

# Health *for* Life

PRESENTED BY KERN MEDICAL

Spring 2018

## TEAMWORK

Why working together makes  
all the difference

Healthy  
**HEARTS**  
in Kern County

leading  
the way

Introducing our Epilepsy  
Center to the Central Valley







# Valley Fever Institute

*Diagnose.  
Treat.  
Cure.*

To learn more, visit  
ValleyFeverInstitute.com or call (661) 706-6748

Printed on Recycled Paper



SPRING 2018

# 4 contents



8

We hope you enjoy this edition of Health for Life. Comments about the publication can be directed to the Marketing & Communications Department:

**Kandiss Bigler**  
Director of Communications  
Kern Medical  
(661) 326-5241  
Kandiss.Bigler@kernmedical.com



16



22

- 2 GREETINGS  
CEO Russell Judd discusses 2017 achievements and 2018 goals
- 3 IN PICTURES  
Kern County Fair, Kern Medical in the news, and more
- 4 COMMUNITY HEALTH  
Helping local vets returning home, advocates for foster children
- 8 JUSTIN'S STORY  
Far from home, family and doctors work together
- 13 HEALTH SPOTLIGHT  
Signs of a heart attack, symptoms in women
- 14 PRACTICE PROFILE  
Cardiologists heal the hearts of Kern County
- 16 ROY'S STORY  
New epilepsy care opportunities for a young man who had lost hope
- 19 MEDICAL ADVANCES  
The Central Valley's first epilepsy center at Kern Medical
- 22 PERFORMANCE HEALTH  
Balance is the key to a healthy lifestyle
- 24 GIVING BACK  
Become a doctor for a day with Kern Medical

**Kern Medical**  
1700 Mount Vernon Avenue  
Bakersfield, CA 93306  
(661) 326-2000

Health for Life is published by Kern Medical as a community service. It is not intended to give medical advice. If you have questions about medical content, or are seeking personal medical advice, please contact your health care provider.

Produced in association with:







# thriving in the new year

2017 has certainly been a year to remember. We had the pleasure of celebrating our 150th anniversary, and we especially enjoyed giving back to the community not just as a vital health care provider, but as a sponsor and participant in many local organizations and causes, including the Kern County Fair and Couples for CASA of Kern County, just to name a few.

We had more than 44,000 emergency room visits, performed over 6,000 surgeries, and treated over 135,000 outpatient visitors in our seven clinic locations in 2017. We continued to grow and expand to serve our community. Some examples include our beautifully remodeled labor and delivery unit, creating a more comfortable and modern experience for mothers, babies, and families, our newly opened eye institute on F Street, and a new location for our patient-centered medical homes providing team-based physician offices and care for medically fragile patients at our GROW and REACH clinics on 34th Street.

We take great pride in being a UCLA-affiliated teaching hospital and have more than 200 residents, fellows, and medical students at Kern Medical. By inviting the newest and most forward-thinking minds into our institution, we are constantly fueling the cycle of innovation. Many of the students who choose our medical center for their medical school rotations go on to additional graduate medical education in our residence and fellowship programs, and subsequently stay and build their careers here, contributing knowledge and compassion to Kern County for years to come.

Our primary goal in 2018 aims to build on this growth and progress, allowing us to better serve the health and well-being of our community. As always, patients remain at the core of our mission, along with our roles as a teaching institution, to serve all regardless of their ability to pay, and to provide advanced expertise through our trauma program and specialty care.

If you have any comments, questions, or suggestions, you can reach me directly at [Russell.Judd@KernMedical.com](mailto:Russell.Judd@KernMedical.com). Thank you for your continued support. We are confident that we have a strong foundation to give back to the community we love, for at least another 150 years.

**Russell Judd**  
CEO, KERN MEDICAL

in pictures

## Living & Giving in Kern County

At Kern Medical, nothing makes us feel more connected to our community than the opportunity to give back. Throughout 2017, we were able to find new ways to reach out and serve the community we call home. These are just a few of those occasions.



**Pictured clockwise from top left:** A) Linda Raygoza, Health Educator, taught ServSafe to the Wasco High School Culinary Arts students, and they show their certificates proving that they've passed the ServSafe Food Handler's Course. B) Dr. Adam Johnson and Dr. Glenn Goldis meet with Jim Scott of Kern County In Depth to discuss Kern Medical's new educational parody videos, "Fast, Fast Baby" and "Sepsy Back," that make learning fun. C) Dr. Aslan GhandForoush, Chief of Cardiology at Kern Medical, speaks to the Hispanic Chamber of Commerce on the topic of heart health. D) The Parade of Equipment to the individual units, deploying equipment for the Up Sooner Safer program made possible by a \$578,000 grant from Kaiser Permanente. E) Kern Medical enjoyed sponsoring the Kern County Fair, hosting a booth with the theme, "Bringing Our Superheroes to Yours," and partnering with the Bakersfield Firefighters Burn Foundation to promote the Safe Home, Safe Baby program.





# Helping Those Who Have Given So Much

Contributed Content by Wendy Porter

**n**

ine years ago, Wendy and Mike Porter invited a handful of close friends to their house for dinner. Over that meal, they shared the idea of helping a local veteran and his family. The Porters and their friends decided to host a dinner and concert fundraiser for the veteran. After the event proved a success, the Porters realized there was a need in Kern County to help veterans and their families transition back into civilian life. Thus, the Wounded Heroes Fund was born.

The Wounded Heroes Fund is a nonprofit organization that aims to facilitate a healthy transition to civilian life through support and appreciation of veterans and their families. The organization provides military families with a variety of services to help them lead a successful life.

