

# Keck Medicine of USC



No matter what dreams you may have on the horizon, our expert health care team is here to partner with you to realize your potential. That's what happens when deep expertise combines with truly personalized care. **Together we are limitless**.

Keck Hospital of USC
USC Arcadia Hospital
USC Care Medical Group
USC Norris Cancer Hospital
USC Verdugo Hills Hospital

KeckMedicine.org

© 2024 Keck Medicine of USC





# Check In

#### Vitals

2-9

| Hearing Aid Benefits | Supporting Caregivers | | What is TIA? | Pregnancy Sickness | How to Spot a Fad Diet | | Marijuana and Heart Health | Men's Mental Health | Meet Our Staff |

#### Examinations





#### Mother and Daughter

Unexpectedly, Felicitas Gonzales and her daughter Margarita had brain surgery one week apart.

14



#### A New Family Bond



21

Two sets of siblings are forever bonded by a rare transplant exchange.

# A Runner's Path USC Verdugo Hills Hospital saved triathlete Laura Brezin Kern

after a ruptured brain aneurysm.

In Case of Emergency 24

USC Arcadia Hospital's emergency department medical director helps you prepare.



#### Consultations

26-30

USC Arcadia Hospital's New Executives

USC-VHH Cath Lab

USC Norris Cancer Hospital Named Top Teaching Hospital

USC Salivary Gland Center's Rare Approach

USC-VHH Nurse Residency Program

USC Urology Symposium Explores AI

Employee of the Year

#### Clinical Trials

31

Labwork

32-34

Blood Test for Diagnosing Ovarian Cancer

TikTok Vaping Content

PFAS and Diet

Blood Sugar and Hip Replacement

#### Perspective

36

Locations

37

# usc health.

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, USC Arcadia Hospital and more than 80 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 2023-24 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 10 medical specialties.

#### Publisher

Sara Reeve

#### **Managing Editor**

Michael Juliani

#### **Art Director**

Julie Matzaganian

#### **Editorial Advisers**

Jennifer Grebow, Jeana Rettig

#### **Contributing Writers**

Zara Abrams, Tina Donvito, Kate Faye, Hope Hamashige, Robin Heffler, Erin Laviola, Deanna Pai, Candace Pearson, Alison Rainey, Sidney Taiko Sheehan, Matthew Vasiliauskas

#### **Photography**

Ricardo Carrasco III, Kremer Johnson Photography, Sergio Bianco, Shutterstock, Adobe Stock

#### **Printer**

Lithographix

Continued on page 2

Find us online KeckMedicine.org/magazine





Permission to reprint articles is available upon request. No artwork may be reproduced without the artist's consent.

Our mailing list comes from several sources. If you receive duplicate copies of this magazine, please send us all the label information and we will strive to eliminate the duplication. Direct inquiries to:

Keck Medicine of USC Health System Marketing and Communications, 2011 N. Soto St., SST-2830 Los Angeles, CA 90032 (323) 442-2830

The content of this magazine is not intended to be a substitute for medical advice, diagnosis or treatment. Always seek the advice of your physician or other qualified health provider with questions you have regarding a medical condition.

Keck Medicine of USC complies with applicable federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability or sex. Keck Medicine of USC does not exclude people or treat them differently because of race, color, national origin, age, disability or sex.

ATTENTION: If you speak Spanish, Chinese, Vietnamese, Tagalog, Korean, Armenian, Persian-Farsi, Russian, Japanese, Arabic, Punjabi, Cambodian, Hmong, Hindi or Thai — call (800) 872-2273 for free language assistance services.

ATENCIÓN: Si habla español, tiene a su disposición servicios gratuitos de asistencia lingüistica. Llame al (800) 872-2273.

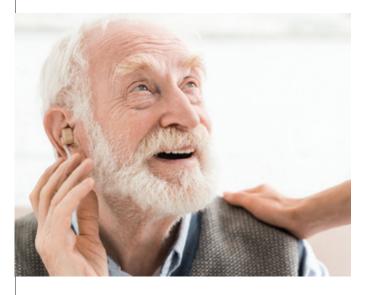
注意:如果您說西班牙語、中文、越南語、他加祿語、韓語、亞美尼亞語、波斯語-波斯語、俄語、日語、阿拉伯語、旁遮普語、柬埔寨語、苗族語、印地語或泰語,請致電(800)872-2273獲取免費語言協助服務。

Find us online KeckMedicine.org/magazine



# Vitals

# The Life-Altering Benefits of Hearing Aids



Keck Medicine of USC researchers have found that regularly using hearing aids may provide extraordinary health benefits including a longer life.

We found that adults with hearing loss who regularly used hearing aids had a 24% lower risk of mortality than those who never wore them," says Janet Choi, MD, MPH, an otolaryngologist with the USC Caruso Department of Otolaryngology — Head and Neck Surgery and lead researcher of the study. "These results are exciting because they suggest that hearing aids may play a protective role in people's health and prevent early death."

Hearing loss affects approximately 40 million American adults, but only 1 in 10 people who need hearing aids use them.

Previous research has shown that untreated hearing loss can result in a reduced life span (as well as other negative outcomes such as social isolation, depression and dementia). However, until now, very little research has examined if the use of hearing aids can reduce the risk of death.

The study, published in The Lancet Healthy Longevity, represents the most comprehensive analysis to date on the relationship between hearing loss, hearing aid use and mortality in the United States, according to Dr. Choi.

While the study did not examine why hearing aids may help users live longer, Dr. Choi points to recent research linking their use with lowered levels of depression and dementia. She speculates that improvements in mental health and cognition that come with improved hearing can promote better overall health, which may improve life span.

Dr. Choi hopes this study will encourage more people to wear hearing aids, even though she acknowledges that factors, including cost, stigma and difficulty finding devices that fit and function well, are barriers to use.

Dr. Choi can personally relate to these challenges. She was born with hearing loss in her left ear, but did not wear a hearing device until her 30s. It then took her several years to find ones that worked effectively for her.

She is now working on a database driven by artificial intelligence that categorizes hearing aid choices and tailors them to individual patient

# Supporting Patients by Supporting Their Caregivers

Keck Medicine of USC and its Care for the Caregiver program have partnered with USC Dornsife Public Exchange and the Dornsife Center for Economic and Social Research to address physician burnout, a widespread problem currently impacting thousands of clinical care providers and their patients.

he project, known as The Thrive Study, aims to improve the well-being and job satisfaction of clinicians, increase rates of provider retention and ensure continuing patient access to timely, high-quality care.

"This is one of the most meaningful programs to date for building a sustainable workforce at Keck Medicine of USC," says Steven Siegel, MD, PhD, chief mental health and wellness officer for Keck Medicine and one of the project's lead investigators.

Medicine can be an exceptionally demanding field — physically, mentally and emotionally. The COVID-19 pandemic put

additional pressure on many physicians, registered nurses, physician assistants and therapists of all kinds.

The ongoing additional demands often result in high rates of caregiver illness, exhaustion and a level of burnout that has driven a significant percentage of them from the field. Caregivers and patients alike felt the impact of this widespread burnout, which has yet to fully abate.

To help counter this ongoing issue, The Thrive Study — funded by the UniHealth Foundation — relies on Keck Medicine physicians, nurse practitioners, physician assistants, nurses and therapists to apply as participants.

Those selected are testing newly developed support systems that aim to decrease mental distress, increase self-efficacy and improve inefficiencies in the medical workplace setting. The trial is estimated to conclude in 2025.

Its results will guide future programs to reduce burnout for Keck Medicine clinicians, building on their input to redesign the health system's approach to promoting well-being, with the hope of positively influencing the broader culture of health care.



# **What Is a TIA?**

Transient ischemic attack (TIA) is a temporary blockage of blood flow to the brain. Often misleadingly called "ministrokes," TIAs are medical emergencies. The experts of Keck Medicine of USC share common signs and how to lower your risk.

#### Learn to spot a TIA F.A.S.T. \*



ace drooping



rm weakness



peech difficulty



ime to call 911

\* The American Stroke Association

#### **Common symptoms of TIA:**

- Weakness
- Face drooping
- Numbness in arm or leg
- Confusion, difficulty speaking or understanding
- Problems walking, talking or seeing

Symptoms usually last less than five minutes. But a TIA could be a warning. According to The American Stroke Association, nearly 1 in 5 people who have a TIA will have a stroke within 90 days.

The leading cause of TIA is hypertension (blood pressure above 120/80).

#### Other risk factors include:

- Diabetes
- Heart disease
- Atrial fibrillation

#### Lower your risk:

- Avoid smoking
- Get plenty of exercise
- Mediterranean diet

#### Learn to spot a TIA F.A.S.T. \*

- Face drooping
- Arm weakness
- Speech difficulty
- Time to call 911

To talk to a doctor about managing your TIA risk, call (800) USC-CARE.

\*The American Stroke Association

#### what's the

# Word?

### Enuresis

noun

[en-yu-REE-sis]

Also known as bedwetting.

"Enuresis in adults is more common than people think," says David Ginsberg, MD, a urologist and urogynecologist with Keck Medicine of USC. "Causes include urinary tract infection and sleep apnea, but the most common cause is overactive bladder."

Overactive bladder (OAB) is a clinical syndrome that often leads to frequent urination and a sudden, uncontrolled need or urge to urinate (often associated with what urologists call "urge incontinence").

