

Difference

SUMMER 2017

INSIDE



CHANGING THE STORY LINE

Not content with the advice, "Go home and enjoy what time you have left with your family," Annette Osborne opted instead for a new treatment developed at UK for her recurring GYN cancer.



DISABILITY OR COMPLEX SPINE SURGERY?

A recipient of extensive, but flawed, prior back surgeries, Richmond resident Dave Lee opted for complex spine surgery to rebuild his back and avoid disability.



FINDING OUT THE HARD WAY

Thinking he left congenital heart disease back in childhood, UK employee Jason Conn found out otherwise after an infection of the lining of the heart nearly took his life.



THE LATEST AT UK HEALTHCARE

- ▶ UK named among 100 Great Hospitals in America
- A pacemaker for the brain
- ▶ UK welcomes Shriners Hospitals for Children
- ▶ UK HealthCare earns GoldPlus Elite status for stroke care
- ▶ DanceBlue Kentucky Children's Hospital Hematology/Oncology Clinic has a new home
- ▶ Advanced Eye Care Clinic



ON THE COVER:

Pain, posture, poor balance and leg numbness were forcing Dave Lee to after complex spine surgery, he can once again help wife Julie with the garden, home repairs and yard work.



UK HealthCare supports SOAR

UK HealthCare and the University of Kentucky are proud sponsors of SOAR (Shaping Our Appalachian Region). We support SOAR's goals of increasing educational opportunities, improving health and creating jobs for the citizens of Eastern Kentucky.

Making a Difference is a publication of UK HealthCare® Corporate Communication.

For information, write: 2333 Alumni Park Plaza, Suite 330, Lexington KY 40517

Editor Jan Taylor **Graphic Designers** Cheryl Conrad James Carr

Writers Kristin Rattini

Photography Shaun Ring Lee Thomas

Coordinator

Copyright 2017, University of Kentucky. All rights reserved. An equal opportunity university. No part of this publication may be reproduced without written permission of UK HealthCare Corporate Communication, 859-323-8587.



Michael Karpf, MD

ADVANCED MEDICINE DEMANDS THE BEST FROM ALL OF US

In this issue of *Making a Difference* we are privileged to once again share the stories of three amazing individuals. From recurrent cancer to debilitating back pain to a life-threatening heart infection, these three patients found themselves entirely reliant on the skills and experience of our physicians, surgeons, nurses and other health professionals to see their way clear.

In my 14 years as the university's executive vice president for health affairs, I have been impressed by the level of expertise present within our academic medical center (AMC). Together, we have transformed UK HealthCare from a small center to one rivalling the nation's leading AMCs in terms of volume, level of complexity and statewide impact.

As I step away from my EVPHA role to focus on raising support for programs I hold dear and to devote more of my time to health services research, I commend to you the highly skilled and deeply caring teams of UK faculty and staff who have a passion for quality care, education of our state's next generation of physicians, and pursuit of discoveries to improve the health of our Commonwealth and the nation.

Their unwavering commitment to our patients and their families is deeply appreciated. I am confident that UK HealthCare is becoming one of the Commonwealth's strongest assets.

Sincerely,

Michael Karpf

Executive VP for Health Affairs UK HealthCare® / University of Kentucky

Update from our 2016 issue



Teresa Schladt, Lexington, Ky.

A congenital disease – AAT deficiency – sent this 45-year-old into liver failure. A liver transplant addressed the organ failure, but then Teresa was diagnosed with advanced cancer. Today, Teresa is cancer free and "enjoying life to the fullest with my family," as she puts it. "Top of my agenda has been to maintain my health

to the best of my abilities including practicing yoga and tai chi and trying to eat as healthy as possible. I also am enjoying daily walks with my Scottie Madam Curie!"

Natasha, Alan & Natalan Hendren, Berea, Ky.

Natasha and Alan, both UK nurses, found help from the high-risk OB and neonatal teams when Natasha's pregnancy took a difficult turn and their baby, Natalan, was born at 30 weeks. After 72 days in the Neonatal ICU. Natalan went home and



was followed in the NICU Graduate Clinic. Today, the family has welcomed another daughter and big sister Natalan, is "the happiest person I know," said her mother. "We had to learn how to not live in fear and enjoy life," she said. Still receiving therapy, Natalan is closing the gap physically and "interacts like any other kid." The Hendrens have spent the last year telling her story, advocating for the March of Dimes and raising awareness on prematurity.



Reuben Ligon, Warsaw, Ky.

Plagued by congestive heart disease for almost 40 years, Reuben received a heart transplant in 2015. On May 7 he turned 60 and had a surprise birthday party. "The most exciting thing for me is the fact that our doctor visits are all routine ones quick, with no issues," said his wife, Janet. "Until the transplant, he and I both did not believe he would be alive to celebrate this milestone."

For more information, contact UK HealthCare – **859-257-1000** or toll free 800-333-8874 or ukhealthcare.uky.edu.

CHANGING THE **STORY LINE**

Creating a new approach to an older procedure, UK radiation oncologist Jonathan Feddock, MD, is providing patients whose gynecological cancer has returned with a second chance at life. Annette Osborne is captivated by stories. The 53-year-old nurse from Winchester, Ky., has been researching her family's ancestry to find the stories behind the black-and-white photographs of generations past that she inherited a decade or so ago. Her quest has taken her to courthouses and churches in Kentucky and Tennessee and unearthed some memorable characters.