Through the Family Building Programs, military families learn new skills to help develop and maintain their health and well-being. These programs also encourage veterans to pursue mental health treatment, and gives them tools for healthy communication among their family. This is just one example of the many programs the Wounded Heroes Fund offers.

The Service Dog Program, one of the most popular offered by Wounded Heroes, allows veterans and service dogs to train side by side, teaching them basic obedience, stress management skills and lessons they can apply to practical life situations. Veterans are also provided with tools to help educate the public about service dogs and about American Disability Act laws, helping them feel comfortable in public with their service dog.

These are only a few programs offered by Wounded Heroes Fund to provide veterans and their families with the support they need to succeed. The nonprofit continues outreach to forge ahead, fulfilling their mission to give back to those who have given the community so much.

The health and wellness of the people that live in our area is always at the forefront of Kern Medical's mind, and our veterans are a vital part of our community. If you know any Kern County veterans who could benefit from these programs, please invite them to register online at [www.thewoundedheroesfund.org](http://www.thewoundedheroesfund.org).

Wendy Porter is the Executive Director of Wounded Heroes Fund. To learn more about giving back with WHF of Kern County, please visit [www.thewoundedheroesfund.org](http://www.thewoundedheroesfund.org) or call (661) 328-8600.



## Additional Programs

- **Female Veterans Program**  
Specific events for local female veterans to come together
- **Financial Grant Program**  
Helps alleviate financial stress
- **Financial Mentorship Program**  
Helps veterans become financially secure
- **Veteran of the Game**  
Veterans attend and are recognized during Bakersfield Condors games



# THE POWER OF A *Volunteer*

Contributed Content by  
Amy Raddatz

## Volunteering With CASA

Through the CASA program, volunteers support their assigned foster child/children in numerous ways:

- Weekly contact
- Identify social, emotional, physical, developmental, and educational needs
- Ensure needs are met in a timely and appropriate manner
- Monitor well-being and safety in their home placements
- Oversee and support academic progress
- Engage in enrichment activities
- Facilitate information sharing among professionals
- Serve as the child's friend

**W**e all know there is a need in our community when it comes to the children who are neglected, mistreated, or abandoned. According to the Kern County Network for Children (KCNC) 2017 Report Card, 3,324 substantiated cases of child abuse were recorded in 2016.

Anyone can make a difference in the lives of foster children and teens in our communities through Court Appointed Special Advocates of Kern County (CASA). CASA provides unique, life changing services for infants, youth, and teens that are not available through any other nonprofit or government agency.

### The Children Who Need Us

The children who urgently need our help have been abused, neglected, or abandoned and are in foster care. In July 2016, there were over 1,600 children living in foster care in Kern County. Many have been taken from their families, homes, and schools

and are placed with people they do not know. Furthermore, the safety net in which they are placed is overburdened, difficult to navigate, and not intended to meet their individual needs.

The best way for the community to help is by becoming a Court Appointed Special Advocate (CASA) Volunteer and work directly with a foster child or teen. The CASA program provides extensive training and ongoing support for CASA volunteers who commit to spending time with foster children each week.

### How else can I help?

- Join a specialty program
- Become a member of a fundraising committee or host a fundraiser in your own home
- Attend a fundraising event
- Donate
- Visit [www.KernCASA.org](http://www.KernCASA.org) for more information.



Amy Raddatz is the Development Director at CASA of Kern County. To learn more about volunteering with CASA of Kern County please visit [www.KernCASA.org](http://www.KernCASA.org) or call (661) 631-2272.







PART OF THE

# TEAM

**Kiley Norvell** STAFF WRITER

Justin Boughan always had a team mentality—but it was never more important than when life and limb were on the line.

In the early afternoon of May 11, 2017, Justin Boughan was traveling south on Interstate 5, heading to San Clemente to visit friends. He was in a hurry, already tired of the long drive from the Bay Area. His foot pressed the gas pedal as he ascended the hill to head up the Grapevine and changed lanes to get around a slower vehicle. Then, his phone vibrated, and he glanced down. Suddenly, everything stopped.

Justin remembers that he was driving with his right hand. He remembers that he had just passed the weigh scales, and that he needed to stop for gas. He remembers calling his mom after the collision, and then 911. He remembers the shock he felt.

Justin does not remember his car going under the semi-truck that changed lanes at the same time as he did. He doesn't remember shielding his





clothes for about three days. The nearly four-hour drive to Bakersfield was filled with anxiety, fear, and constant prayer. They arrived at the hospital around midnight, and Justin went into surgery Saturday morning.

When Justin arrived at Kern Medical, he was in critical condition. His right hand hung limp and immobile; his elbow was shattered, and he had compound fractures in his forearm and upper arm. He had a hairline fracture in his neck, countless cuts and scratches, and any number of internal injuries not yet discovered. In fact, he and his family had been told that he may lose his arm if it would save his life.

"Justin had suffered a truly devastating injury," said Dr. Larissa Morsky, who was an emergency medicine resident on staff when Justin arrived. "He was immediately sedated and intubated, but there was a good chance that he wouldn't keep his arm. We just

weren't sure."

Many doctors, nurses, and other staff played important roles in Justin's three-week hospital stay. His primary orthopedic surgeon, Dr. Arturo Gomez, was one of the first people to address Justin's injuries.

"It was shocking that he didn't lose his arm," Dr. Gomez said. "It was one of the worst upper extremity injuries I've ever seen."