People may sleep through the need to urinate, resulting in enuresis.

While OAB can happen to anyone, women are more likely to have urinary leakage because they don't have prostates to block the flow of urine. Older women are more likely to be affected, but young women and teens can also have this condition

"I would urge anyone bothered by enuresis or overactive bladder to see a doctor," Dr. Ginsberg says. "We have many options to evaluate, treat and improve these symptoms."

To make an appointment with one of our experts, call (800) USC-CARE or visit KeckMedicine.org/urology



Nausea and vomiting affect 80% of women during pregnancy. An additional 2% experience an extreme form called hyperemesis gravidarum (HG) that can lead to weight loss, dehydration and hospitalization. But little has been known about the cause.

groundbreaking study has found that these forms of pregnancy sickness may be the result of a specific hormone the placenta produces, known as growth differentiation factor 15 (GDF15), which increases substantially during pregnancy. Women exposed to lower levels of GDF15 before pregnancy experience more severe symptoms.

"We now know that women get sick during pregnancy when they are exposed to higher levels of the hormone GDF15 than they are used to," says Marlena Fejzo, PhD, a clinical assistant professor of population and public health sciences in the Center for Genetic Epidemiology at the Keck School of Medicine of USC, and one of the study's lead authors.

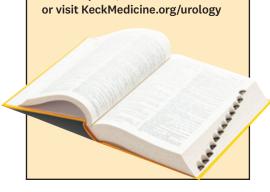
The findings, published in December in the journal Nature, are a crucial breakthrough that also points to possible solutions.

Lowering GDF15 is one way to potentially address pregnancy sickness—and the study provides the first human evidence that it is likely safe to do so. Another solution may be to expose women to GDF15 prior to pregnancy, acclimating them to elevated levels of the hormone. "This study provides strong evidence that one or both of those methods will be effective in preventing or treating HG," Dr. Fejzo says.

For this research, Time magazine named Dr. Fejzo — who has firsthand experience with HG — one of its 2024 "Women of the Year." She says these findings offer hope for women who, like her, have experienced severe illness during pregnancy.

"Hopefully, now that we understand the main cause of HG, we're a step closer to developing effective treatments to stop other mothers from going through what I, and many other women, have experienced," she says.

For this research, Time magazine named Dr. Fejzo — who has firsthand experience with HG — one of its 2024 "Women of the Year."





# **How to Spot a Fad Diet**

Diets that promise quick, remarkable results can sound alluring. However, they're likely not sustainable and can wreak havoc on our body's natural systems. Jen Hathwell, MS, RD, a registered dietitian at USC Verdugo Hills Hospital, says there are common red flags to spot.

#### **Quick fixes**

"To get a lot of weight loss in a short amount of time, you're going to be severely restricting calories and nutrients your body needs, and that can be dangerous," Hathwell says.

Once those calories are added back into your diet, the weight returns, as well. "Some people then start another restrictive diet, creating a cycle of weight loss and weight gain and on-and-off dieting."

#### Foods labeled 'bad'

Moderation is key when it comes to sugary and salty treats. Hathwell says to avoid diets that label certain foods as "bad."

Attempting to eliminate them can "lead to overeating of those foods once we do consume them, and negatively affect our moods if we feel like we're doing something wrong."

#### Eliminating food groups

"Any diet that tells you to cut out major food groups is something to look out for," Hathwell says. This includes the Paleo diet, which eliminates grains, dairy and legumes, and the Ketogenic and Atkins diets, which restrict carbohydrates.

Intermittent fasting also counts. "Putting your body into starvation mode affects satiety and hunger hormones and alters your metabolism."

#### Why fad diets don't work

They're not sustainable. While you may temporarily lose weight, you'll likely gain it back once you start eating normally again.

Fad diets can also affect natural hormones that tell us when we're hungry and full. Ironically, your appetite may increase and make you gain weight in the long term.



# **Class Notes**

LEARN SOMETHING NEW WITH KECK MEDICINE OF USC

#### **Breastfeeding**

This practical workshop taught twice a month by a certified lactation educator will help you prepare to breastfeed your baby. The ideal time to take this class is between your sixth and eighth months of pregnancy.

Where: USC Verdugo Hills Hospital

**When:** Twice a month, in evening

sessions

**How much:** \$25 to \$30

For more information, contact Teri Rice at (818) 952-2272 or Teri.Rice@vhh.usc.edu

#### **A Healthier Approach**

Set short-term, achievable goals, rather than overhauling all eating habits at once.

Practice mindful eating — listen to your body's cues that you're full.

Focus on eating more whole foods and less processed items.

Aim for at least 150 minutes of moderate exercise per week.



# Marijuana and Heart Health:

#### A Cardiologist's Advice

Recent studies presented by the American Heart Association linked marijuana use with negative cardiovascular effects — including a 34% increase in the risk of heart failure for daily users.

According to Antreas Hindoyan, MD, an interventional cardiologist for the USC Cardiac and Vascular Institute, part of Keck Medicine of USC, the new research supports a growing understanding of marijuana's potential health impacts.

## How does marijuana use impact cardiovascular health?

Smoking it damages the blood vessels, just like tobacco smoke. It triggers the fight-or-flight adrenaline release, which can cause abnormal heart rhythms. It also affects the coronary beds and, with the new research, we know that it likely contributes to heart failure.

#### How should users evaluate their risks?

I recommend a cautionary approach. More robust studies are needed, but I think the evidence will only become stronger, including in relation to heart failure, heart attacks, arrhythmias and strokes.

#### What do you tell your patients?

Marijuana use is something you can change. By limiting or stopping it, you'll be helping yourself. The findings are especially important as more and more older people gravitate to marijuana use.





#### MEET OUR STAFF

# Expanding Access to Pre-op Care

Mary Schoenbaum, NP-C, has taken care of thousands of patients in her nearly 20 years with Keck Medicine of USC. Today, as the nurse practitioner (NP) who helped launch the preoperative cardiac evaluation clinic at Keck Hospital of USC, she is expanding access to care with a new clinic at Keck Medicine of USC — Arcadia.



Ricardo Carrasco III

#### What does your job entail?

Before a patient undergoes surgery, the surgeon wants to know their cardiac risk. In my NP-run clinic at Keck Hospital, we conduct thorough cardiac examinations, including health histories, echocardiograms and stress tests, to identify the patient's risk of having a cardiac event during surgery. We see patients before orthopaedic, bariatric, vascular, urological, oncological and transplant procedures.

My clinic was originally one day a week, but before I knew it, interest exploded, and we're now five days per week with the addition of more NPs. I love the opportunity to meet with patients and their families, and to use my role to help take care of them.

# Tell us about the new pre-op clinic at Keck Medicine of USC — Arcadia.

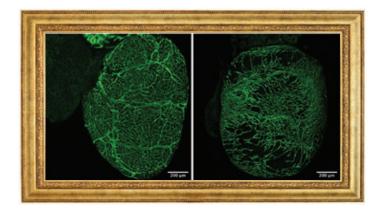
It's a big win for local patients because they can stay closer to home for their pre-op workups. We all practice the same Keck Medicine mission and philosophy, so the care is the same highlevel quality. I am proud and honored to now provide this care in the Arcadia location.

### How do you spend your time outside of work?

I volunteer with the Preventive Search and Rescue program at Joshua Tree National Park. I provide trail information and first aid, and I make sure visitors have water. It's great because I love to hike, I love people and I love the national park.



Many areas of medicine, from research to clinical diagnosis and treatment, use advanced technology to see things that the human eye cannot. These images can be beautiful as well as informative.



Zebrafish can regenerate heart tissue, making them valuable for medical research. On the left, green dye maps the coronary arteries of a healthy zebrafish. The zebrafish heart on the right has a mutation that prevents regeneration. By comparing specimens, scientists can better understand regeneration, bringing them closer to advancing human organ care.

(Image courtesy of Ching-Ling (Ellen) Lien, PhD, professor of surgery, biochemistry & molecular medicine, and stem cell biology and regenerative medicine at USC Stem Cell, and Xidi Feng, PhD. Dr. Lien is also principal investigator of the Lien Laboratory at Children's Hospital of Los Angeles and director of its California Institute of Molecular Medicine Training Program.)

# Shining a Light on Men's Mental Health

Depression and anxiety are often experienced differently in men than in women. And while men are less likely to experience depression and anxiety than women, they are more likely to lose their life to suicide.



Steven Siegel, MD, PhD, chief mental health and wellness officer for Keck Medicine of USC, shares insights on men's mental health, including some wellness tips.

#### What are the signs of depression in men?

The symptoms of mental distress may vary between men and women. While women living with depression typically experience sadness and sleep disruption, symptoms in men tend toward irritability and impulsive anger.

## How do depression and anxiety impact physical health?

Studies show that depression can be just as harmful to the heart as morbid obesity, smoking and type 1 diabetes. Additionally, depression and anxiety are linked to the immune system, potentially making it harder to fight off infection and increasing vulnerability to illness.

### If you're experiencing it, how can you address it?

Fortunately, the mental health field now has tools to address most cases of depression, so the best thing one can do is ask for help.

Awareness is also growing, which will hopefully empower more men to seek care.