"My great-granny Parker – seven generations ago - lived in Virginia and would host George and Martha Washington frequently," Osborne said. "Apparently, she could dance cotillion with a glass of water on her head and never spill a drop. George Washington





Annette Osborne's quest to uncover family characters was interrupted in 2015 when she learned vaginal cancer had returned, two years after

was so impressed he gave her a pair of silk stockings."

Osborne's own life story includes two chapters that she would not have willingly written for herself: two rounds of vaginal cancer. But thanks to the groundbreaking permanent interstitial brachytherapy (PIB) treatment she received under radiation oncologist Jonathan Feddock, MD, and his care team at UK Markey Cancer Center, Osborne's story has taken a dramatically happier and healthier turn and has many chapters yet ahead.

FINDING THE TRUE CAUSE OF HER FATIGUE

Osborne had long been a caregiver, not a patient. During her 27-year nursing career, she had worked in many settings, but her favorite rotations were in long-term care. "I valued the relationships that you build with your patients," she said. "I enjoyed listening to their

Her caregiver role continued at home. In 2012, when her father's Alzheimer's disease worsened, he moved in with Osborne and her husband, Phil, so she could tend to his needs. Osborne already had been suffering fatigue and occasional vaginal bleeding over the previous year. She chalked up the fatigue to the stress of her dad's declining health. And her gynecologist attributed the bleeding to a vaginal tear. But as 2013 began, her own health declined. "I had fatigue like I'd

never had before in my life," she remembered. "And I had a lot of bleeding."

Her gynecologist had moved out of the area, so she consulted with a new doctor in March 2013. He drew her a picture of what he'd found. "There was a tumor on top of the vaginal wall," she said. "Where my other doctor thought was a tear, there was cancer."

She went through six weeks of chemotherapy and then external beam radiation at a facility in Lexington. The radiation oncologist thought they had gotten everything, but... "He said getting full coverage at the top of the vaginal wall can be difficult," Osborne said. "He said that if I was going to have a recurrence, it would happen within two years."

In July 2015, two years to the month after her last treatment. Osborne was told her cancer had returned.

GRIM STATISTICS FOR GYNECOLOGICAL CANCERS

Gynecological cancers are a major health problem in Kentucky. The state ranks sixth nationwide in the number of cervical cancer deaths and has a cervical cancer death rate 21 percent higher than the national average. "There are many different causes of gynecological cancers, some of which we still do not know. However, several unfortunate characteristics about the state of Kentucky contribute to our high

rates for these cancers. Compared to other states, more patients than not in Kentucky are overweight, and we know that obesity is a risk factor for uterine cancers," said Feddock. "In addition, cervical and vulvar cancers are frequently related to human papillomavirus (HPV), which can be detected with screenings. Access to health care and cancer screening has been fairly poor in Eastern Kentucky, and as a result, we see a large number of cervical and vulvar cancers and these women tend to present with more advanced disease compared to other states."

Historically, when gynecological cancers recur, the patient's outlook has been grim. Many oncologists believe that once a patient has had radiation to a certain part of the body, radiation cannot be repeated. If a patient's cancer has not spread elsewhere, traditionally a woman's only treatment options have been to undergo radical surgery such as a pelvic exenteration, or chemotherapy, which are rarely curative.

"The problem with a recurrence of cervical or vaginal cancer is that they most commonly occur in the middle of the pelvis. Patients experience lots of pain, alterations in how their bladder or rectum function, and overall, these recurrences cause a lot of suffering. Even though surgery potentially can be curative if successful, it requires removing all of the pelvic organs," Feddock 6th

Kentucky ranks sixth nationwide in the number of cervical cancer deaths and has a cervical cancer death rate 21 percent higher than the national average.

explained. "The patient is closed up on her bottom and receives two colostomy bags: one for stool, one for urine. It is a long surgical process that carries a lot of risks. If a woman survives the immediate recovery, most report a poor quality of life and suffer significant psychological stress including post-traumatic stress disorder. Yes, they are alive, but I've always thought to myself, there has to be a better option."



Marcus Randall, MD, brought the basic brachytherapy procedure to UK and taught it to Jonathan Feddock, MD, who then improved it.

A BRIGHTER PICTURE

THANKS TO UK

That dire picture
has radically
improved thanks to
a groundbreaking
procedure
championed at
the University
of Kentucky by
Marc Randall, MD,
and pioneered by
Feddock. Called
permanent interstitial
brachytherapy (PIB),
this outpatient
procedure implants

tiny seeds of the radioactive isotope Cesium-131 (Cs-131) directly into a patient's gynecological tumor.

Taught basic brachytherapy by Randall, Feddock saw its potential and was responsible for the transition to a newer isotope, bringing in image guidance for more complicated cases, and changing the way the procedure is performed. For the last five years, he has performed all of the PIB implants done at UK.

"When you compare PIB to external beam radiation, it's the difference between using Round Up weed killer versus a whole-yard weed killer," Feddock explained. "You can repeat radiation with PIB because you are implanting only the active tumor. You can deliver a full course of treatment and still protect the surrounding organs." In addition, because PIB uses an ultra-low dose of radiation, it has the lowest risk for long-term side effects.