During the nearly three-and-a-half-hour surgery, Dr. Gomez used several plates to reconstruct both bones in Justin's forearm and even more to reconstruct his shattered elbow and broken humerus bone in his upper arm. In the crash, one of the two major arteries to the hand had been severed—fortunately, while the other artery had suffered some trauma, it was still intact, which allowed Justin to keep his arm.

"Kern Medical let my family and I be a part of the team that saved my arm and my life," Justin says. "We worked together with the doctors and nurses. Every step of the way, we've been on the same side, and my recovery would have been so much more dif-

face with his right arm, or being flown to Kern Medical in a helicopter. His memory is foggy, and he's not entirely sure which memories are his own; he's put together some of the pieces from the stories he's heard. What he and his family remember most, nearly a year later, is the people.

## "It was shocking that he didn't lose his arm..."

Justin's dad, Chuck, was walking into the gym when he received a call from a California Highway Patrol officer—which he almost didn't answer. The officer told him to come to Bakersfield right away, because his son was being airlifted to Kern Medical, but not to rush and take his time.

"He told me not to have another accident, which I understand, but how do you not rush when your child's life is at stake?" Chuck said, as he remembered that day. "My wife and I were panicking. We didn't know what to expect. But this was our only child, so we had to rush."

He and Justin's mom, Linda, had to find someone to watch their dogs and their home in Livermore, and didn't end up leaving for two agonizing hours. In the process, Chuck grabbed enough



**From Left:** A) Justin recovers at Kern Medical. B) Justin takes a photo with nurse April. C) X-ray of the hardware used to put Justin's arm back together.

**Opposite Page:** D) Justin poses with Dr. Gomez, Chief Orthopedic Surgery at Kern Medical.



icult if it were not for the team."

The team isn't just made up of surgeons, physicians, and nurses—Justin specifically noted that his team was comprised of every single person he came in contact with at Kern Medical. He praised the cleaning staff, who always made his mom laugh, as well as food services, who gave him double servings because of his larger-than-average stature (he's 6'6" and about 230 pounds).

Justin has always been an athlete. He's played sports all his life, rotating from one to another depending on the season. When he was 12 years old, he played on an all-star baseball team that

traveled to China to play in a championship tournament, where his team placed second. As an adult, he plays softball, but also loves snowboarding and mountain biking—not to mention shooting hoops with his friends.

Justin's mom and dad had not planned for what ended up being a lengthy hospital stay. As neither one could bear to leave Justin for long enough to return home to the Bay Area, they went to the mall to buy more clothes and continued to sit by his bed. They also repeatedly extended their hotel reservation, but only a couple of days at a time—they kept hoping that Justin would be released soon.





# Signs of a HEART ATTACK



“It’s the same lesson I’ve been learning in sports for my **entire life.**”

However, on May 14, Mother’s Day, Justin’s mom noticed his voice was strained—even though he was laying down, he was short of breath. When she called for the nurses, they quickly realized that his left lung had collapsed. Once again, the team sprang into action.

“It’s the same lesson I’ve been learning in sports for my entire life,” Justin recalls. “When faced with an unexpected challenge, we adjust and persevere. There is no time to panic, and no giving up.”

It’s a lesson that played out on the television screen in Justin’s hospital room as well, as Justin’s favorite basketball team, the Golden State Warriors, battled for another NBA title. Justin and his family decorated his room for the playoffs, diligently watching every game.

During Justin’s hospital stay, the Warriors battled the San Antonio Spurs, a team they had notoriously lost to in past playoffs. In the fourth game, the Warriors were consistently ahead—until the fourth quarter, when the Spurs started regaining ground. The Warriors didn’t flinch. No time to panic, no giving up. They kept their lead, winning the Western Conference and moving on to the championship.

On May 30, Justin walked out of Kern Medical wearing his Warriors jersey. On his way out, he ran into friends he made during his three-week stay—the new team he’d come to know and love. He stopped to take pictures and say goodbye, and it took over an hour to finally make his way to the parking lot.

Justin has a long road to full recovery ahead of him. He’s still in phys-

ical therapy three times a week, and while Dr. Gomez has told him it’s no longer necessary, he still wears his arm brace occasionally to help regain full extension in his elbow. The positive relationship that Justin’s family built with his team has reinforced their choice to continue his outpatient recovery at Kern Medical—a three-hour commute each way. He refuses to seek care anywhere else, even though his life is no longer in danger. But the day he left the hospital, he was on top of the world.

“I made it, you know? I was pumped!” Justin smiled as he remembered. “But at the same time, I was sad to be walking away from such amazing people. I’m glad I’m able to continue to work with Kern Medical. I couldn’t have put together a better team.”



February was American Heart Month, and March 3 was Go Red, an event to increase awareness for women’s heart health. According to the American Heart Association, a person has a heart attack approximately every 43 seconds, and fewer women than men survive their first attack.

Almost everyone has seen the dramatic heart attack scene in a movie, where a man suddenly grabs his chest, collapsing to the ground. Some heart attacks are like that, but most begin slowly and don’t just affect men.

Chest discomfort is the most common symptom among both men and women. However, women are more likely to experience a combination of symptoms. Because most of these symptoms are ones not typically associ-

ated with heart attacks, they are often times missed or misunderstood.

### Chest Discomfort

This feeling usually lasts longer than a few minutes but can disappear and reappear later on. You may experience uncomfortable pressure that can be described as an elephant sitting on top of your chest.

### Upper Body Discomfort

You may also feel discomfort in other areas of the upper body, like in the arms, back, neck, jaw, or stomach. This pain may feel less severe, but it’s just as telling.