# Dr. Siegel also suggests the following strategies:

- Act well before you feel well the order of operations is "do" first, then "feel" later. The "doing" will result in feeling better.
- Stick to a healthy schedule. Wake up on time, exercise regularly, get outside and eat nutritious foods. Actions determine your mood, not the reverse.
- Be kind to others; few things are more uplifting than doing something nice for someone.
- Embrace your agency. Acknowledging your role in whatever you're facing gives you the ability to fix it, which provides hope.

To learn more about Keck Medicine's mental health services, call (800) USC-CARE or visit KeckMedicine.org/services/psychiatry-and-behavioral-sciences

# The 19 Question

Trying to find the right specialist to treat your condition can be stressful. Where should you begin? How do you decide? Two experts from Keck Medicine of USC share their advice.

#### What is the best way to find a specialist?



Primary care clinicians can offer recommendations, but it's up to you to choose. Online reviews can help, but may not paint an accurate picture, so I don't advise using them as the primary reason to choose a specialist.

Look for a convenient location, then consider each doctor's qualifications. Where did they study? How experienced are they with your specific health issue? Do they have a philosophy of care?

During your first visit, pay attention to how you feel about the experience. The specialist should take their time, listen without interrupting and clearly explain their recommendations. You'll also need a reliable communicator who will keep your primary care clinician informed. If you don't feel comfortable choosing them, don't worry — you have the right to see other specialists until you find a good fit.

If your primary care clinician can recommend a specialist because they've treated their patients well, that means a lot, so it may be worth seeing them even if the location isn't as convenient.

Michael Young Lee, MD Primary Care Physician USC Family Medicine



Start by seeing your primary care clinician, especially if you have symptoms. Their insight will point you in the right direction.

It can be challenging to find the right specialist. You can start by looking at the websites of major medical centers because many specialists are affiliated with these institutions. When choosing a specialist, make sure that they actually treat your problem.

Look for specialists in your insurance network and consult advocacy groups for assistance. For rare diseases, focus on centers specializing in your condition. For example, sarcoma patient outcomes are much better at sarcoma centers than places that only see a few sarcomas a year.

Finally, you will need to like the physician and staff. Do not settle for less than a specialist who makes you feel heard, respected and supported.

#### J. Dominic Femino, MD

Chief, USC Sarcoma Program USC Orthopaedic Surgery USC Norris Comprehensive Cancer Center



# **How to Manage Age-Related**



Osteoarthritis is a painful, age-related condition caused by the loss of cartilage. "Cartilage keeps the joints moving smoothly - but once normal cartilage is gone, it's gone," says Jay Lieberman, MD, chair of **USC Orthopaedic Surgery.** 

However, he says, there are ways to prevent and treat osteoarthritis.

#### How aging damages cartilage:

- Loss of muscle mass
- Loss of flexibility
- Hormone-induced weight gain

#### **Additional risk factors:**

- Genetics
- Developmental disorders
- Injuries

#### Prevention measures you can take:

- Maintain muscle strength
- Stay flexible
- Maintain a healthy weight
- If you have consistent pain with activity, choose low-impact exercise

#### **Treatment options:**

- Anti-inflammatory medicine
- Physical therapy
- Steroid injections
- Hyaluronic acid injections
- Platelet-rich plasma and stem cell injections
- Joint replacement

"Researchers across the world are developing agents to relieve inflammation and even prevent cartilage degeneration," Dr. Lieberman says. "These efforts will be the key to limiting age-related joint damage."



#### **Connect With Keck Medicine**

JOIN US TO DISCOVER NEWS, TIPS FOR HEALTHY LIVING AND MORE AT:













Manage your health care in one easy spot with myUSCchart: Visit myUSCchart.KeckMedicine.org









The Communal Spirit

BY HOPE HAMASHIGE

11 11

Cora Jackson-Fossett uses her own experience as a laryngectomy patient to mentor others facing the surgery.

Cora Jackson-Fossett's life has been defined by service to her communities. After a laryngeal cancer diagnosis, Cora turned to Niels Kokot, MD, from the USC Head and Neck Center, who gave her the chance to continue helping others.

ora Jackson-Fossett's voice was a big part of her identity.

As director of public affairs for Los Angeles' public works department, she often spoke in front of the city council or a clutch of news cameras about important issues facing her department. She was the announcer at her church and a frequent emcee at community events.

After leaving her job at the city, she started a new chapter as an editor for the Los Angeles Sentinel, a newspaper focused on the Black community — another job that involved using her voice, to interview people for stories.

In early 2020, Cora developed an earache that she assumed was not serious. The timing, however, could not have been worse. She made an appointment with an otolaryngologist, but it was delayed for a few months when the COVID-19 pandemic shut down medical offices across California.

By the time she was able to get in, her doctor said the problem with her ear was caused by a tumor in her larynx — one that he would not be able to remove.

#### **Specialized treatment**

Cora's doctor referred her to Niels C. Kokot, MD, an otolaryngologist with the USC Head and Neck Center, part of the USC Caruso Department of Otolaryngology — Head and Neck Surgery, which is part of Keck Medicine of USC. Dr. Kokot is an expert in all aspects of head and neck surgery, including treating cancers of the larynx and performing microvascular reconstructive surgery.

"It was devastating news," Cora says. "Dr. Kokot said I needed surgery right away because it was already extremely dangerous and I could die if he didn't operate right away."

Cora's laryngeal cancer was advanced and extremely aggressive, Dr. Kokot says. It had already spread to multiple lymph nodes and was destroying her voice box.

While some people with cancer of the larynx can be treated with chemotherapy, radiation or a partial laryngectomy, Cora, the woman who used her voice so much, needed a total laryngectomy, which would remove her vocal cords and voice box.

With about 12,300 new cases every year, laryngeal cancer is not exactly rare, but also not commonplace. Treating people with laryngeal cancer can be complex, Dr. Kokot says, which is why

laryngectomies are usually performed at academic medical centers like Keck Medical Center of USC.

Many people need microvascular reconstructive surgery, a highly specialized type of surgery, after their tumor is removed. All require rehabilitation after treatment.

After laryngectomy, people need to relearn breathing, swallowing and speaking. Getting patients back to living a full life requires tailoring their recovery and rehabilitation to their specific needs.

"We try to be as comprehensive as possible in treating our patients," Dr. Kokot says, noting that the USC Head and Neck Center team includes not only doctors but also speech pathologists, a dietitian, physical therapists and occupational therapists who have special training to work with people who have had laryngectomies.



Niels C. Kokot, MD

### "It is much more overwhelming not to be able to talk than anyone knows."

Cora Jackson-Fossett

#### A community of support

In addition to a total laryngectomy, Cora had reconstructive surgery on her throat and several months of chemotherapy and radiation. Those first months after her diagnosis were extremely difficult for her, especially losing her voice.

"It is much more overwhelming not to be able to talk than anyone knows," says Cora, who worked with occupational therapists from Keck Medicine for several months after her surgery to help with depression and anxiety. "I was so frustrated all the time, and I felt really lonely."

Though there are a few different ways that people can communicate after a total laryngectomy, all of which require training with a speech pathologist, the most common way is to use a prosthesis that the surgeon places in the back of the stoma, the hole in the front of the neck.

In her case, Cora also needed a physical therapist to help regain mobility in her neck and to manage lymphedema, a common side effect of laryngectomy that causes swelling of the neck and face.

A speech pathologist guided her through her options for restoring her voice, and she ultimately settled on the prosthesis.

#### Life after surgery

Cora also found that, despite strong support from her family and friends, she yearned to connect with people who had been through similar experiences. For that, Keck Medicine's support group for survivors of laryngeal cancer helped her through.

Now that she has her voice again, Cora is determined to keep using it and finding ways to live her life to its fullest. She is back at work at the LA Sentinel, continues to be involved in her church and volunteers with several other LA organizations.

One new passion is spending time meeting and mentoring people who are going to have a laryngectomy.

"The whole journey through losing your voice is tough emotionally, and a lot of people struggle," she says. "They got me back on track at Keck Medicine, and now I want people to know that there is life after laryngectomy."

For more information, call (800) USC-CARE or scan the QR code below.



# Types of laryngectomies

Research shows that highly experienced surgical centers — like the USC Head and Neck Center — provide better outcomes to patients with head and neck cancers.

Due to the complexities of these surgeries and the need for highly specialized treatment plans, experience proves crucial in extending patients' lives.

Surgeons take different approaches to laryngectomy, a surgery to remove part or all of the larynx (voice box), depending on the particular case.

**Partial laryngectomy:** To address smaller cancers, surgeons may be able to remove the cancer without taking out the entire voice box — either with an open procedure or through the mouth using a laser.

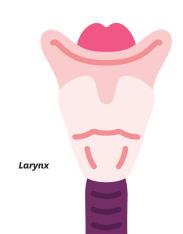
**Supraglottic laryngectomy:** Part of the larynx above the vocal cords is removed, preserving the patient's speaking voice.

**Hemilaryngectomy:** Removal of only one vocal cord, when possible. The patient retains some speech.

**Total laryngectomy:** Removal of the entire larynx. Patients, with the help of specialists, can develop new methods of speaking.

Other interventions are also available, depending on the case.

Source: American Cancer Society







### When Gabriel Zada, MD, performed brain surgery on Felicitas Gonzales, no one expected that, eight days later, Dr. Zada would be operating on her daughter Margarita as well.