UK's expertise in the procedure

is unmatched. Of the 103 PIB implants using Cs-131 performed in the United States, UK has performed 97 and consulted or assisted on four of the other six. "When patients develop a recurrence, a lot of them are told, 'That's it. Nothing we can do,'" Feddock said. "PIB is a game changer. If it's done at the right time, we have high cure rates. All the women we've treated have had minimal and acceptable side effects. Our practice is growing at a tremendous rate because people are realizing how powerful this procedure is."

A MUCH-NEEDED DOSE OF WARMTH AND OPTIMISM

By the time Osborne had her initial consult with Feddock in October 2015, she was running out of hope. Her cancer had not only returned in its original site but had spread to a small spot in her right lung. She had sought a second opinion at a clinic in Chicago where the doctor removed the spot from her lung and recommended a course of chemotherapy.

Because the cancer had spread, pelvic exenteration was ruled out as an option for Osborne. "When I returned to my doctor in Lexington she said, 'There's nothing I can offer you,'" Osborne recalled. The doctor mentioned off-handedly that someone at UK was doing "funky radiation stuff" that might be worth looking into; she scheduled an appointment for Osborne with Feddock. But the doctor's parting advice was, "Go home and enjoy what time you have left with your family."

From the moment Osborne walked into Feddock's office, she was awed and comforted by the warmth and optimism of the staff. "At my previous oncologist's office, it was doom and gloom," she said. "But Dr. Feddock's office was so upbeat and positive."

As was Feddock himself. He reviewed Osborne's scans with her and took her step by step through the PIB process. "He was so positive and explained everything to a T," she said. "I knew everything that was going to happen, what side effects might occur. He was so thorough, yet so relaxed. I never felt like he was in any hurry. He sits with you and asks if you have any questions, like you are the only patient he has all day."

Dr. Feddock had reason to be optimistic about Osborne's case.

"Even though she had been told there was nothing that could be done, I considered hers to be a straightforward case," he said. "It wasn't that big of a tumor. I'd already implanted much worse tumors than that and had good success. I felt very confident I could implant her tumor with a good outcome."

After Osborne completed her chemotherapy for her lung, she returned to Feddock's office for a follow-up consult. Radiation therapy nurse Penny Ross, RN, welcomed Osborne back with the same warmth and optimism she had experienced on her first visit. "The focus of our conversations was never on the disease," Osborne said. "She'd ask how I was doing, sometimes talk about an event in the community or the news. The focus was on everyday life. I really appreciated that."

Ross joined Feddock's nursing team just two years ago, after spending 20 years as a trauma nurse. Like Osborne, she values the opportunity to develop longer-term relationships with the patients in the clinic. "I am so fond of our patients," Ross said. "We want them to have that hope. If you can make them feel one bit like they did before they were diagnosed, it helps them remember that they are still the

person they were; they are not the cancer."

Osborne had new reason for hope. Upon looking at her scans, Feddock declared that her cancer had responded much better than expected to the chemotherapy. Her tumor had shrunk down to an operable size. It was all systems go for the PIB.

THE TEAM EFFORT BEHIND PIB

In February 2016, when Osborne was rolled into the surgical suite for her outpatient PIB, her first reaction tickled her as a former nurse. "I was surprised how many people were in the room!" she said. Because the procedure involves radioactive material that must be scrupulously handled and tracked, both the primary and secondary medical physicist assist Feddock, his nurse and his resident.

Osborne received a pain pill and a local anesthetic and then had a catheter inserted. She remained fully awake during the procedure. The medical physicist handed Feddock one Cs-131 seed at a time in a preloaded dispenser. Feddock utilized an ultrasound machine and fluoroscopic C-ARM machine – for which he had raised the funds himself – to fully visualize the field in real time so he could evenly distribute the

"My staff and I try to protect the modesty of every patient as much as we can without compromising their care."

- David Lockhart BSRT(R)(T

Dr. Feddock (right) with radiology technologist David Lockhart. CT images are used to confirm the radioactive seeds are implanted directly on the active tumor.



"If you can make them feel one bit like they did before they were diagnosed, it helps them remember that they are still the person they were; they are not the cancer."

- Penny Ross, RN

Penny Ross, RN, helps set a tone of optimism and hope for those in radiation therapy.



seeds throughout the middle of the tumor.

"Dr. Feddock talked to me throughout the whole procedure," Osborne said. "It wasn't painful at all, just some pressure sensation. It didn't take long at all, maybe 30 minutes."

For the final step, Feddock turned Osborne over to David Lockhart, BSRT(R)(T), a radiation medicine therapist who conducted a CT scan to confirm the count and placement of the seeds. "When you have this kind of cancer, everyone wants to take a look at your private parts," Osborne said. "It can be uncomfortable, especially when it's a man getting ready to look again down there. But he (David) was very good at maintaining my modesty and privacy and making me feel at ease."

"GYN patients lose a lot of modesty when they come here," said Lockhart. "Before cancer, they have control of their lives. Once they have cancer, that sense of control is lost somewhat and many strangers – such as me and other health care workers come into their lives. It is very uncomfortable for patients to have private areas exposed to strangers. If I don't need to see the area, I work to keep them covered. Sometimes keeping a patient covered goes a long way with them, and they appreciate

your consideration of their feelings. When I see someone exposed without needing to be, it makes me uncomfortable; I can only imagine how they feel lying there. My staff and I try to protect the modesty of every patient as much as we can without compromising their care."

