changes in its executive leadership, naming new chief executive and medical officers. Having served as interim CEO of the hospital since March 2021, Armand Dorian, MD, MMM, has transitioned to permanent CEO. Taking his former position as CMO of the hospital is Tarina Kang, MD, MHA, who provided Keck Medicine of USC with invaluable ideas and oversight in the early days of the COVID-19 pandemic.

Having served as interim CEO of USC-VHH since March 2021, Dr. Dorian is already well-accomplished in leading all aspects of the hospital. In his permanent role, he will continue to drive its mission to provide exceptional, patient-centered care to those living and working in the Foothill communities of North Los Angeles and surrounding areas.

“Armand has nearly 20 years of medical experience as a board-certified emergency medicine physician and a valued leader and administrator,” said Rod Hanners, CEO



Armand Dorian, MD, MMM



Tarina Kang, MD, MHA

of Keck Medicine. “He is an indefatigable and inspirational leader, as he just proved by successfully leading the hospital through many challenges during the pandemic. With him at the helm, and with his commitment to patient care, staff wellness and community engagement, there is no limit to what USC-VHH can offer our patients, staff and community.”

Dr. Dorian keeps busy, offering his efforts as the president of the USC-VHH governing board and member — formerly

president — of the hospital’s Caduceus Society, a physicians’ giving group dedicated to raising funds for hospital equipment, facility care and a medical staff endowment fund. He also remains a clinical professor of emergency medicine at the Keck School of Medicine of USC.

Prior to his CEO position, Dr. Dorian worked as the chief medical officer of USC-VHH. As his replacement, Dr. Kang will ensure the highest quality of care for patients by overseeing the coordination of services, technology implementation, process improvements and compliance. She also will continue her work as a clinical associate professor of emergency medicine at the Keck School.

Dr. Kang most recently made her mark as the medical director of quality for Keck Medical Center of USC and as medical director for the Evaluation and Treatment Clinic at Keck Hospital of USC. In these roles, she contributed greatly to the hospital’s early response to the COVID-19 pandemic by overseeing physician staffing and creating the outdoor COVID-19 evaluation tent.

“Dr. Kang has extensive health care leadership experience and a passion for maintaining the health and safety of our communities,” Dr. Dorian said. “She brings tremendous talent and expertise to the position, and we are thrilled to welcome her onboard.”





New center offers care for diseases of head, neck

At the newly designated USC Head and Neck Center, part of the USC Caruso Department of Otolaryngology – Head and Neck Surgery at Keck Medicine of USC, the team puts the patient at the center of their care, surrounding them and their loved ones with the support and expertise needed — from diagnosis through treatment and during their rehabilitation.

“The vision for our center is to prevent and cure diseases of the head and neck, and to maximize the balance between survival and quality of life,” says Uttam K. Sinha, MD, MS, medical director of head and neck surgery and Watt Chair in Head and Neck Cancer Research at the Keck School of Medicine of USC. “How do we do this? By performing high-impact science and research, and converting that knowledge into novel and effective diagnostic treatment that also offers patients a culturally sensitive experience.”

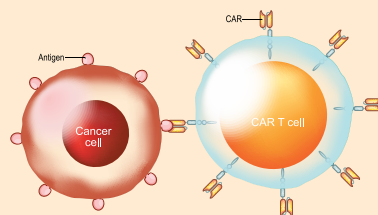
The health care team understands the impact a diagnosis of a head and neck ailment can have on a patient and their loved ones. The center has a strong focus on rehabilitation after surgery. And in collaboration with the USC Norris Comprehensive Cancer Center, the center offers clinical trials for early detection of cancer using a liquid biopsy platform with blood and saliva for patients that qualify.

To learn more or to make an appointment, call (800) USC-CARE or go to KeckMedicine.org/head-and-neck.



Uttam K. Sinha, MD, MS

DID YOU KNOW:



USC Norris expands offerings of CAR T-cell therapy for cancer patients

USC Norris Comprehensive Cancer Center now offers patients with lymphoma and leukemia access to a new class of treatment known as CAR T-cell therapy.

CAR (chimeric antigen receptor) T-cell therapy is unlike any other treatment currently available for cancer patients. The procedure involves taking blood from the patient and separating out T cells, a type of white blood cell. These cells undergo a process in a laboratory that helps them to recognize and kill cancer cells.

The altered T cells are reintroduced into the patient’s bloodstream after the patient has a short course of chemotherapy. Though relatively new, CAR T-cell treatments have shown great promise for patients with certain forms of leukemia and lymphoma who have not responded to standard chemotherapy.

To make an appointment, contact Stephanie Rupit-Venegas at (323) 865-3741 or stephanie.rupit-venegas@med.usc.edu.