Neurosurgeon Gabriel Zada, MD, entered the operating room at Keck Hospital of USC on June 22, 2023, prepared to remove a noncancerous pituitary tumor from his 64-year-old patient, Felicitas Gonzales.

An expert in brain, skull base and pituitary tumor surgery, Dr. Zada had performed such a procedure many times before.

He knew Felicitas' daughters, Margarita, 37, and Betsy, 27, and other relatives were waiting to hear the outcome. What he couldn't know was he would be performing a different brain surgery on Margarita only eight days later.

The unusual occurrence marked the first time Dr. Zada, director of the USC Brain Tumor Center, part of Keck Medicine of USC, has operated on two such close relatives. It brought him the thanks of a whole family.

"From what we can tell, their cases are completely unrelated," Dr. Zada says. "Their conditions had no genetic link as far as we know, and they had much different diagnoses."

#### Initial, mysterious symptoms

Felicitas first knew something was wrong when she fell three times in two days first in her garden and twice in her bedroom in the McFarland, California, home where she lives with her daughters.

When Margarita and Betsy found her after the last fall, she was disoriented and, like with the earlier falls, couldn't explain it.

The sisters drove their mother from McFarland in Kern County to a hospital in Bakersfield, a half hour away. There, emergency room doctors suspected Felicitas might have had a brain tumor and referred her to the USC Brain Tumor Center.

Dr. Zada quickly confirmed Felicitas had a pituitary tumor, measuring just under three centimeters (about the size of a grape) and located at the base of the skull. The cause of these noncancerous tumors remains unknown, but surgical treatments have become highly effective.

On surgery day, Dr. Zada didn't need to make a single incision on the patient's skin. Instead, he inserted an endoscope — a tiny tube with a camera at the end — through Felicitas' nasal cavity to access and remove the tumor located within millimeters of her optic nerves.

Worried, Betsy stayed at Keck Medical Center of USC to watch over their mother's care. "When you hear the word 'tumor,' you think the worst," Betsy says.

Margarita traveled back and forth. She had begun experiencing severe headaches, nausea and sensitivity to noise. "I couldn't even laugh without my head hurting," she says. "I thought it was stress."

#### A second diagnosis

Increasingly concerned, Margarita visited an urgent care near their home. A physician there diagnosed migraines and prescribed a medication that made her feel worse.

She returned to the Bakersfield emergency room, where doctors again suspected a brain tumor. Betsy and their brother, Frank, joined forces to help get Margarita transferred to the USC Brain Tumor Center as quickly as possible.

For the Gonzales family, having a second family member face brain surgery within such a short time span multiplied their anxiety. When Margarita broke the news to her mother, who was recovering from her own operation, Felicitas cried. Margarita reassured her, "Don't worry. Dr. Zada and his team are going to take care of me."

"Undergoing a neurosurgical operation can be one of the most frightening and

"Everyone on Dr. Zada's team did such a wonderful job for both of us. I'm so grateful."

Margarita Gonzales

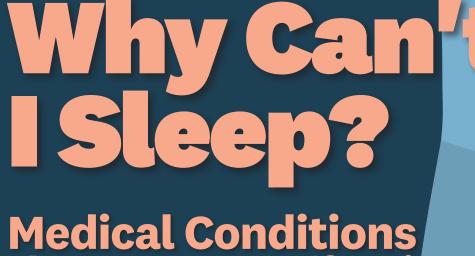
life-changing experiences a person will ever have," Dr. Zada says. "I was very privileged and honored they entrusted me with both of their lives."

His exam revealed Margarita's issue: an arachnoid cyst, a sac filled with spinal fluid at the back of her brain, measuring four centimeters (about golf-ball size) and causing significant pressure on her cerebellum and brainstem. Although diagnosed later, Margarita's case was more rapidly progressing and urgent than her mother's, with the cyst elevating the pressure inside her brain and already causing double vision.

In the operating room, Dr. Zada made a small incision in the back of Margarita's head, then threaded in an endoscope to essentially "pop" the cyst and allow its fluid to drain, alleviating the pressure it was causing.

Continued on Page 35





Medical Conditions that May Be Affecting Your Sleep

BY KATE FAYE

Sleep is one of the most important ways to stay mentally and physically healthy, so it's no surprise that the lack of it can take a toll. Five experts from Keck Medicine of USC explain different causes and how to find relief.



#### Insomnia

The most common sleep disorder in the United States,\* insomnia is very often a psychophysiological disorder that encompasses difficulties with falling asleep, staying asleep or both. "Many things can cause insomnia," says Richard Castriotta, MD, a Keck Medicine sleep disorder specialist and pulmonologist. "Poor sleep hygiene, blue light exposure before bed, drugs (including many medications and food supplements), alcohol, anxiety and depression are just a few."

#### Common treatments:

- Cognitive behavioral therapy for insomnia (CBT-I)
- Prescription medication
- Sleep hygiene modification

#### **Breathe easier**

Sebastian M. Jara, MD, MPH, a sleep specialist with the USC Caruso Department of Otolaryngology — Head and Neck Surgery, says obstructive sleep apnea — repetitive pauses in breathing during sleep — causes "significant sleep issues resulting in memory problems, energy loss and even potentially cardiovascular disease"

#### Possible treatments:

- Lifestyle modifications
- CPAP
- Dental devices
- Tongue stimulation implant
- Surgeries such as:
  - Deviated septum correction
  - Throat surgery (i.e., tonsillectomy)
  - Jaw advancement

#### **Midnight bathroom trips**

"Nocturia is when someone wakes up to urinate more than once a night," says Hooman Djaladat, MD, MS, a urologist with USC Urology. "It can be due to diseases such as heart failure, edema (fluid buildup in body tissues), urinary tract problems or neurologic conditions."

#### Sleep through the night:

- Limit water intake before bed
- Address related disorders
- Prescription medication

# Menopause: Before, during and after

Keck Medicine OB/GYN Kimeshia Thomas, MD, says that although sleep problems aren't a well-known symptom, "about 40% to 60% of peri- and postmenopausal women report waking up frequently in the middle of the night." This can be due to hot flashes, night sweats and other symptoms.

#### Find relief:

- Consistent sleep schedule
- Sleep therapy
- Hormone therapy

#### **Spine disorders**

Herniated discs and sciatica pain often disrupt sleep, says John C. Liu, MD, co-director of the USC Spine Center. "We counsel people on how to sleep properly, but every spine is different — what works for some won't work for others."

#### Dr. Liu suggests trying:

- Supportive sleep positions
- Various orthopaedic pillows
- Find the right mattress for you (test options for 15-20 minutes each)

#### Please note:

Conditions like hypersomnia
(excessive daytime sleepiness), narcolepsy
and REM behavior disorder (acting out
dreams while asleep) can lead to dangerous
consequences like falling asleep at the wheel
or erratic behavior while asleep. If you're
experiencing symptoms, talk to a sleep
specialist right away.

To learn more or to schedule an appointment, call (800) USC-CARE or visit KeckMedicine.org

<sup>\*</sup> The National Institutes of Health

A year after a ruptured brain aneurysm, Laura Brezin Kern ran the Los Angeles Marathon.

# A Runners Path

12 JULI 2015

BUN

BY ROBIN HEFFLER

When triathlete Laura Brezin Kern experienced a ruptured aneurysm at home, USC Verdugo Hills Hospital's emergency department saved her life and helped set her on her next trail.

n March 9, 2022, Laura Brezin Kern, then 41, was working out in her La Cañada Flintridge home gym when she suddenly felt dizzy and lightheaded. A Walt Disney Company executive and competitor in triathlon races since 2009, she remembers passing out and waking up shortly afterward with "the worst headache of my life."

Finding it hard to speak and move, she used her smartwatch to contact her husband, Steve, who was walking their dogs.

Laura recalls him saying that she didn't sound right and should call 911, which she did with difficulty. After her husband and the ambulance arrived, paramedics asked the couple if they had a hospital preference. Steve said the closest one, about a mile away, was USC Verdugo Hills Hospital.

That decision probably saved Laura's life.

Upon arrival, an emergency department physician quickly collected her history, did an exam and ordered a CT scan of her head, according to Jonathan Crabb, MD, assistant medical director for emergency medicine at USC-VHH, which is part of Keck Medicine of USC.

Dr. Crabb says the scan showed Laura had significant bleeding, or hemorrhaging, in her brain. The pattern also suggested an aneurysm — a diseased section of an artery where the wall weakens, potentially causing it to burst.

"The initial response is very important because some of these hemorrhages can cause swelling of the brain and life-threatening trouble with breathing or circulation," Dr. Crabb says. "So the patient first needs to be stabilized, especially making sure that the airway is protected. Then it's important to get a specialist to intervene as quickly as possible to prevent further bleeding."

#### Quick coordination, specialized response

Dr. Crabb says USC-VHH has an advantage in accessing specialized neurological care because of a phone hotline set up with the neurocritical care team at Keck Hospital of USC. Benjamin Emanuel, DO, whose specialties include brain injury and critical care neurology, was the Keck Medicine neurologist on-call that day.

"Any type of hemorrhage seen at USC-VHH comes to Keck Hospital because of our neurosurgeons, specialized neurocritical care unit, endovascular care and extra support," Dr. Emanuel says.