Afterward, Osborne took things easy at home. She had some fatigue, but her biggest challenge was keeping her two beloved dogs, Oscar and Gabby, from jumping on her lap, which would remain a radiation "hot zone" for a few weeks.

It became a little hotter about a week later, when Feddock called Osborne back in to implant a few more seeds. "There was one area of the tumor where I didn't feel confident I had enough seeds where I needed them to be," he said. "So Osborne came in for a supplemental procedure to make sure we got the coverage we needed in that corner."

Osborne was grateful she had Feddock and his care team in her corner. "They've treated me with such respect," she said. "I have been so impressed by him and his staff."

A JUBILANT NEW CHAPTER

In May 2016, Osborne got the news she was waiting for: Her tumor was gone. And it is likely to stay that way. "Our data shows Osborne's tumor was declared "gone" in May 2016. Since then she has returned to kayaking, working out, gardening, and being with her family.

that if a tumor hasn't grown back after six months, then it probably isn't coming back," Feddock said.

Now more than a year in remission, Osborne has been able to resume activities she enjoyed before her cancer diagnosis. She and Phil go kayaking along Stoner Creek. "It's so peaceful, and the scenery is so beautiful," she says. "I was so happy to have the energy to kayak again." She has been working out with a physical trainer to regain her strength so she can eventually return to work. She tends to her garden. She cherishes visits with her four children and five grandchildren. And she is back to researching her ancestors' stories.

One ancestor in particular has come to mean so much to Osborne: her great-great-great grandmother Mahala. Osborne's father always loved the name Mahala and wished for it to be passed on in the family. Around the time that Osborne received her "all clear" diagnosis, her daughter, Lydia, learned she was pregnant. Over the years, three different doctors had told Lydia she would not be able to have children. Paired with Osborne's remission. the pregnancy was the family's second miracle of the spring.

Today, Osborne is a proud grandmother and willing babysitter for her newest grandchild. "Neither of us is supposed to be here," she said. "I am so grateful I am." As this cancer-free chapter of her life unfolds, she now has the time to share all her stories – and create new ones – with her young granddaughter: Mahala.

SPREADING THE WORD ON PIB

Annette's PIB procedure saved her life, but she made her way to Dr. Feddock only through a rather off-handed referral. "Even though the PIB treatment has been proven, it is still not that well utilized or understood regionally or nationally," Feddock said. Many practitioners still believe – of gynecological cancers cannot be treated a second time with radiation. There is a tremendous need to increase awareness and comprehension of PIB among oncologists and gynecologists throughout Kentucky and the United States.

UK's gynecological oncology team has enthusiastically embraced and advocated for the PIB procedure and referred multiple patients to Feddock. "In the right circumstances," said GYN oncologist Chris DeSimone, MD, of the UK Markey Cancer Center, "PIB is a remarkable treatment for women with recurrent gynecologic cancers. We are extremely fortunate to have this treatment modality available for the women of Central Kentucky and surrounding areas."

"In the right circumstances, PIB is a remarkable



treatment for women with recurrent gynecologic cancers."

– Chris DeSimone.

— Chris DeSimone, MD GYN oncologist, Uk Markey Cancer Cente

IRONCOLOGY

Jonathan Feddock, MD, in addition to being a radiation oncologist at the UK College of Medicine, performs regularly in Ironman distance triathlons. In 2014, he created the Ironcology fundraiser as a way to blend his talents as an Ironman triathlete with the need to improve cancer care.