New, state-of-the-art oncology clinic and infusion center in Newport Beach

USC Norris Comprehensive Cancer Center, part of Keck Medicine of USC, has expanded access to oncology services in Orange County by opening a new location in Newport Beach specializing in the diagnosis and treatment of a wide range of cancers and blood disorders.

The 33,000-square-foot location consists of an oncology clinic with 24 rooms equipped with cutting-edge technology, as well as an infusion center with 32 semiprivate, spacious bays with beach views and room for visitors. It also includes two fully private bays for patients with longer infusions or cold caps, which are used to prevent hair loss during treatment.

The location offers an on-site laboratory as well as sterile compounding pharmacy services, which customize medications based on patients' needs and allow for coordinated, convenient and personalized treatment.

Among the services provided, patients have access to on-site testing, which offers quick results about their tumor markers so their care teams can promptly design personalized treatment plans.

Patients needing infusion can conveniently have their lab work done on-site just before their appointments. The pharmacy will then use the lab work to develop and customize their infusion treatments.



Among the physicians who practice at Keck Medicine of USC – Newport Beach are (from left) Drs. An Nguyen, Minh Nguyen, Louis VanderMolen, Greg Angstreich and Umair Ghani.

a Ricardo Carrasco III

Keck Medicine is also expanding its Orange County clinical trials program at the Newport Beach location, further increasing patients' access to potentially life-saving care. Additionally, physicians at the Newport Beach clinic regularly participate in USC Norris and Hoag Hospital Newport Beach tumor boards, ensuring that each patient receives thoughtful, multidisciplinary treatment plans.

The Newport Beach location was designed to cater to both patients' physical health and their mental well-being. To put patients at ease, the space is designed to feel airy, bright and coastal with plenty of natural light, soothing nautical artwork and clear lines of sight for staff to watch over patients.

"Dealing with cancer is stressful, and we want to create the best patient experience possible," said Keck Medicine's Louis VanderMolen, MD, a medical oncologist with Keck Medicine, and a professor of clinical medicine and vice chair of clinical oncology at the Orange County program of the Keck School of Medicine of USC.

Keck Medicine of USC – Newport Beach
330 Old Newport Blvd., Newport Beach, CA 92663

Learn more or make an appointment: [KeckMedicine.org/330-Newport-Beach](https://www.KeckMedicine.org/330-Newport-Beach) or (949) 646-6441.

Keck Hospital of USC's Acute Rehabilitation Unit named among top physical rehabilitation centers

Newsweek has named Keck Hospital of USC's Acute Rehabilitation Unit (ARU) one of the top physical rehabilitation centers in California. At No. 13 in the rankings for California, Keck Hospital reached the top 10% for inpatient rehabilitative care in the state.

Keck Medicine has long been committed to providing the best possible rehabilitation care so that inpatients can make greater strides toward recovered independence and improved quality of life. The ARU is a comprehensive program with an interdisciplinary team approach, where experts strive to increase patient functions including mobility, daily activities, cognition, communication, strength and overall independence. The discharge to community rate of 89.2% currently surpasses the national average of 81.8%.

"It makes us proud to see that this team of multidisciplinary rehabilitation specialists has risen quickly and confidently in less than nine years to the top 10% of the best inpatient physical rehabilitation centers in California," said Ramzi Ben-Youssef, MD, medical director of the ARU and clinical associate professor of neurology at the Keck School of Medicine of USC.

USC Norris Cancer Hospital earns national 2021 Leapfrog Top Teaching Hospital award



USC Norris Cancer Hospital, part of USC Norris Comprehensive Cancer Center, was named a Top Teaching Hospital nationally by The Leapfrog Group, a national watchdog organization.

"This is a tremendous honor, and recognizes USC Norris Hospital for its achievements in patient safety and quality," said Marty Sargeant, CEO of Keck Hospital of USC and USC Norris Cancer Hospital.

Over 2,200 hospitals were considered for a Top Hospital award, which recognized hospitals in four categories: children's, general, rural and teaching.

A total of 149 hospitals were selected as Top Hospitals, including 72 Top Teaching Hospitals.

"USC Norris Cancer Hospital's designation is a reflection of our dedication to excellence across many areas of hospital performance, including infection rates, surgery and the hospital's capacity to prevent errors," said Caryn Lerman, PhD, director of the cancer center. "I am very proud that even when facing

the challenges of the pandemic, we continued to ensure the highest level of care for our patients and continued the important research that leads to cancer treatment breakthroughs."

To qualify for the Top Hospitals distinction, hospitals must rank top among peers on the Leapfrog Hospital Survey, which assesses hospital performance on the highest standards for quality and patient safety.