Heart attacks often seem unexpected, but the warning signs are there. If you experience any of these symptoms, act fast. Visit your doctor for regular checkups to help maintain your car-

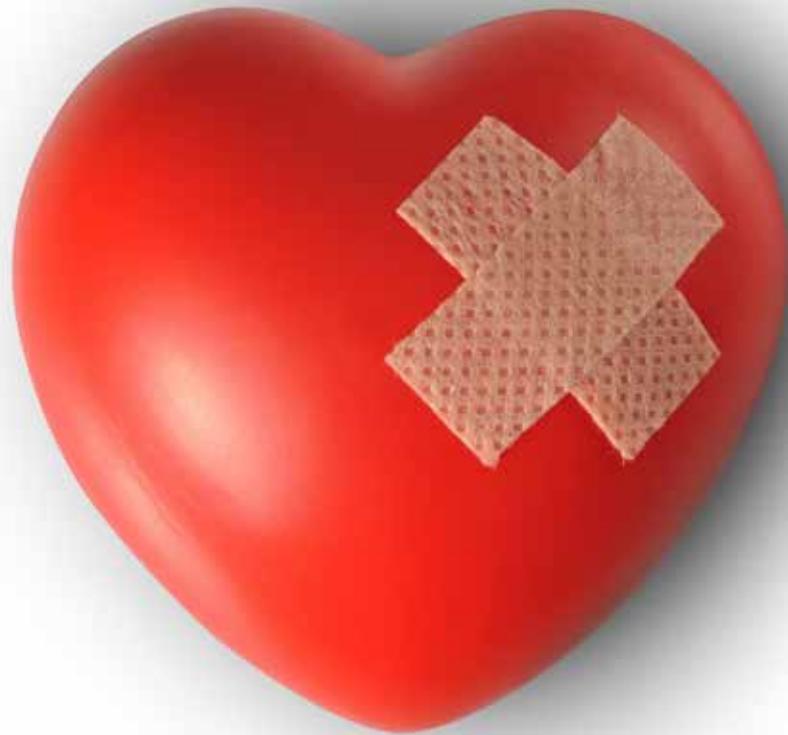
diovascular health. Kern Medical is here to help you stay heart-healthy, during American Heart Month and beyond.

## WOMEN & HEART ATTACKS

Women experience a much more complex set of symptoms that usually aren’t typical to men, including nausea, shortness of breath, and abdominal pain.

While these signs are less common, it’s important to remember them because, in conjunction with other symptoms, they may help you recognize that you’re having a heart attack—particularly if you are a woman.





# Healing From The Heart

CARING FOR THE HEARTS OF KERN COUNTY

Kiley Norvell STAFF WRITER

Cardiovascular disease is the leading cause of death in both males and females. More than 500,000 people die of heart disease annually. The causes of cardiovascular death include heart attacks, strokes, and heart failure. At Kern Medical, we make it our goal and mission to treat not only heart disease, but more importantly, to act preventatively and rehabilitate those who have significant risk factors of heart disease. Our physicians, faculty, and dedicated team of professionals are committed to providing you with the best and most cutting-edge treatments, interventions, and evidence-based medicine.

When patients establish care with our cardiology department, the patient and their family meets with one of our dedicated cardiovascular specialists.

Our heart specialists are experienced in diagnosing and treating patients with heart conditions, including many rare and complex disorders.

Patients will partner with a team of doctors, nurses, and other caregivers focusing on heart health—together, this team will create a personalized treatment plan that is customized for the patient.

The Kern Medical Cardiology team includes experts in interventional cardiology, general cardiology, electrophysiology, heart failure, echocardiography, nuclear cardiology, pulmonary hypertension, and women's heart disease. Together, the team can diagnose and manage a variety of conditions, including heart valve disease, heart rhythm disorders, lipid disorders (including cho-

lesterol), hypertension (high blood pressure), and pulmonary hypertension (high blood pressure in the lungs). The cardiology team also includes two of the only female cardiologists in the Central Valley. In an effort to provide the most comprehensive care possible, cardiologists will often collaborate with many other doctors throughout Kern Medical and greater Kern County, as well as Southern California. Every patient at Kern Medical has access to state-of-the-art diagnostic and treatment facilities.

We know the science of medicine is consistently changing, and our heart experts are continually learning and exploring new ways to improve how we diagnose and treat all our patients—no matter what condition they may have. That's why, at our heart center,



## First Steps

To schedule an appointment with a Kern Medical cardiologist at our Truxtun location, please call (661) 664-2200.

we practice guideline-derived and evidence-based medicine while keeping the whole-body approach in mind at all times, when treating both everyday issues and the most complex of cardiac diseases.

Kern Medical cardiology is part of the Kern Medical system, with offices at the Mt. Vernon and Truxtun locations. We continue to pioneer treatments that advance cardiovascular research and clinical care for people everywhere. The physicians at Kern Medical have faculty appointments at the UCLA Department of Medicine, one of the nation's leading medical schools. We offer an advanced team approach to treating the heart.