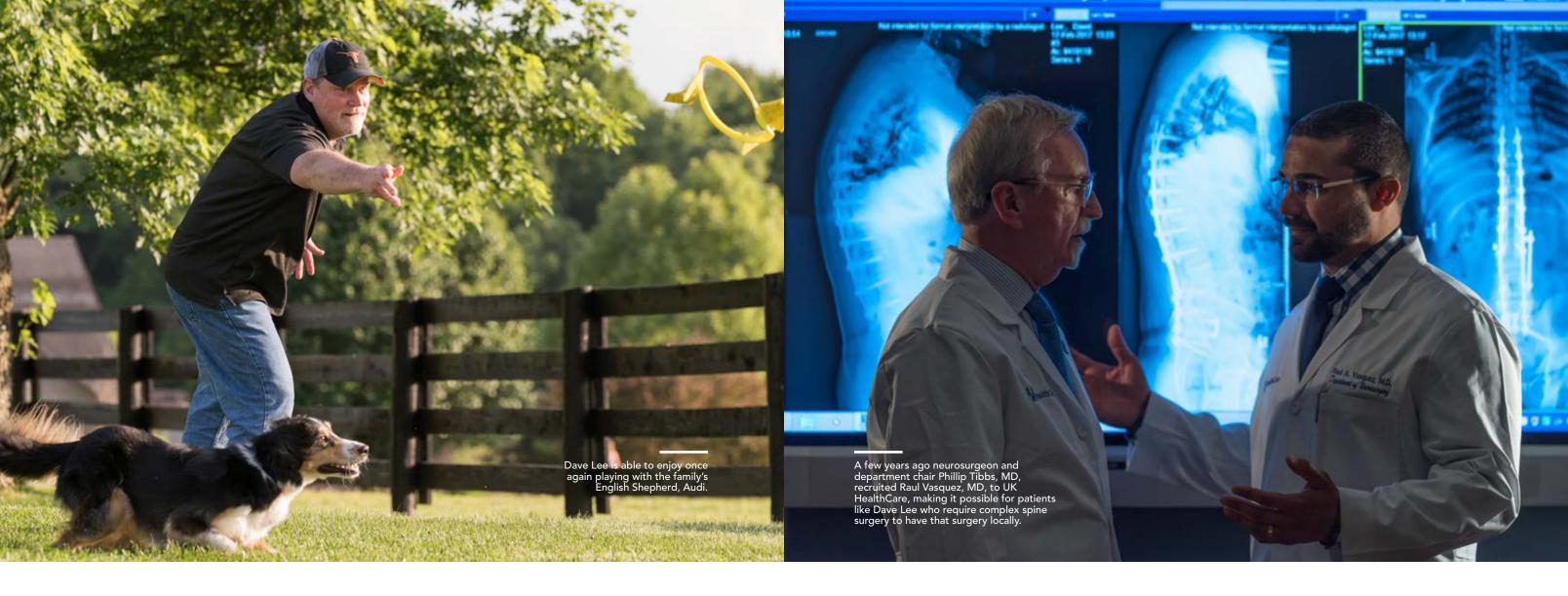
In an effort to raise funds for a new brachytherapy suite, Feddock competed in the 2014 Ironman Louisville, starting the race as the final athlete. Feddock collected donations and pledges based on how many people he could pass throughout the day. After passing nearly 2,000 people, he raised more than \$54,000 in a single day. Completing two additional races in 2014, overall Feddock raised more than \$141,000, all of it used to help create a dedicated brachytherapy suite within UK Radiation Medicine.





Ironcology has since become an annual fundraiser benefiting the Markey Cancer Center. In 2017, the Ironcology Survive the Night Triathlon took place June 16-17 at the new Kroger Field (formerly Commonwealth Stadium). For more information about Ironcology or to follow Dr. Feddock as he continues to race, visit **ironcology.org.** ■

6 | MAKING A DIFFERENCE



DISABILITY OR COMPLEX SPINE SURGERY?

Multiple back surgeries since age 21 had left Richmond resident Dave Lee with a 13-inch scar, a spine flanked by metal rods melded to his spine by screws, and excruciating pain. In the fall of 2016, Dave Lee, then 52, was walking like a man 30 years his senior, pitched forward, shoulders humped. His back pain was so excruciating that when asked to rate his pain level, he said "15" – well beyond the 1-to-10 scale health care professionals use to access pain.

Pain, posture, poor balance and numbness in his right leg had caused Lee to fall three times, the worst one a tumble on the concrete floor at Costco. None of the falls had caused serious injury, but Lee was becoming increasingly worried about his physical decline. He feared the pain would make it impossible to continue his career as a supervisor for a government contractor, overseeing a staff of

two dozen during construction of a chemical weapons disposal facility at the Blue Grass Army Depot. Although the job does not involve manual labor, Lee must be able to walk about the site and meet with employees. And because the job requires clear-headed thinking, he took nothing more potent than over-the-counter medications for his back pain.

At home, Lee could do few of the things he had once enjoyed. He and his wife, Julie, together 17 years, had always been active and energetic. They walked their English Shepherd, Audi; they hiked; they traveled in their RV. They teamed up to plant and harvest a vegetable garden each summer; they worked together on home repairs and yard work. "She

would mow, and I would weedeat," Lee said. Now Julie Lee, petite but strong, did everything around the house.

A VISIT TO UK'S SPINE CENTER

Because of the falls and his increasing back pain, Lee decided it was time to visit the Kentucky Neuroscience Institute and meet again with neurosurgeon Phillip Tibbs, MD.

The Lees had met Tibbs, chair of neurosurgery and director of the UK Spine Center, in 2014 when Dave Lee's back pain became severe. He had had the first of multiple spinal surgeries when he was 21 and living in Utah. The most extensive was in 2009 after his legs went numb and tests showed his L3-L5 discs were

8 | MAKING A DIFFERENCE SUMMER 2017 | 9

herniated. He emerged from that surgery with a 13-inch scar and a spine flanked by metal rods melded to his spine by screws.

Shortly after he and Julie moved to Kentucky, a private-practice surgeon had performed another surgery in 2011, removing two screws at the base of Lee's spine.

At the 2014 consultation, Tibbs

Taking a conservative approach

A referral to the UK Spine Center does not mean that your next stop will be the operating room. In fact, odds are quite good that surgery is not in your immediate future. That's because the center's approach is "very conservative," said Phillip Tibbs, MD, center director. The Spine Center recommends surgery for only 7 to 10 percent of the patients seen there.

"We see a lot of patients who have had surgeries that we wouldn't have done, and they weren't successful," said Tibbs. "We always do extensive conservative treatment – physical therapy, injections, pain medications – and only when that conservative treatment fails to provide relief, and only when the MRIs and X-rays show a condition that is amenable to surgery, do we operate.