The National Cancer Institute (NCI) has designated the USC Norris Comprehensive Cancer Center as one of the nation's 51 comprehensive cancer centers, a select group of institutions providing leadership in cancer treatment, research, prevention and education. USC Norris has held this designation since 1973, at which time it was named as one of the first eight such centers in the country. Every day, USC Norris scientists and physicians join patients and the community in the fight against cancer.

To see the full list of institutions honored as 2021 Top Hospitals, visit www.leapfroggroup.org/tophospitals.



There are hundreds of **clinical trials** and **studies** currently taking place at Keck Medicine of USC, giving participants access to novel and potentially promising therapies that may not be available elsewhere. For more information on all of Keck Medicine's open clinical trials, visit clinicaltrials.keckmedicine.org.

Drug-Induced Sleep Endoscopy for Upper Airway Evaluation in Obstructive Sleep Apnea

This study is designed to evaluate the role of drug-induced sleep endoscopy (DISE) in patients undergoing obstructive sleep apnea surgery at Keck Medical Center of USC. Our previous research has determined the reliability of DISE and compared DISE to other evaluation techniques. Our ongoing research examines how DISE can be used to improve outcomes in sleep apnea surgery.

What should you expect?

Obstructive sleep apnea patients considering surgical treatment will receive an intravenous propofol infusion titrated to reach a target level of sedation and sleep with arousability to verbal stimuli. The study aims to measure pre- and post-operative associations between DISE and physical examination; between DISE and polysomnogram results; between DISE and awake Mueller maneuver; between DISE and lateral cephalometry; and between DISE findings and surgical outcomes.

Who can participate?

Anyone age 18 and older with a diagnosis of obstructive sleep apnea who is considering surgical treatment.

Contact and Principal Investigator:

Eric Kezirian, MD, MPH, eric.kezirian@med.usc.edu

A Long and Winding Road

Continued from page 11

a form with the transfusion-free services program so that she could make her wishes known about, for example, blood substitutes or products derived from blood components.

A Day To Remember

Physically, Natalie prepared for the surgery by taking blood builders, a bone marrow stimulant and a "cocktail" of iron, folic acid (vitamin B9), and vitamin B12 to raise her blood count and correct any anemia.

After her blood was optimized, Natalie's blood volume was deliberately decreased to reduce potential bleeding. And then, Aug. 2, 2021, she was finally scheduled for her open-heart surgery.

Dr. Fleischman worked cautiously and meticulously, using surgical techniques to prevent bleeding and avoid the need for transfusion. He repaired the aneurysm and replaced Natalie's aortic root with a graft. The procedure went well.

"I knew it was going well because there was no bleeding," Dr. Fleischman says, "but I waited 8 to 10 hours and checked in to make sure that her blood was flowing well." He was pleased with how the procedure went.

"I just remember waking up and I could breathe!" Natalie says. "I can take a deep breath and breathe the air. I can walk now."

Natalie is back to work now, and she can enjoy her favorite pastimes: shopping, watching movies and cooking. Weekends are the best — she and Ray like to take a drive and enjoy the beach or a walk outdoors.

"They saved my life," Natalie says. "I had so much fear in me and everyone there put me at ease. They made me believe that I was going to live."

To learn more or to schedule an appointment, call (323) 442-5849 or go to clinicaltrials.keckmedicine.org/windingroad.



Labwork

Lack of access to affordable, nutritious food puts those with chronic liver disease at a higher risk of death

BY ALISON RAINEY

Food insecurity, the limited availability of nutritionally adequate food, is a growing public health concern in the United States. Over 35 million Americans experience food insecurity annually, according to the U.S. Department of Agriculture. These numbers are estimated to have risen dramatically during the COVID-19 pandemic as economic hardship has caused more Americans to lose access to an affordable, nutritious diet.

A new study by Keck Medicine of USC found that food insecurity can be deadly for patients with either nonalcoholic fatty liver disease, a buildup of extra fat in the liver that is the most common cause of chronic liver disease in the U.S., or advanced liver disease, a condition characterized by inflammation and scarring of the liver.

The results showed that people living with nonalcoholic fatty liver disease who are food insecure have a 46% higher risk of death compared to individuals with nonalcoholic fatty liver disease who are food secure.

For those with advanced liver disease who are food insecure, the risk of dying is 37% higher when compared to food-secure advanced liver disease patients.

Additionally, researchers estimated that 3% of nonalcoholic fatty liver disease deaths and 7% of advanced liver disease deaths could be eliminated if food insecurity was eradicated.