## Diagnosis

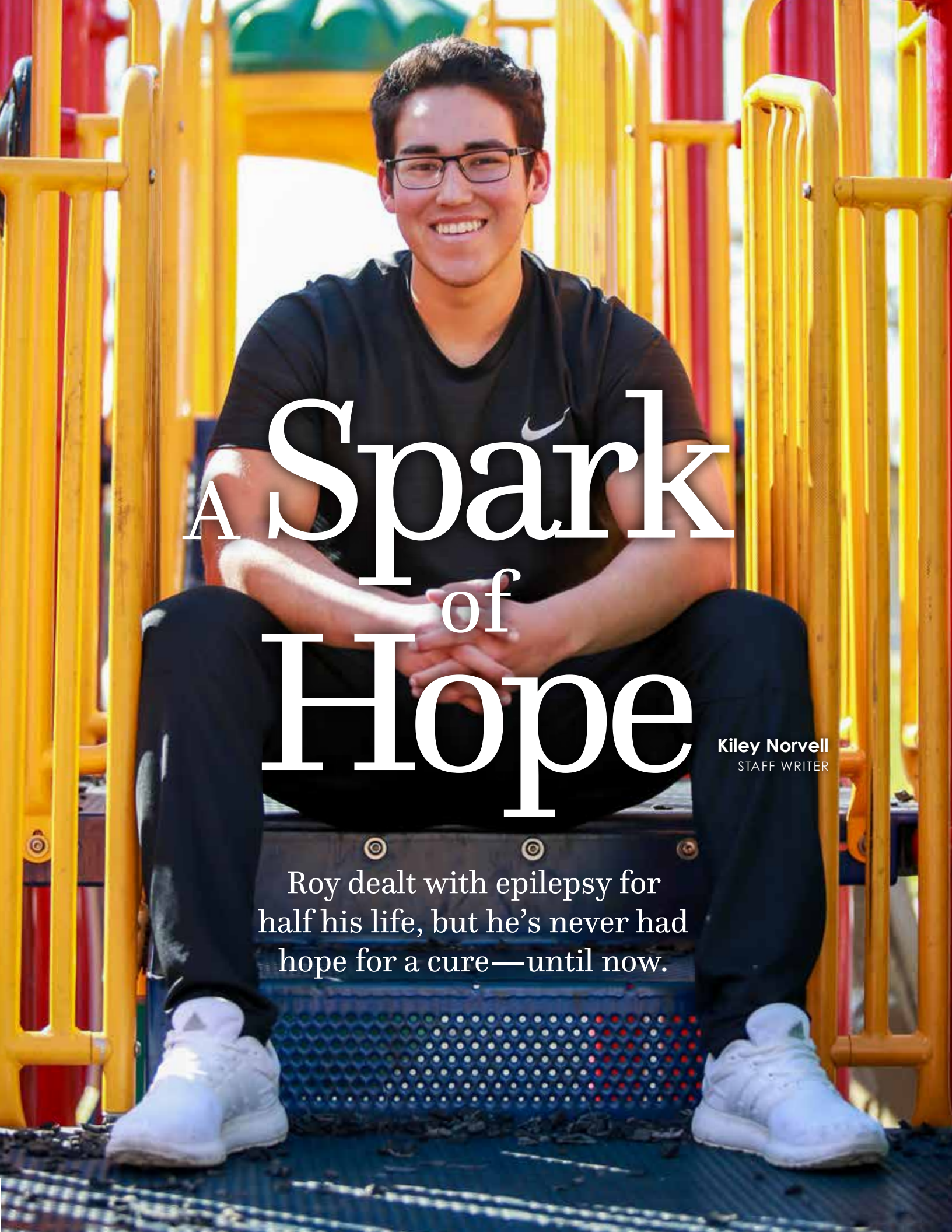
Imaging is key in diagnosing heart conditions. At Kern Medical, our cardiovascular department offers a range of services that focus on you, your heart, and its vascular system. These services include:

- Echocardiography — an ultrasound that can show the size of your heart, its structure, and activity
- Cardiac stress testing — sometimes called the “exercise test;” can help determine how well your heart handles the stress of exercise
- Nuclear cardiology — a noninvasive imaging technique that shows how well your heart pumps blood
- Carotid ultrasound — an ultrasound that provides an inside view of your carotid arteries, revealing their overall health
- Upper and lower extremity arterial and venous sonography — ultrasound tests that show how well blood flows through the arteries in your arms and legs
- Abdominal aorta and iliac sonography — ultrasound tests that show how well blood flows through the arteries of your lower abdomen
- Renal artery sonography — an ultrasound that shows how well blood flows through the arteries that connect to your kidneys
- Catheterization lab — diagnostic imaging equipment used to visualize the arteries and chambers of the heart for cardiovascular patients; can also help with image-guided interventions for neurological specialties and microsurgery-inspired operations for interventional radiology, treating a wide variety of conditions



From left to right:  
Fowrooz Joolhar, MD,  
Aslan GhandForoush, DO,  
and Tiffany Win, MD





# A Spark of Hope

Kiley Norvell  
STAFF WRITER

Roy dealt with epilepsy for half his life, but he's never had hope for a cure—until now.

# W

hen he was 11 years old, Roy stopped riding bikes. He no longer went swimming during the hot Kern County summers. He learned that he would never get his driver's license and he gave up his dreams of becoming a professional athlete. Many of the conventional rites of passage for boys growing into young men were suddenly no longer possible for Roy. Roy Reynoso is 20 years old, and for nearly half of his life, he's had epilepsy.

Many people would see this as a tragic loss. The seizures, sometimes happening as often as two or three times per week, were the only thing holding back an otherwise healthy and active child—he loved sports and being outside with his friends, staying outside until late in the day. During the first couple of years living with his illness, Roy felt like his life was over.

However, in his early teen years, Roy's mentality changed completely. He was tired of feeling sorry for himself, sick of letting his epilepsy be his defining characteristic. Instead of succumbing to the disorder, he decided to learn how to live with it—which sometimes meant pretending he didn't have epilepsy at all.

"I started telling myself it wouldn't affect me, and that I would keep doing what I love," Roy says, thinking back. "I refused to give in to the epilepsy."

Even though he had a positive outlook, Roy never felt like he had his epilepsy completely under control. He



was handling it to the best of his ability, and because of his strong willpower, he was doing pretty well. He was leading a "normal" life, going to work and the gym regularly, enjoying early adulthood—despite the increasing frequency of his seizures.