Because ruptured aneurysms pose a high risk of death, Laura was transferred to Keck Hospital just three hours after arriving at USC-VHH. She was seen by Dr. Emanuel and Keck Medicine neurologist and endovascular neurosurgeon Matthew Tenser, MD, who conducted further tests to determine the right treatment.

The next day, Dr. Tenser performed a minimally invasive procedure called a cerebral angiogram with endovascular coil embolization, in which very thin metal coils are delivered through a catheter in the artery directly into the aneurysm, filling the space and preventing future rupture and bleeding.

"In cases like Laura's, we try this procedure first because it's less invasive, and is less stressful on the body than other procedures," Dr. Tenser says. "And, even though we don't necessarily know what caused her aneurysm, she's safer now that we fixed it and are continuing to track it."

Laura was hospitalized for just 11 days — four to seven days fewer than is usual for her condition, according to Dr. Emanuel. "It's a testament to how well she looked when she first arrived from USC-VHH, how well we took care of her and probably the fact that she is an athlete," he says.



Jonathan Crabb, MD



Benjamin Emanuel, DO



Matthew Tenser, MD



The care he cites includes the USC-VHH emergency department's quick CT scan to diagnose her, their control of her blood pressure and headache with medication, and their ability to transfer her quickly to Keck Hospital's specialists.

"When she left the hospital, she was up and walking, and just had a headache," Dr. Emanuel says.

Laura was also very pleased.

"The providers at both hospitals really listened to me and were able to quickly tailor their care to my needs very effectively," she says. "They didn't just see me as another patient but rather as a unique human being."

#### **Returning to competitive form**

While Dr. Tenser is continuing to monitor her medical status through follow-up brain scans and visits, Laura has resumed her work for Disney, without any long-term symptoms. Following her doctors' recommendations, she waited a few months after her procedure to ease back into athletic training. Her biggest hurdle, she says, was "overcoming the trauma of my aneurysm and learning to not live in fear that it would rerupture."

She received support and encouragement from another marathon runner and ruptured-aneurysm survivor, Kathy Nguyen. Together, they've become running partners with Jonathan Russin, MD, a Keck Medicine neurosurgeon who treated Kathy.

Laura's determination has paid off.

A year after the aneurysm, Laura participated in the Los Angeles Marathon and, seven months later, in Ironman California in Sacramento. In the Ironman race, which includes swimming, biking and running events, she significantly beat her 2015 Ironman time. Her performance also qualified her to participate in the upcoming Ironman World Championship in Nice, France.

"They didn't just see me as another patient but rather as a unique human being."

Laura Brezin Kern

Laura credits her health journey for fueling a new perspective that helped her reach these achievements.

"Now, I appreciate things more and have a lot more mental fortitude than before my near-death experience," she says.

To Dr. Crabb, Laura's experience is an example of both the best possible outcome and a warning that "anyone with an unusual and severe headache, regardless of age or fitness, should get it evaluated right away."

He also notes that USC-VHH's emergency department is distinctly positioned to provide high-quality care for a variety of emergency needs.

"It's a local hospital with a personal touch and community focus," he says. "At the same time, it has a connection to a large academic center with all the specialists and treatment options not typically available at a small community hospital. So it's the best of both worlds."

For more information, call (800) USC-CARE or scan the QR code below.





oselin Casillas, a 28-year-old teacher from West Covina, had been dealing with symptoms of biliary atresia, a rare and incurable liver disease, since the day she was born.

The condition causes blockages in the liver's bile ducts, leading to liver failure. Most patients who survive beyond early childhood ultimately require a liver transplant.

"It had always felt like I lived my life on pause," Joselin says.

By 2023, Joselin had developed cirrhosis, permanent scarring of the liver, as well as gastrointestinal bleeding that repeatedly hospitalized her. A doctor had referred her to Keck Medicine of USC for more specialized care.

Doctors at the USC Transplant Institute, part of Keck Medicine, determined that the time for a transplant had arrived.

"Once GI bleeds start," Joselin says, "it goes downhill fast."

Her brother, Saul, 21, a college student and first-aid instructor, volunteered to donate part of his liver, but tests revealed their organs were incompatible.

While Joselin and her family waited and hoped, the team continued looking for a match.

#### Different family, similar journey

Meanwhile, Jaime Rocha Fernandez, a 39-year-old father of three from La Puente, was in urgent need of his own transplant. His kidneys were failing and doctors had placed him on dialysis, a short-term solution.

"I was always tired, and even my skin tone looked different," Jaime says. "I was scared."

After his doctors referred him to the USC Transplant Institute, Jaime met with his family members to ask if any would be willing to donate a kidney to help save his life.

His youngest sibling, Kathya Rocha, 28, the married mother of a young son, offered to help. But like with Joselin and Saul, tests revealed an incompatibility.

Both families, unaware of each other, were staring into the unknown.

However, their Keck Medicine treatment teams soon found them a reason for hope.

#### Rare transplant exchange

Navpreet Kaur, MD, surgical director for the living-donor liver transplant program at the USC Transplant Institute, realized in July 2023 that an exchange between the Casillases and the Rochas, who did not know each other, was possible.

She explains that, in their case, "a female-to-female liver transplant and a male-to-male kidney transplant" would be a perfect fit. Kathya could provide a partial liver transplant to Joselin, while Saul's kidneys were a match for Jaime's.

Jim Kim, MD, the kidney transplant surgeon who would later operate on Saul, says while paired kidney exchanges are common, kidney-liver exchanges are not. "A lot of it was timing," he says. "It's rare to find two people who can't donate one organ, but the other organ lines up."

"It was like the stars aligned," says Aaron Ahearn, MD, the liver transplant surgeon who operated on Joselin. "It seemed like it was meant to be."

For Joselin and Jaime, it provided a lifesaving opportunity; for Saul and Kathya, the chance to save their siblings.

"At first it didn't seem real," Kathya says.
"After they explained more of how it would all work, I wanted to do it."

"There's always going to be fear," Saul says. "But I didn't want to see Joselin struggle anymore."

All four signed on, crediting their treatment teams for helping to build their confidence in such a unique plan. Their surgeries were set for Aug. 31, 2023, at Keck Hospital of USC.

#### A dream team

Keck Medicine's status as a pioneer in living-liver donation, and the only institution in southern California currently offering it, made the team uniquely qualified to complete such a complex paired exchange.

"Not many people go through this kind of experience. So it's meaningful to know we always have someone else to share it with."

Saul Casillas

In addition to Drs. Kim and Ahearn, the surgical team included Hamid Shidban, MD, who operated on Jaime. Dr. Kaur and Yuri Genyk, MD, focused on Kathya.

The four procedures were coordinated on a precise schedule, with four operating rooms running simultaneously. According to Dr. Kaur, the experience of the institute's support teams in managing multiple daily surgeries proved beneficial.

"When you have an exchange like this, all four surgeries have to go off without a hitch to be successful," Dr. Ahearn says. "It reflects the resiliency and strength of the program that we were able to make it all line up."

Joselin recalls that, while she nervously awaited surgery, Dr. Ahearn visited her.

"He said, 'When you wake up, you'll have a brand-new liver.' Those words were so comforting to me."

The surgeries, for all four patients, were a success.

"Everyone who took care of me was excellent," Jaime says. "The kidney was working right away."

Joselin's new liver also began functioning well. After a lifetime struggle with biliary atresia, she could now look forward.



"I'm eternally grateful I was referred to Keck Medicine," she says. "I can live life normally now."

Following the initial recovery period — which often takes several weeks all four patients are feeling well and pursuing favorite activities. Saul has gone snowboarding a few times; Joselin is hiking; and Jaime and Kathya are enjoying time with their children.

"My kids are so excited we can do all kinds of things together now," Jaime says.

Their doctors say all four can expect to live healthy lives. "They're all young people," Dr. Kaur says. "I'm glad they can all move on and start a new chapter."

Continued on Page 35



Aaron Ahearn, MD



Jim Kim, MD

Navpreet Kaur, MD



Yuri Genyk, MD



Hamid Shidban, MD



# In Case of Emergency

No one ever looks forward to a trip to the emergency room. It means that you, a friend or loved one is having a particularly bad day.

The ER, however, is always there — 24/7, 365 days a year.

Sometimes, your need for it is clear. Other times, you may not be sure that your symptoms are worth a visit.

Veronica Vasquez-Montez, MD, MBA, medical director for USC Arcadia Hospital's emergency department, shares insights to help you when you're unsure of what to do.

# In addition to life-threatening emergencies, what are some symptoms or health issues that may require a trip to the emergency room?

- Broken bones or dislocations
- Large lacerations or cuts with excessive bleeding
- Persistent abdominal pain
- Newborn babies less than 30 days old with a fever
- Abdominal cramping or vaginal bleeding during pregnancy

# What are some symptoms or conditions that may be better for urgent care, walk-in clinics or a primary care doctor?

- Sprains
- Minor lacerations
- Earaches
- Urinary tract infections
- Mild wheezing
- Cold and flu symptoms
- Minor allergic reactions

# What are some symptoms that people should be on the lookout for as signs of potentially serious emergencies?

- Chest pain or shortness of breath, which could be signs of a heart attack
- Numbness or weakness in one side of your body, which could be signs of a stroke

For both these types of emergencies, the sooner you receive care, the better. Quick emergency intervention can save lives and improve recovery.