“These findings are very significant because while food insecurity has previously been linked to chronic liver disease, this is the first

study to examine its long-term effect on individuals,” said Ani Kardashian, MD, a hepatologist with Keck Medicine and lead author of the study. “The study clearly indicates that lack of access to healthy food is a major health problem for this patient population.”

Kardashian, who is also an assistant professor of clinical medicine at the Keck School of Medicine of USC, and her colleagues gathered data from the National Health and Nutrition Examination Survey, a large, nationally representative health and diet survey.

The researchers hypothesize that several factors may lead to the association between lack of healthy food choices and a greater risk of death for liver disease patients.

“Cheaper, nutrient-poor foods tend to be laden with fat and carbohydrates, which can lead to obesity, diabetes and in turn, to fatty liver and advanced liver disease,” Kardashian said. “Individuals with food insecurity also may experience competing demands between food and medical care, and this may be particularly harmful in liver disease patients who require more specialized care.”

The other study authors include Jennifer Dodge, MPH, an assistant professor of research medicine and population and public health sciences at the Keck School, and Norah Terrault, MD, MPH, a Keck Medicine gastroenterologist and division chief of gastroenterology and liver diseases at the Keck School.



“The study clearly indicates that lack of access to healthy food is a major health problem for this patient population.”

Ani Kardashian, MD

Researchers publish first successful ‘smart boot’ study regarding diabetes-related wounds

BY LEX DAVIS

For patients with diabetic nerve damage, a foot wound can lead to infection, hospitalization and even amputation. Treatment involves offloading pressure from the bottom of the foot using specially-made braces known as removable cast boots. When patient compliance with wearing the boots hovered at 28%, the researchers aimed for a more sophisticated wearable.

As part of its partnership with Center to Stream Healthcare in Place (C2SHIP),

Keck Medicine of USC has developed a new, interactive smart boot to help diabetic patients recover from dangerous foot wounds. The work was conducted in a multiphase study funded by the National Institutes of Health and led by podiatrist and surgical wound care specialist David Armstrong, PhD, DPM, director of C2SHIP and a professor of surgery at the Keck School of Medicine of USC.

Driven by cloud computing, the new model allows patients to put on or remove the boot whenever they wish. To further increase compliance, the boot gives feedback to the patient about their activity level and the amount of time they spend with the boot on. This “smart boot” also sends data directly to the care team. Early data suggests good compliance and the feedback may help patients stay actively engaged in their own recovery process.

“I may know the medical aspects, but I always have to be aware that patients know their own lives best,” Armstrong said.



© Courtesy David Armstrong



Study suggests simple possible cure for noise-induced hearing loss

BY ALISON RAINEY

Exposure to loud noise, such as a firecracker or an ear-splitting concert, is the most common preventable cause of hearing loss. Research suggests that 12% or more of the world population is at risk for noise-induced loss of hearing.

Loud sounds can cause a loss of auditory nerve cells in the inner ear, resulting in hearing difficulty. Now, a new study from Keck Medicine of USC links this type of inner ear nerve damage to a condition known as endolymphatic hydrops, a buildup of fluid in the inner ear, showing that these both occur at noise exposure levels people might encounter in their daily life.

Additionally, researchers found that treating the resulting fluid buildup with a readily available saline solution lessened nerve damage in the inner ear.

“This research provides clues to better understand how and when noise-induced damage to the ears occurs and suggests new ways to detect and prevent hearing loss,” said John Ogghalai, MD, an otolaryngologist with Keck Medicine, chair of the USC Caruso Department of Otolaryngology – Head and Neck Surgery and lead author of the study.



How Caring for the Caregiver Helps Our Patients

No matter what industry people work in, they're often most productive when they're happy and healthy. At Keck Medicine of USC, taking care of our physicians and staff is directly linked to our ability to deliver high-quality, innovative and compassionate care to our patients.

While health care is a stressful though rewarding field, the COVID-19 pandemic highlighted the need to establish comprehensive services that support the overall health and well-being of our caregivers. In turn, they would be better equipped to serve patients at every stage of the care journey.

This conviction led to the launch of the Care for the Caregiver program. It serves to provide financial and mental health support to physicians and staff throughout the organization. Resources are wide ranging, but include peer groups, improved access to mental health care and safe, comfortable lodging near Keck Medical Center.

As the chief mental health and wellness officer and lead of clinical programming, I have witnessed firsthand how this has led to improved physical and mental health among our employees, enhancing their ability to provide patients with the care, expertise and attention they deserve.

Regardless of what happens in the future, we intend to keep the Care for the Caregiver program in place. We consider our employees to be the Olympians of health care. By providing for them, we can better serve our top priority — the well-being of our patients.

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