Roy's epilepsy care, however, had been lacking. His family didn't have the money to travel all over California seeking the best treatments, so he went to places his insurance covered. His former doctors were not specialized in epilepsy care and, unfortunately, couldn't offer him much more than a series of prescriptions. Surgery as a treatment option for epilepsy was a taboo subject—it was never discussed with Roy and his family.

Roy has a form of epilepsy that is intractable, meaning it is not entirely treatable with medication. He could take medicine to help reduce the frequency and severity of his seizures, but he would never be completely free of epilepsy in this way.

As Roy's family continued seeking the best treatment options available, they found Dr. Hari Veedu, neurologist, epileptologist, and Medical Director of the Kern Medical Comprehensive Epilepsy Center. They were overjoyed to find that Roy could receive specialized treatment for his illness without leaving Kern County.

Much to their excitement, he was selected as the first person to be observed in the Epilepsy Monitoring Unit (EMU), where Roy is connected to a

“I started telling myself it wouldn't affect me.”



Top: Roy has electrodes placed during his stay at the Kern Medical Epilepsy Center.

Bottom: Roy chats with Dr. Hari Veedu, the Medical Director of the Kern Medical Epilepsy Center.





“I refused to give in to the epilepsy.”

machine that tracks induced seizures using video, audio, and EEG to determine the origin of seizures and to identify possible surgical candidates. Because Roy's epilepsy is intractable, surgery is the only chance he has of curing his condition.

Prior to his admission, doctors thought that the cause of the seizures was likely on the right side of his brain, away from Roy's motor functions. This made him an even stronger candidate for surgery, as the risk for damage to Roy's brain during surgery is reduced.

Roy was admitted to the Epilepsy Center on January 29 and ended up having a total of ten seizures during his two-day stay. Roy wasn't scared—instead, he felt comforted knowing he was in a safe place with experts giving him the best care possible, and for the first time in a long time, hopeful.

The information gathered from Roy's stay in the EMU is more complicated than originally anticipated. The preliminary findings show that the source of the epilepsy in Roy's brain may be in the frontal lobe, not the temporal lobe, which could make future surgical plans more complex.

Roy is not discouraged by the recent findings. He is willing to do what it takes to determine if surgery is a viable option to cure his epilepsy, and he has confidence and trust in his care team. Roy has experts from five epilepsy centers that are part of the USC Epilepsy Consortium reviewing his case and determining next steps. Although the future is unknown, Roy and his family have found something they've never had before: hope.

Stay tuned for Part 2 of Roy's story in a future issue of Health for Life.

medicaladvances

# BRINGING EPILEPSY CARE

TO THE CENTRAL VALLEY

Kiley Norvell STAFF WRITER

Epilepsy is the fourth most common neurological disorder worldwide. Caring for epilepsy patients is very complicated—not only because of the wide range of specialists needed to monitor, diagnose, treat, and sometimes operate on the patients, but also because it is a complicated condition in itself. Each case is unique, with idiosyncrasies and nuances that can entirely change the required course of action.

Epilepsy centers are an integral part of the care and treatment of patients who have been living with seizure disorders and Epilepsy. Highly trained and experienced physicians come together to strategize, evaluate, and provide treatment options. This team of experts in neurology, neuropsychology, neuroradiology, and neurosurgery assembles for one purpose: to enhance the quality of their patients' lives through comprehensive diagnosis and advanced treatment. For those who suffer from epilepsy, this team approach offers more options and can lead to effective, long-term solutions.



### EPILEPSY CARE IN THE CENTRAL VALLEY

The new Kern Medical Comprehensive Epilepsy Center is the product of a long-term partnership with the University of Southern California's Neurorestoration Center. It is the first epilepsy center for adult patients between Sacramento and Los Angeles, serving a population that was previously forced to travel significant distances to receive the type of comprehensive care that these centers offer.

Dr. Charles Liu, Director of the USC Neurorestoration Center, professor of neurological surgery at USC's Keck School of Medicine, and long-time friend of Kern Medical, was one of the people who spearheaded the Epilepsy Center partnership. Dr. Liu is also the Surgical Director of the Kern Medical Comprehensive Epilepsy Center, spending a percentage of his time in Bakersfield to contribute to the development and management of the new Epilepsy Center. He understands the difficulties that patients face when trying to find proficient epilepsy care, and believes that the problem is only compounded by the complicated network of health-care.

"Our vision was to create a patient-centered ecosystem for epilepsy care," Dr. Liu said. "We wanted to maximize our local resources while allowing patients to receive care close to home. In the Central Valley, that used to be impossible."



Charles Liu, MD, PhD, speaks at the launch of the Kern Medical Comprehensive Epilepsy Center.

technology, and increasing the availability of resources to patients. Doctors often travel from one center to another, offering their skill and expertise to any patients who need them. Kern Medical can now utilize resources all over Southern California because of the proactive interconnection. This is the first alliance of its kind, and a consortium such as this exists nowhere else in the world. Each center is stronger because of the network as a whole.

### EPILEPSY MONITORING UNIT

One of the most exciting aspects of the Kern Medical Epilepsy Center is the addition of the Epilepsy Monitoring Unit (EMU). The EMU is a specialized care area within the hospital which is staffed by nurses who have received advanced training in the care of patients with seizures. Patients are admitted to the unit for close observation and treatment of their seizures. Special attention is given to early identification of the seizures, continuous video monitoring, and EEG and EKG monitoring, which help

determine treatment options.