The emphasis on effective, appropriate treatment influences the medical residents who train with Tibbs and other neurosurgeons. "We want those young doctors to see the best way and the right way to fix things and that is usually conservative first," said Tibbs. ■

had advised Lee against another surgery at that time. UK's Spine Center takes a conservative approach; for every 100 patients seen in its clinic, seven to 10 will have surgery.

"At that time, Dr. Tibbs felt it was too risky," said Lee. "I was living a somewhat normal life. He said. 'Let's wait until it gets worse.' In a way I am glad it was a couple more years before I had to have surgery."

NEW COMPLEX SPINE SURGEON ARRIVES AT UK

From a medical standpoint, the delay was fortuitous. Ten months earlier, Tibbs had conducted a national search and had successfully recruited Raul A. Vasquez, MD, a neurosurgeon who had completed a distinguished complex spine fellowship at Vanderbilt University and a neuroscience fellowship at the National Institutes of Health. At Vanderbilt, he had studied under Joseph Cheng, MD, now clinical vice chair of neurosurgery at Yale. According to Tibbs, Cheng a preeminent complex spine surgeon himself – had described Vasquez as "probably the finest young person" he'd had the pleasure of training.

Although Tibbs does complex spine surgeries, he realized it was time to add a spine specialist trained in techniques that are even more complicated and that involve minimally invasive procedures. With Vasquez on board, the UK Spine Center could do more complicated surgeries like the one Lee needed instead of referring those patients to other medical centers out of state as they had in the past.

"I was trained a generation ago," Tibbs said, "and tremendous advances have been made in technology and in the treatment of spinal disorders, from advances in instrumentation



Two months postsurgery, this X-ray shows Dave Lee's spine newly supported, decompressed and returned to a more natural balance.

to better understanding of the biomechanics of spinal disorders."

Vasquez started practice at UK in February 2016, and "from the moment he arrived, everything changed," said Tibbs. "I do a lot of complex spine, but he does procedures I don't do and his understanding of the biomechanics of the spine is extraordinary."

Most important to patients like Dave Lee were the results Vasquez's patients were experiencing. "I'm constantly getting positive feedback about the success of his surgeries," said Tibbs. "He has been able to rescue a number of patients who have had extensive prior surgery that didn't work out, and he is able to understand the underlying flaw and work through that, undo the previous surgery, restore support, decompress the spine and restore the spine's balance."

Scoliosis, tumors of the spinal cord or spine, and other deformities may require complex spine surgery.

Complex spine surgery tackles problems beyond ruptured or compressed disks. Cases typically involve deformities, such as scoliosis, a curvature of the spine that can be congenital or triggered by prior surgeries; tumors of the spinal cord or spine; and other deformities. Surgeries often involve fusing vertebrae, removing bone to enlarge pathways for nerves, and using rods and screws to realign the spine. More than half of the 300 surgeries Vasquez did in his first year at UK HealthCare were complex spine surgeries.

VASQUEZ DESCRIBES SURGERY IN DETAIL

Vasquez sat down with the Lees and got to know them. He asked about Dave Lee's work, his lifestyle and medical history, and what he hoped to gain by having surgery. The Lees had appreciated Tibbs' straightforward and compassionate demeanor, and they found the same in Vasquez. "Dr. Vasquez was to the point and very informative," said Lee.

Lee made one point very clear to

the surgeon. He had been told in 2009 that he qualified for medical disability, but he had no intention of not working. "I told Dr. Vasquez that disability was not an option."

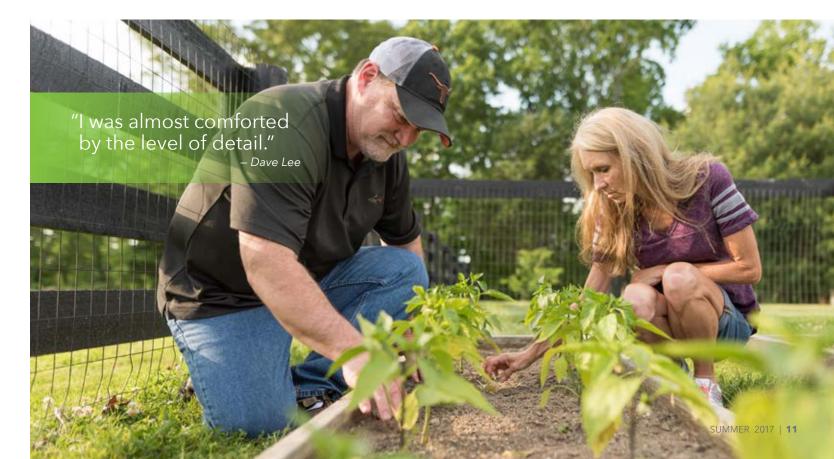
Vasquez displayed Lee's X-rays and explained that Lee's previous surgeries had removed the natural curve from Lee's back. Those surgeries had also caused Lee to develop scoliosis. And, Vasquez said, when the Lexington surgeon removed the screws from the base of Lee's spine, it had caused his spine to further collapse forward.