# What advice do you have for patients as they self-evaluate their symptoms?

Even with serious emergencies, not everyone experiences the same symptoms.

During a heart attack, a woman's symptoms may not present the same as a man's. We often associate crushing chest pain with heart attacks, but women may only experience something as simple as left shoulder pain, shortness of breath or excessive fatigue.

Age is also a factor. Younger and older people may experience different symptoms.

I always tell patients, "You know your body best." It's easy for a doctor to know your condition once they have test results, but when something doesn't feel right, it's important that you share that.

# What do you do if you're not sure what kind of care your symptoms require?

You can start by calling your primary care doctor's office or insurance company. They will often have a nurse advice line that can help talk you through your symptoms and guide you on when and where it is best to seek help based on your symptoms.

# What advice do you have for someone who may be caring for a friend or loved one who is experiencing concerning symptoms?

Don't wait. Sometimes people are hopeful things will go away, or they might be afraid to confirm something is wrong. But if you are having concerning symptoms, waiting may result in limiting time-sensitive treatment options or interventions, as well as worsening of your condition.

# For people who may hesitate to visit the ER because of fear or negative association with it, what advice do you have?

We recognize that when patients come here, it's often their worst day. It's probably not something they expected when they woke

Continued on Page 35



Veronica Vasquez-Montez, MD, MBA, at work with her team.

### USC ARCADIA HOSPITAL'S EMERGENCY DEPARTMENT

# Board-certified emergency medicine physicians

"Though it might seem surprising, not every emergency room is staffed with specialists in emergency medicine," says Veronica Vasquez-Montez, MD, MBA, medical director for USC Arcadia Hospital's emergency department. "This training is essential when it comes to things like resuscitating people."

#### Fellowship-trained team members

"Many of our team members have additional expertise in another area of medicine, which proves important when considering the variety of emergencies that may require our intervention," Dr. Vasquez-Montez says.

#### **Keck Medicine of USC specialists**

According to Dr. Vasquez-Montez, the hospital's affiliation with Keck Medicine of USC allows seamless referral of patients to highly specialized care, including at Keck Hospital of USC. "Other emergency rooms would have to make calls to other hospitals to find out if anyone could take that patient," Dr. Vasquez-Montez says, "but we don't have to do that."

#### **Academically supported medicine**

"Our physicians, as academics, teach medical students and younger doctors, so we are all constantly improving our skills and keeping up with what is new in the medical field," Dr. Vasquez-Montez says. "That sense of urgency about remaining current improves our quality of care and provides a standard of excellence."

# Consultations

# New Executives at USC Arcadia Hospital

SC Arcadia Hospital began the new year with the announcement of four leaders joining its executive team — all tasked with continuing the hospital's longtime service to its community while maximizing on new chances for growth and excellence. "We enter 2024 with a renewed sense of strength and determination, confident that these leadership changes, coupled with our many past successes, will further cement our hospital's reputation as an elite provider of health services," says Ike Mmeje, MHA, president and chief executive officer for USC-AH, who made the announcement in January.



# Robert Begg, vice president of human resources

Robert Begg joined USC Arcadia Hospital from the Oregon-based health system Asante, where he served as vice president of human resources.

Among other responsibilities, Begg leads human resources integration and transformation efforts for the hospital, following the start of its affiliation with Keck Medicine of USC in 2022.



# Lisa Johnson, DNP, RN, CENP, CPHQ, chief quality officer

Lisa Johnson, DNP, RN, CENP, CPHQ, leads oversight and coordination of quality improvement, infection prevention, licensing and accreditation for the hospital — in addition to other responsibilities.

With over 27 years of health care experience, Dr. Johnson previously served as an executive administrator of quality and outcomes for Keck Medical Center of USC.



#### Jynette Querubin, RN, MSN, director of transformation and strategic projects

Jynette Querubin, RN, MSN, leads and oversees projects related to USC Arcadia Hospital's and Keck Medicine of USC's strategic goals, while also serving as chief of staff for the office of Ike Mmeje, MHA, the hospital's president and chief executive officer.

Before this role, Querubin worked as the director of the office of performance and transformation for Keck Medical Center of USC, where — among other effective projects — she led its COVID-19 response.



# Colleen Wilcoxen, RN, MSN, chief nursing officer

Colleen Wilcoxen, RN, MSN, transitioned from her role as USC Arcadia Hospital's acting chief nursing officer to become chief nursing officer on a permanent basis.

Having joined USC-AH in 2021 as assistant chief nursing officer, Wilcoxen is building on over 10 years of experience as a nurse executive to "serve as a voice for patient care nurses and empower them to reach new heights of clinical excellence," Mmeje says.

# USC-VHH IR/Cath Lab Receives Interventional Certification



Ricardo Carrasco III

he Interventional Radiology and Cardiac Catheterization Laboratory at USC Verdugo Hills Hospital has received a certification survey approval to provide elective percutaneous coronary intervention (ePCI) service. This nonsurgical procedure treats the narrowed arteries found in patients with coronary artery disease and other life-threatening cardiovascular conditions. The announcement was made in February.

"The licensure of our IR/Cath lab ensures that patients in the Foothill communities and beyond have access to cardiac treatment they need close to home," says Armand Dorian, MD, MMM, chief executive officer for USC-VHH.

Opened in 2022, the hospital's IR/Cath lab is a state-of-the-art facility that uses imaging equipment to view patients' arteries and veins, as well as the chambers of the heart. Through minimally invasive procedures, clinicians utilize the lab to diagnose and treat a variety of conditions, including cardiovascular disease.

Guided by fluoroscopy, on-site staff collaborate with USC-VHH physicians — including interventional radiologists, cardiologists and vascular specialists — to guide small instruments through blood vessels for delicate procedures such as angioplasty or stenting. These interventions often prove lifesaving during cardiac emergencies.

"Prior to receiving certification, providers were limited to only diagnostic procedures in our cath lab," Dr. Dorian says. "With the certification for interventions, we expect the cath lab to be buzzing with activity very soon."

# USC Norris Cancer Hospital Named Top Teaching Hospital

he Leapfrog Group, a national hospital watchdog organization, named USC Norris Cancer Hospital a 2023 Top Teaching Hospital — the third year in a row the hospital received this distinction.

"I am incredibly proud that once again, USC Norris Cancer Hospital ranked among the top hospitals in the country," says Marty Sargeant, MBA, chief executive officer of USC Norris Cancer Hospital and Keck Hospital of USC. "This prestigious honor reflects our rigorous safety and quality standards and our continuous commitment to our patients, as well as our passion for inspiring the next generation of medical providers."

To qualify for the Top Hospitals distinction, hospitals must rank highest among peers on the Leapfrog Hospital Survey, which assesses the quality of patient care across many areas of hospital performance, including practices for safe surgery and preventing patient risk.

Over 2,100 hospitals nationwide were considered for a Top Hospital award, which recognized hospitals in four categories: children's, general, rural and teaching. One hundred thirty-two hospitals were selected as Top Hospitals, including 75 Top Teaching Hospitals.

USC Norris Cancer Hospital's cancer program is ranked No. 15 in the country, according to the 2023-2024 U.S. News & World Report's Best Hospitals rankings. The hospital is part of USC Norris Comprehensive Cancer Center, which has been designated by the National Cancer Institute 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 Salivary Gland Center Offers Rare Approach

he USC Salivary Gland Center, part of the USC Caruso Department of Otolaryngology — Head and Neck Surgery, is a new and comprehensive outlet for treating salivary gland conditions, which often require highly specialized care.

Founded in 2023, the Keck Medicine of USC center is now treating patients experiencing a full range of salivary gland conditions, including stones, tumors, infections, inflammation and excessive saliva.

"We're at the forefront of technology for treating salivary gland disease," says Raymond Kung, MD, the center's director, who is a Keck Medicine otolaryngologist specialized in salivary gland pathology. "We have the equipment and the collective years of background to give patients the best quality of care that is possible now."

The center takes a multidisciplinary approach, bringing together otolaryngologists, head and neck radiologists, oncologists and rheumatologists to collaborate on patient cases. Its locations span the map, from Beverly Hills to the San Gabriel Valley, as well as Keck Medical Center of USC.

According to Dr. Kung, this kind of structured effort is a rare option for patients. "Very few physicians and medical facilities focus on the salivary glands because treatment requires a lot of advanced training and equipment," Dr. Kung says.

At the center, physicians can practice minimally invasive procedures such as sialendoscopy, a diagnostic and treatment tool for a wide range of conditions affecting the major salivary glands. With this option, patients can avoid open surgery typically used to tackle salivary gland disorders.

"Traditionally, most surgeons cut open the neck and remove the salivary gland," Dr. Kung says. "But there are risks from doing open-neck surgery, including facial nerve weakness. You also lose that gland's saliva production for the rest of your life."

As part of an academic health system, the center also serves to help generate collaborative research efforts to improve future care for salivary gland disorders.

To make an appointment, call (800) USC-CARE.

# USC-VHH's Nurse Residency Program Earns Distinguished Accreditation

SC Verdugo Hills Hospital has earned the distinguished Practice Transition Accreditation Program (PTAP) accreditation from the American Nurses Credentialing Center (ANCC) for its nurse residency program. The recognition was announced in January.