Patient care at the epilepsy center goes beyond just doctors—there is an entire team of specially trained individuals who come together to focus on the patient, including nurses, nursing assistants, EEG technicians, IT support monitor technicians, pharmacists, radiologists, seizure educators, lab technicians, primary care doctors, neuropsychologists, psychiatrists, epileptologists, epilepsy surgeons, and the patient's family or support system. Kern Medical relies on the entire team to run the Epilepsy Center.

"The Kern Medical Epilepsy Center is going to make a profound impact on this community," Dr. Liu said. "Patients will enter the Consortium, receive the best care possible, have access to resources that were previously unavailable to them, and remain close to home as often as possible throughout the course of their treatment. It's a life-changing improvement in this area."

## OTHER SERVICES IN THE EPILEPSY CENTER

Together, the Kern Medical Comprehensive Epilepsy Center will provide comprehensive services including epilepsy evaluation, imaging, EEG services, video telemetry, stereotactic EEG, invasive EEG monitoring, epilepsy surgery resections, and neuromodulation. The epilepsy team collaborates with each patient to develop personalized treatment plans.

### Routine (Spot) EEG 20 minutes to 3 hours

- Can be inpatient or outpatient
- Video and audio recording help enhance and clarify results
- Use of flashing light, hyperventilation, and sleep to increase the chances of capturing seizure-like activity

### Outpatient Ambulatory EEG 24 hours to 96 hours

- Helps capture and classify seizures or events outside of the facilities
- Electrodes are applied with non-flexible glue
- Outpatients remain on anti-epileptic drugs
- Video and audio recording help enhance and clarify results
- Patient comes back daily for data

### Inpatient CCEEG 24 hours to 30 days

- For inpatients that have been admitted for any reason that may have an increased risk of neurological decline
- Goal is to recognize a decline in a patient's condition before physical signs and symptoms are present
- Medications and sedations are often used in tandem with EEG
- Continuous live video and constant EEG monitoring by a technician are considered when real-time neurocritical care information is required to manage the patient

### Elective Inpatient (EMU) Long-Term EEG Monitoring 3 to 7 days

- Necessary when classification of events has not been confirmed
- Can be used to identify possible surgical candidates
- Patient is closely monitored 24/7 by a Registered EEG Technologist
- Goal is to capture five seizures or events during admission
- Patients are placed at high risk for seizures, which requires specialized safety precautions

## WHAT IS EPILEPSY?

Epilepsy is a disease of the brain that predisposes a person to recurrent, unprovoked seizures. It is diagnosed when two or more unprovoked seizures have occurred.

### FACT:

**ONE OUT OF THREE EPILEPSY PATIENTS HAVE SEIZURES THAT CANNOT BE CONTROLLED WITH EPILEPSY MEDICATIONS.**

**FACT:  
THERE ARE MORE THAN  
33,000 EPILEPSY PATIENTS IN  
KERN COUNTY.**

### USC EPILEPSY CONSORTIUM

The Kern Epilepsy Center is part of the USC Epilepsy Consortium, which also includes Rancho Los Amigos National Rehabilitation Center, Hoag Epilepsy Center, Children's Hospital of Los Angeles Epilepsy Center, and USC Comprehensive Epilepsy Center.

These five epilepsy centers work in tandem, exchanging opinions, sharing



From left to right: Kern Medical Epilepsy Center physicians Dr. Sabetian, Dr. Veedu, Dr. Liu, patient Roy Reynoso, Dr. Pantera, Dr. Chen, and CEO Russell Judd.





# BUILDING BETTER BALANCE

by Targeting Your Internal GPS



The human brain performs many jobs—from cognitive tasks, such as solving a crossword puzzle, to properly coordinating automatic processes, like breathing and regulating blood pressure. One task that is recognized as being both cognitive and automatic is balance.

The brain is designed to promote moment-to-moment movement patterns by gathering information from spatial sensors (hands and feet, for example) located throughout the body. Internal GPS can either help someone stay healthy by contributing to posture

control, optimal core muscle activation, and balance, or become a hindrance by negatively impacting posture alignment, joint range of motion, and fine motor skills. This is based upon a concept called neuroplasticity. Your internal GPS is comprised of three primary “satellites”—the visual system (the eyes and the muscles around the eyes), the vestibular system (the inner ear; fluid that acts much like a level to the brain), and the proprioceptive system (movement literacy in joints). Much like satellites in space sending signals to a GPS located

in a car, airplane, or phone, your brain constantly relies on information presented from these three systems. Each one of these systems is incredibly important, fulfilling its own unique role in the total balance and movement equation.

For the satellites to function properly and positively impact balance and movement, there are two primary requirements—one: the information from each satellite must be clear and understandable to the brain; and two: the brain must be able to correctly integrate all that information together.

**“Taking care of yourself requires a total body approach.”**

To enhance balance, it is important to clean up any malfunctions in the three satellites. Reduced functionality in one or more satellite systems leads to poor



spatial integration, resulting in poor balance and movement control.

Everyone has a body, a brain, and a nervous system that are inherently designed to process sensory information, which allows us to perform simple and complex tasks. Taking care of oneself requires a total body approach—with focus on the brain, the body, and nutrition. Athlete's Advantage Academy programs are always centered around enhancing internal GPS, as well as physical skills, to optimize overall performance. The partnership with Kern

Medical gives A3 clients access to Kern Medical's orthopedic team, including surgeons and sports medicine specialists, and reciprocally gives Kern Medical clients and staff special access to A3 facilities and programs, as well as pre- and post-procedure “non-clinical” care. A3 offers training programs for anyone and everyone, regardless of age, skill level, or athletic/fitness goals. At A3, everyone is an athlete, and being an athlete is much more than sports-specific training.