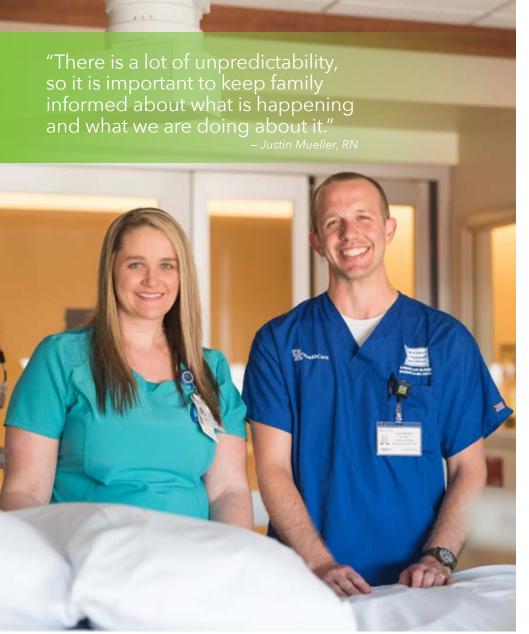
The goal was to rebuild Dave Lee's back, restoring natural curve to his spine and replacing old hardware with new – a complicated surgery done over two days.

Vasquez's aim was to rebuild Lee's back. He would restore the natural curve and replace the old hardware with new. He explained that in complicated cases like Lee's, he did surgery over two days. He would begin by operating through the front of Lee's body, fusing several vertebrae near the base of Lee's spine for stability. Lee would then be flipped over and Vasquez would make an incision and remove and replace all the old hardware. This time the incision would stretch 18 inches. Vasquez would also do a number of laminectomies, a surgical procedure that enlarges the spinal canal to take pressure off the spinal cord, and foraminotomies, a procedure that relieves pressure on nerve bundles caused by the part of the vertebrae they travel through to reach the spinal cord.

On day one, after six to seven hours, surgery would be halted, and Lee would go to the ICU for rest and dinner. The next morning, surgery would resume.

The Lees have long enjoyed planting and tending a large vegetable garden, a pleasure Dave had to give up when his back pain was severe.





"Dr. Vasquez explained to us, 'I don't like for my patients to be in pain, so I stop the surgery when I feel like they have had enough,'" said Lee.

As Lee listened, he felt a pang of fear only once, when Vasquez told him that he would have to fracture Lee's back to restore its curve. "He said 'We will need to break your back.' That's when I started to get a little nervous."

Even at that, Lee appreciated Vasquez's thorough explanation. "I was comforted by the level of detail."

"I am honest and realistic," said Vasquez, "but I don't try to scare them. I don't want to exaggerate the amount of suffering, but I don't underestimate." His frank descriptions of surgery and recovery are always followed by a reassurance of an excellent outcome, based on the many surgeries he has performed. "I tell them they will feel so much better."

As they talked, Lee realized that he and his surgeon shared the same goal. "I went in with the expectation that I was going to end up feeling better, and I did."

The Lees were also impressed when all of the members of Vasquez's surgical team stopped by the day of surgery to introduce Terra Albertson, NCT, and Justin Mueller, RN, are members of the Neurosciences ICU team who took care of Dave and Julie Lee. The Lees admired the team's professionalism and friendliness.

themselves and describe their role.

"Dr. Vasquez understands that he is a member of the team," said Tibbs. "The university has a multidisciplinary group of caregivers who work with the surgeon to bring about the successful surgery and recovery."

UNEXPECTED ISSUE IN THE ICU

The surgery on December 13 and 14, 2016, went just as Vasquez had explained, but Lee had a complication in the Neurosciences Intensive Care Unit (ICU) that neither he nor Julie expected. In previous surgeries, Lee had never had an adverse reaction to anesthesia or pain medications. This time he did. From Wednesday to Saturday, he did not recognize Julie. At times, he thrashed and fought the nursing team. He was not talking. Unlike many back pain patients, Lee was "narcotic naïve," Vasquez said, because he had not used prescription narcotics for relief. Anesthesia and painkillers had a stronger effect on him.

Because Lee was incoherent, the ICU nursing team on the sixth floor of Chandler Hospital Pavilion A monitored him closely. "We were with him a lot more than most, keeping a close eye on him so he could recover safely," said Justin Mueller, RN.

Without verbal communication, Mueller and others relied on Lee's body language for cues. "We noticed that he liked to lay on his side," said Mueller, so the staff adjusted IVs and other lines so Lee could be comfortable and Remembering her own family's experience, Terra Albertson encourages family members to take breaks, reassuring them that staff will be with their loved one.

safe. The team also consulted with Vasquez because they worried Lee's thrashing might undo his recent surgery. They were thankful to learn that it would be difficult for him to do much damage.

The nursing team also made sure that Julie Lee was kept in the loop. "There is a lot of unpredictability," said Mueller, "so it is important to keep family informed about what is happening and what we are doing about it."

The Lees admired the ICU team's professionalism, and they also appreciated the staff's ability to joke and be light-hearted. At other hospitals where Lee had been treated, staff had been professional but stuffy. At UK, the nurses and nursing techs were professional and personable. "They were very professional and very friendly," said Julie Lee.

Mueller made Julie chuckle. She still smiles when she remembers the day he leaned in to care for her

Heather Vance, BSN, RN, CNMI, patient care manager for the Neurosciences floor, interviews applicants for qualities she believes are important in nurses: communication skills, empathy, compassion and humor.



husband, who was still incoherent, and said, "Oh, Dave, we really have to do something about your breath."