The accreditation — based on a high rate of success in transitioning newly graduated registered nurses into clinical practice — honors the hospital's commitment to nurturing and advancing nursing professionals and ensuring sustained quality of care.

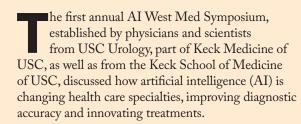
At USC-VHH, participants in the six-month program train in a hands-on hospital setting to continue their professional development. In this collaborative learning environment, they work alongside experienced staff, helping them develop critical thinking, clinical reasoning, leadership and interprofessional communication skills.

ANCC, a subsidiary of the American Nurses Association, uses evidence-based assessment criteria to evaluate health care organizations that promote nursing excellence and quality patient outcomes.



# USC Urology Symposium Explores AI





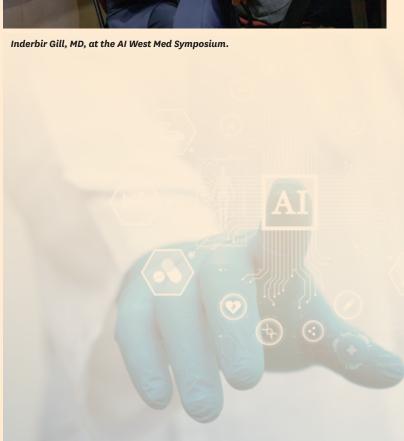
The event, held in February at the USC Health Sciences Campus, featured 31 leading faculty from 18 institutions, including USC. Experts from other medical centers, academic institutions and health care corporations participated.

"AI is an inescapable part of the future of health care," says symposium director Inderbir Gill, MD, founding executive director of USC Urology and distinguished professor and chair of the Catherine and Joseph Aresty Department of Urology at the Keck School. "AI West Med is more than just a conference; it is our commitment to help transform digital health care — not to replace physicians but to empower and enhance them."

Speakers outlined AI tools currently in use, emphasizing the need for providers to know what to expect and how to maximize AI's benefits to patient care. Topics included AI's role in transforming surgical workflows and improving postoperative care, as well as its potential to refine data accuracy and documentation processes to help physicians better personalize treatments.

"Our AI West Med Symposium was among the first of such conferences in the country," says symposium co-director Giovanni Cacciamani, MD, director of the USC Urology AI Center. "It was a pleasure to help create and host this event during which not only the attendees but also the faculty learned a lot."

Next year, the symposium will return in February.



# Chaplain Honored for Outstanding Support

t a special ceremony on March 14, Chaplain Symeon Yee was named the 2023 Employee of the Year for Keck Medical Center of USC by Rod Hanners, chief executive officer of Keck Medicine of USC.

The award is bestowed to an employee whose embodiment of Keck Medicine's values makes them an extraordinary asset to the organization and its patients.

During the ceremony, Hanners shared how Yee's presence continues to enhance the experience of the organization's patients, visitors and staff.

"Symeon brings professionalism, compassion, empathy and inspiration to those he interacts with," Hanners said. "We are grateful for the incredible value he brings to our Spiritual Care Program. Being a chaplain is not easy work, but Symeon makes it seem seamless. He is an asset to our organization."

Yee was selected from 11 nominees, who were also praised by Hanners.

"To those of you gathered here today, I cannot begin to tell you how much it means to me to have the opportunity to recognize your priceless contributions," Hanners said. "Every single one of you continues to work toward our goal of a limitless approach to care. I look forward to working with you as we shape the future of health care together."



Chaplain Symeon Yee receiving the 2023 Employee of the Year award at Keck Medical Center of USC.



Sergio Bianco

#### Clinical Trials



There are hundreds of **clinical trials and studies** 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 open clinical trials, visit clinical trials. KeckMedicine.org.

# **Evaluating Advanced Surgical Techniques for Pancreatic Cancer**

This clinical trial will be conducted in patients with pancreatic cancer that was considered technically inoperable due to the involvement of major abdominal arteries and veins. Many patients with pancreatic cancer of this extent are not considered candidates for surgical tumor removal because of the risk of damaging blood vessels and interrupting blood flow to other abdominal organs during the operation.

Patients will first receive chemotherapy to help shrink their tumors. Surgeons will then use cutting-edge techniques to remove the tumors and reconstruct the blood vessels surrounding the pancreas.

#### What should patients expect?

Two to eight weeks after completing a chemotherapy regimen, patients with locally advanced pancreatic cancer will undergo surgery on their pancreatic tumors. Throughout the study, patients will receive routine physical exams, blood tests and CT and/or MRI scans. During the first year post-surgery, researchers will follow up with patients every three months, then every six months for two years after that.

#### Who can participate?

Patients 18 years or older with locally advanced pancreatic adenocarcinoma that is typically considered inoperable. Patients must have undergone at least four cycles of chemotherapy to be eligible. Exclusion criteria and more information can be found at https://clinicaltrials.gov/study/NCT06132087

#### **Co-Principal Investigators:**

Yuri Genyk, MD; Steven R. Grossman, MD, PhD

#### **Contact:**

Carrie Foreman (323) 865-3593 Carrie.Foreman@med.usc.edu

#### Evaluating High-Temperature Treatments Before Surgery for Prostate Cancer

This clinical trial tests the safety and effectiveness of MRI/ ultrasound fusion-guided transperineal targeted microwave ablation (TMA) for prostate cancer. Using high temperatures delivered through the perineum (the skin between the scrotum and anus), the TMA may kill prostate cancer without affecting surrounding tissue.

Radical prostatectomy, a surgery that removes the entire prostate gland, can have a significant negative impact on a patient's quality of life. Receiving TMA — a less invasive treatment — before the surgery may kill tumor cells and improve the patient's quality of life in the long term.

#### What should patients expect?

Multiparametric MRI and 3D mapping prostate biopsy will be used to map the prostate prior to TMA, helping to plan targeted treatment and avoid damaging healthy tissue. Patients will receive MRI- and ultrasound-guided TMA and undergo radical prostatectomy on the same day or at 30 days after TMA.

#### Who can participate?

Prostate cancer patients 18 years and older who are planning to undergo prostatectomy as their treatment of choice. Exclusion criteria and more information can be found at https://clinicaltrials.gov/study/NCT06128525

#### **Principal Investigator:**

Andre Luis Abreu, MD Andre.Abreu@med.usc.edu

#### **Contact:**

Ileana Aldana (323) 865-0702 Ileana.Aldana@med.usc.edu

# Labwork

breakthrough study led by USC Norris Comprehensive Cancer Center researchers may offer doctors a blood test to diagnose the most common and deadliest form of ovarian cancer.

Unlike with many other cancers, biopsies to detect ovarian cancer are typically not an option. That makes it hard for doctors to choose the best course of treatment without first conducting surgery.

"There is a need for physicians to know what they're dealing with before surgery," says Lynda Roman, MD, a gynecologic oncologist for USC Norris, part of Keck Medicine of USC, one of the study's co-authors. "This test will help in starting to find a way to diagnose this disease early."

Knowing more about a pelvic mass before surgery could point to which type of surgeon and which method of surgery is best, Dr. Roman says. When ovarian cancer is found early, patients have a more than 90% chance of living for five years or more. Their chances drop to less than 40% if the cancer is detected in advanced stages.

The new test, which has 91% accuracy, detects specific nucleic acids circulating in the blood. Its high accuracy means it is both highly sensitive and specific, while most other tests on the market are high in one and low in the other, according to Bodour Salhia, PhD, leader of the Epigenetic Regulation in Cancer Program at USC Norris and the study's corresponding author.

The researchers are launching a follow-up study to validate their results, which were published in the journal Clinical Cancer Research. Afterward, they plan to release a commercially viable version of the test for clinical use within two years.

They will also investigate whether it can be used to screen the general population, giving doctors a chance to catch ovarian cancer early in asymptomatic patients.

# **New Blood Test** for Diagnosing Ovarian Cancer



"This test will help in starting to find a way to diagnose this disease early."

Lynda Roman, MD

#### Links Between Diet and 'Forever Chemicals'

ew research has identified food and beverage products linked to per- and polyfluoroalkyl substances (PFAS) and suggests potential ways to address their impact.

PFAS are known to be harmful to health: They can disrupt hormones, weaken bones and increase disease risk. Sometimes called "forever chemicals" because they take so long to break down, PFAS are used in fabrics, furniture and other household items. Recent tests also trace the chemicals to livestock, drinking water and food packaging.

A new study, funded in part by the National Institutes of Health and led by researchers from the Keck School of Medicine of USC, uncovers key details about the link between PFAS and diet. Greater consumption of tea, processed meats and food prepared outside the home (which researchers used to infer contact with food packaging) was associated with higher levels of PFAS in the body over time.

"To our knowledge, this is the first study to examine how dietary factors are associated with changes in PFAS over time," says Jesse A. Goodrich, PhD, an assistant professor of population and public health sciences at the Keck School and the study's senior author. "Looking at multiple time points gives us an idea of how changing people's diets might actually impact PFAS levels."

The results, published in the journal Environment International, also point to the importance of testing and monitoring various food and beverage products for contamination with PFAS.