# BE A DOCTOR FOR A DAY



**Erica Easton**  
Executive Director of  
Kern Medical Foundation

Kern County has a rich history that was built by a generous community. For more than 150 years, Kern Medical has cared for the most vulnerable, the critically injured, and the ill. In recent years, we have made strides to revolutionize healthcare locally. Aside from being the only trauma center in a 100-mile radius, many locals remain unaware of the vital role Kern Medical plays in improving the health of our community.

We are an academic teaching center, focused on educating more than 200 medical students, residents,

and fellows each year. As a tertiary referral center, we provide specialty care unavailable anywhere else in town, allowing people to remain close to home while still receiving the most advanced care available.

In recent years, Kern Medical has become a financially stable institution with a strategic vision focused on the future health of our community. In an effort to better educate the community about the important role that Kern Medical has as the community's only teaching hospital, we wanted to pull back the veil and share the specialized services we offer to the community.

In January of 2017, we launched "Doc for a Day," a new program aimed at bringing community leaders to experience a behind-the-scenes look at Kern Medical. Doc for a Day participants have ranged from local business

owners to community leaders who are interested in improving the health of our community. The monthly agenda is personalized based on the interests of participants and the latest technology available.

Since each Doc for a Day was unique, we wanted to share experiences and provide even more opportunities to explore the latest in technology at Kern Medical. In early 2018, we had the privilege of hosting a reunion for all of our guest docs who participated during our inaugural year.

We are thrilled about the success of the Doc for a Day program and the positive feedback we have received from our participants. We look forward to continuing to share the latest at Kern Medical. Programs like this allow us to share the amazing things that happen in our hospital, one person at a time.

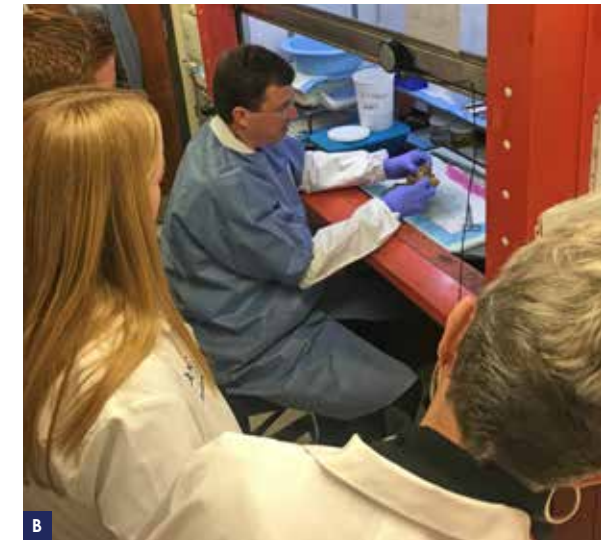
## A Day in the Life of a Doctor at Kern Medical

Every day is different for doctors at Kern Medical, and therefore, each Doc for a Day experience is unique, as well. Here's what might happen while you're a Doc for a Day.

- **Interdisciplinary Tumor Board** — Patient cases are discussed with an interdisciplinary group of physicians from Kern Medical and throughout the community, all focused on collaborating and learning from one another to better diagnose and treat cancer.
- **Attend clinic** — Participants are able to engage with patients during their visits with physicians at the outpatient clinic, which is for patients who need ongoing and follow-up care from our team of medical professionals.
- **Patient rounding** — Participants make rounds at the hospital just as faculty, residents, and medical students do, meeting patients and learning about the diagnostic process.
- **Hospital tour and interactive demonstrations**
  - **Simulation Man** — Participants are able to experience using the SIM manikin and practice a variety of procedures ranging from CPR and intubation to defibrillation using the paddles. Future doctors train on the same equipment.
  - **Da Vinci Xi Robotic Surgery** — Participants see the da Vinci Xi robot in action as they observe a real surgery in the surgical suite.
  - **Catheterization lab equipment and procedures** — A personal demonstration is given on the latest cardiac and interventional radiology techniques and equipment. Participants have the opportunity to touch and feel real IV filters, stents, and catheters, then observe a procedure.
  - **Intrathecal Procedures for Valley Fever** — Participants observe and meet individuals being treated by the world's experts in Valley Fever. Patients discuss the various symptoms and receive treatment for Valley Fever.
- **Lunch with CEO Russell Judd and physicians** — Participants have the opportunity to discuss their experiences of the day with the doctors of Kern Medical and hear the future plans for Kern Medical from the CEO.



A



B

**From Top:** A) The Jamison family observes a robotic surgery performed by Dr. Pakula. B) Dr. William Stull demonstrates to the Pavletich family the role pathology plays at Kern Medical. C) Dr. Larissa Morsky teaches Berta McCarthy and Christina Sistrunk how to perform CPR on the Simulation Man. D) Lori Malkin training on a 3D Robotic Surgery simulator at the Doc for a Day Reunion at the Petroleum Club.



C



D

For more information about the special programs and projects at Kern Medical, please contact the Kern Medical Foundation at [Erica.Easton@KernMedical.com](mailto:Erica.Easton@KernMedical.com), (661) 480-5252 or visit us at [KernMedicalFoundation.com](http://KernMedicalFoundation.com).



1700 Mount Vernon Avenue  
Bakersfield, CA 93306

PRSRT-STD  
U.S. Postage  
**PAID**  
Bakersfield, CA  
Permit #7



**A new place for newborns.**

 **KernMedical**

*Health for Life.*

[KernMedical.com](http://KernMedical.com)