"We're starting to see that even foods that are metabolically quite healthy can be contaminated with PFAS," says Hailey Hampson, a doctoral student in the Keck School's Division of Environmental Health and the study's lead author. "These findings highlight the need to look at what constitutes 'healthy' food in a different way."

# Increase in TikTok Influencer Posts Promoting Tobacco

new study used a form of artificial intelligence (AI) known as computer vision to track tobacco-related objects on social media, finding that some content increased as much as 100% between 2019 and 2022.

While previous computer vision studies looked broadly at e-cigarette-related content, this was the first to focus on TikTok influencer posts, says the study's co-author Julia Vassey, MPH, a health behavior researcher in the Department of Population and Public Health Sciences at the Keck School of Medicine of USC.

An AI-driven model designed by Vassey and her team analyzed 14,072 TikTok videos posted from "micro-influencers" — users who have between 1,000 and 100,000 followers and who get a high number of likes and comments.

The researchers found that content related to pod devices increased by 33% between 2021 and 2022, while e-juice flavor names and e-cigarette brand names increased by about 100% between 2019 and 2022.

The study is from the Keck School's Tobacco Center of Regulatory Science, one of seven centers funded by the Food and Drug Administration and National Institutes of Health that conduct research to inform federal tobacco policy.

"We know that this content is growing, not disappearing," Vassey says. "That tells us there's a need for continued research on the presence and the effects of this marketing."



The study, published in the journal Nicotine & Tobacco Research, also suggests that AI may play an important role in this line of research. While humans tend to identify tobacco-related objects with higher accuracy, AI can process much larger datasets, offsetting its slightly lower accuracy.

"We know that this content is growing, not disappearing."

Julia Vassey, MPH



# High Blood Sugar Raises Infection Risk After Hip Replacement

aving high blood sugar on the day you have hip replacement surgery could put you at greater risk of joint infections after the procedure, according to a new study by Keck Medicine of USC researchers.

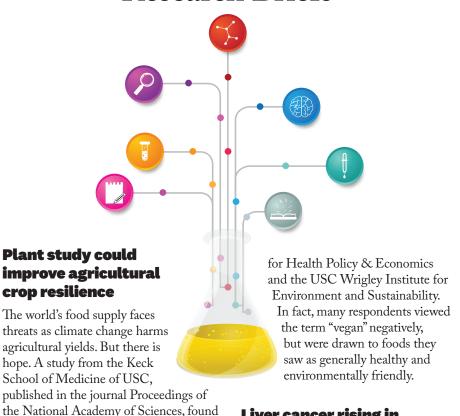
Past research has shown that hyperglycemia, a common diabetes symptom, can increase someone's likelihood of developing joint infections after total hip replacement, but few studies have investigated how preoperative blood sugar levels — especially levels on the day of surgery — can affect all patients.

"It is well-established that patients with diabetes that have elevated blood glucose levels have an increased risk of developing an infection after total joint replacement," says Jay Lieberman, MD, chair of USC Orthopaedic Surgery, and the study's senior author. "Our data suggests that all patients are at increased risk for infection if they have elevated blood glucose levels prior to their total joint replacement."

Dr. Lieberman and co-author Nathanael Heckmann, MD, an orthopaedic surgeon with Keck Medicine, reviewed more than 900,000 cases of diabetic and nondiabetic patients who experienced joint infections within 90 days after surgery. For diabetics, a preoperative blood sugar reading at or above 277 mg/dL carried 1.5-times greater risk of infection. For nondiabetics, the threshold was found to be 193 mg/dL.

These results, published in The Journal of Bone and Joint Surgery, suggest that surgeons can measure blood sugar prior to surgery to determine infection risk. These patients can be treated with insulin to return their blood sugar to a normal level.

### Research Briefs



# Al could facilitate earlier autism detection

that a plant's circadian clock helps it

and high soil salinity. This discovery

offers new avenues for engineering

drought-resistant crops.

adjust to extreme conditions of drought

Artificial intelligence could improve early detection of autism spectrum disorder, according to research from the USC Chan Division of Occupational Science and Occupational Therapy. The study used machine-learning analytics and an iPad game to distinguish movements in children with either autism, developmental coordination disorder or typical development. Results appeared in the Journal of Autism and Developmental Disorders.

# 'Healthy' beats 'vegan' in food marketing

Foods labeled "healthy" or "sustainable" were more attractive to consumers than "vegan" or "plant-based," according to a survey led by the USC Schaeffer Center

#### Liver cancer rising in Mexican Americans

Second- and third-generation Mexican Americans were found to be 37% and 66% more likely to develop liver cancer than first-generation Mexican Americans, according to research from the Keck School. Metabolic syndrome (which includes obesity and diabetes) and lifestyle factors, such as increasing alcohol consumption and smoking, could partly explain the rise, but more research is needed. The study appeared in the journal Cancer.

# Algorithms aid in glaucoma detection

Researchers expect an increase in patients who have or appear at risk for glaucoma — paired with an impending shortage of eye care specialists. To bridge this gap, USC Roski Eye Institute researchers are developing artificial intelligence algorithms to identify eyes with or at risk for glaucoma. Their methods are being implemented into Los Angeles County Department of Health Services screening clinics.

#### Mother and Daughter

Continued from Page 15

#### Comprehensive brain tumor care

According to Dr. Zada, the USC Brain Tumor Center is optimally qualified to take on among the most complex neurosurgical challenges. In addition to its expertise in minimally invasive surgical techniques, "we have a great multidisciplinary team, all dedicated to brain tumors," he says.

In another plus, Keck Medicine is home to one of the few National Institutes of Health-funded research centers for pituitary tumors.

Felicitas recovered quickly. Afterward, she says, "I felt like a 15-year-old again."

Since the surgery, her blood pressure and blood sugar readings have gone down. She has returned to tending her plants and making her family-favorite albondigas soup.

Margarita had a more challenging recovery. For the first week, she experienced headaches and dizziness and used a walker, but she soon improved.

She is back at work at Pandol Bros., Inc., a San Joaquin Valley produce grower and distributor, where her sister Betsy also works.

"Everyone on Dr. Zada's team did such a wonderful job for both of us," Margarita says. "I'm so grateful."

For more information, call (800) USC-CARE or scan the QR code below.



#### **New Family Bond**

Continued from Page 23

#### Two families' new bond

Three months after the transplants, the Casillases and Rochas met for the first time during a visit at Keck Medical Center of USC, where they also reunited with many of the physicians and staff who cared for them.

The families were able to learn more about each other.

"It was like our lives had been intertwined," Joselin says. "We realized we had grown up in the same area and had similar childhoods."

"They felt like family the instant we met," Kathya says.

They remain in touch.

"Not many people go through this kind of experience," Saul says. "So it's meaningful to know we always have someone else to share it with."

All four patients say they hope their journey gives faith to others who await transplants, as well as inspires others to consider donation.

"Don't give up," Jaime says. "I always tell people now: Our story is proof that there are options."

For more information, call (800) USC-CARE or scan the QR code below.



#### Emergency

Continued from Page 25



up. What's special about emergency departments, especially my team, is that we work hard to address the patient's entire experience — not simply their medical needs, but also their emotional ones. We develop a quick rapport, make people feel safe and encourage having family members at the bedside when needed.

# What else should people keep in mind about the role of an emergency department and what it can provide?

While patients should recognize that going to the ER for minor illnesses or injuries means a longer wait for everyone — including those with life-threatening illnesses — we are still here to serve all comers, regardless of what you are experiencing. We will do our best to help you feel better in a timely fashion.

For more information, call (800) USC-CARE or scan the QR code below.





lmost 11 years ago, my abdominal pains quickly progressed to liver failure. I was experiencing sepsis, I fell into a coma and my husband was told I had 48 hours to live — until my miracle happened. A last-minute full-liver transplant at Keck Medicine of USC's Transplant Institute gave me a second chance at life.

After my transplant, I felt it was my duty to pay it forward. For me, the best way to do that was to become an advocate for other patients.

I was inspired to take that route because, while I had an amazing family that supported me throughout my health scare, others aren't as fortunate. I wanted to ensure that all patients have someone speaking up for them.

I started volunteering for Keck Medicine and now serve as co-chair of the patient and family advisory council.

The council's mission is to serve as the voice of the patients. We meet with hospital leaders regularly to provide recommendations and firsthand insights into what would enhance the patient experience. We help administrators identify how resources could best be utilized to benefit patients.

I love how influential the council can be. It's the best feeling to witness changes we recommended, such as upgrades to the discharge process, improvements to the parking system and adjustments that helped Keck Hospital of USC's nursing team achieve Magnet redesignation — the gold standard in nursing excellence — in 2023.

There is always room for growth. The patient and family advisory council is here to ensure that the health system continues to provide high-quality care — and I'm proud to do my part.

Christine Valenzuela is co-chair for Keck Medicine of USC's patient and family advisory council. To learn more, call (323) 442-9516 or email PatientExperience@med.usc.edu





#### Keck Medicine of USC

HEALTH SYSTEM MARKETING AND COMMUNICATIONS

2011 N. Soto St. SST-2830 Los Angeles, CA 90032 NON-PROFIT
ORGANIZATION
US POSTAGE
PAID
UNIVERSITY OF
SOUTHERN
CALIFORNIA

# Keck Medicine of USC



RT

Opening in 2025 | 590 S. Fair Oaks Ave. in Pasadena