"I laughed," she said. "It was a good release."

Communication skills, empathy, compassion and humor are vital in the ICU, said Heather Vance, BSN, RN, CNML, patient care manager for the Neurosciences ICU.

"We pride ourselves here at UK with not only being professional but looking at it from the patient's and the family's point of view. We try to put ourselves in their shoes and understand where they are coming from. We are sympathetic to their needs and try to listen and respond according to what they need."

As Vance interviews job applicants, she evaluates their interpersonal communication skills. "Do they make eye contact, do they express themselves, do they smile and show emotion? Are they going to interact well with patients and other staff members? Do they talk about being team players and getting along well with others? Those are the things we think about because this is a difficult

environment to work in and you will have to deal with difficult issues."

The staff listened as
Julie Lee told them how
unusual her husband's
post-operative behavior
was. She had been at
his side through other
surgeries. Although
everyone believed his

incoherence was temporary,
Vasquez ordered CT scans to
ensure Lee's brain function was
normal. It was, and Julie was
relieved. A nurse also listened
when Lee insisted that Vasquez
had told him he could get up to go
to the bathroom without putting
on a back brace. Initially the nurse
was skeptical; she called to check
and learned that Lee was correct.
"It made me feel good that she
didn't just take my word for it but
called to confirm it," Lee said.

NURSES FIND WAYS TO CARE FOR FAMILY MEMBERS

With no relatives nearby, Julie Lee was at the hospital by herself most days. The nursing team checked in with her frequently during her husband's week in the ICU. Did she need coffee? Food? A warm blanket?

"I am always cold, so they were always asking if they could bring me warm blankets," she said.

Terra Albertson, a nursing care tech (NCT) and a nursing student who worked closely with the Lees, remembered how hard it was for her grandmother to leave her grandfather's side when he was in the ICU at Chandler Hospital years ago. Because of that experience, she encourages family members like Julie Lee to take breaks from caregiving, reassuring them that she and other nursing staff will be with their loved one.

"I will tell them we are going to give the patient a bath or clean up, and we will be in the room, so why don't they go get some fresh air because we are going to be here a while." She assures

12 | MAKING A DIFFERENCE SUMMER 2017 | 13

family members that she has their cellphone number – always written on the board in the patient's room – and will call when she is finished bathing the patient or if she sees that their doctor is on the floor making rounds.

Although patients are the primary focus, families are also part of care, said Vance. "We try to meet the needs of the patient first, but the family is a natural extension of the patient.

"Sometimes we say, 'Hey, it is ok for you to leave the room. Walk away and make a phone call. Go downstairs and have lunch,'" said Vance. "It is hard when you don't have that family support, and we try to take that into account. We let them know, 'We are here for you as well.'"

Five days into his week in the ICU, Dave Lee came around, and when he did, he immediately noticed how attentive and pleasant the ICU staff was, not only to him but to his wife. "I felt comfortable because they made her comfortable," he said. "That, to me, was huge."

SURGERY RESTORES THE LEES' LIFE

In May 2017, five months after what Vasquez called "the biggest surgery of Dave's life," Lee seems to have his life back. He returned to work three months after his surgery, and is working 40- to 50-hour weeks. "I still have my good days and bad days, and I try not to do too much.

Julie is good at helping remind me of that," he said.

Walking is good for his back, and between his job and walks with Julie and Audi, he's clocking a lot of miles. "I'm probably walking three to four miles a day, around the plant and at home."

As summer approached, the Lees could once again start planning their garden; they were thinking too that it might be time to shop for a new RV.

Best of all, only halfway through the typical yearlong recovery, Lee no longer rates his pain in double digits. "I'm probably a four on my worst day, and a two or three on my best."

Now that Dave Lee can be more active once again, he has joined wife Julie in managing their large garden and in enjoying time spent with their dog Audi (right).



Raul Vasquez, MD (left, shown with chair of neurosurgery Phillip Tibbs), started a spine registry earlier this year.

DID TREATMENT PRODUCE THE HOPED FOR RESULTS? YOU TELL US.

Patient feedback collected in a new registry system is giving the Kentucky Neuroscience Institute a better understanding of how its care and treatment affects patient lives.

Neurosurgeon Raul A. Vasquez, MD, created the spine registry in April 2017. Vasquez had worked with similar registries during his residency at the University of Florida and fellowship at Vanderbilt University. UK's spine registry is the only one in Lexington and one of the few in the state. It's strength, said Vasquez, is its use of patient-reported outcomes that give an unbiased evaluation of the center's treatments and surgeries.

Patients complete a questionnaire before they receive any treatment and at each visit to the center's clinic. Typically, spine surgery patients will complete the assessment at three months, six months, one year and two years after surgery.

In the clinic, Paula Coffman, DNP, APRN, works with patients to collect the information, either online before the appointment or in clinic. Patients are asked to rate their pain level, independence, mobility, ability to work, mental state, expectations and satisfaction with their treatment. Because they are self-reporting, patients are more likely to give honest assessments of their health.





"In an academic medical center, we want to be able to step back and learn from all the experiences, all the outcomes, the pluses and minuses, the successes, the failures, the complications."

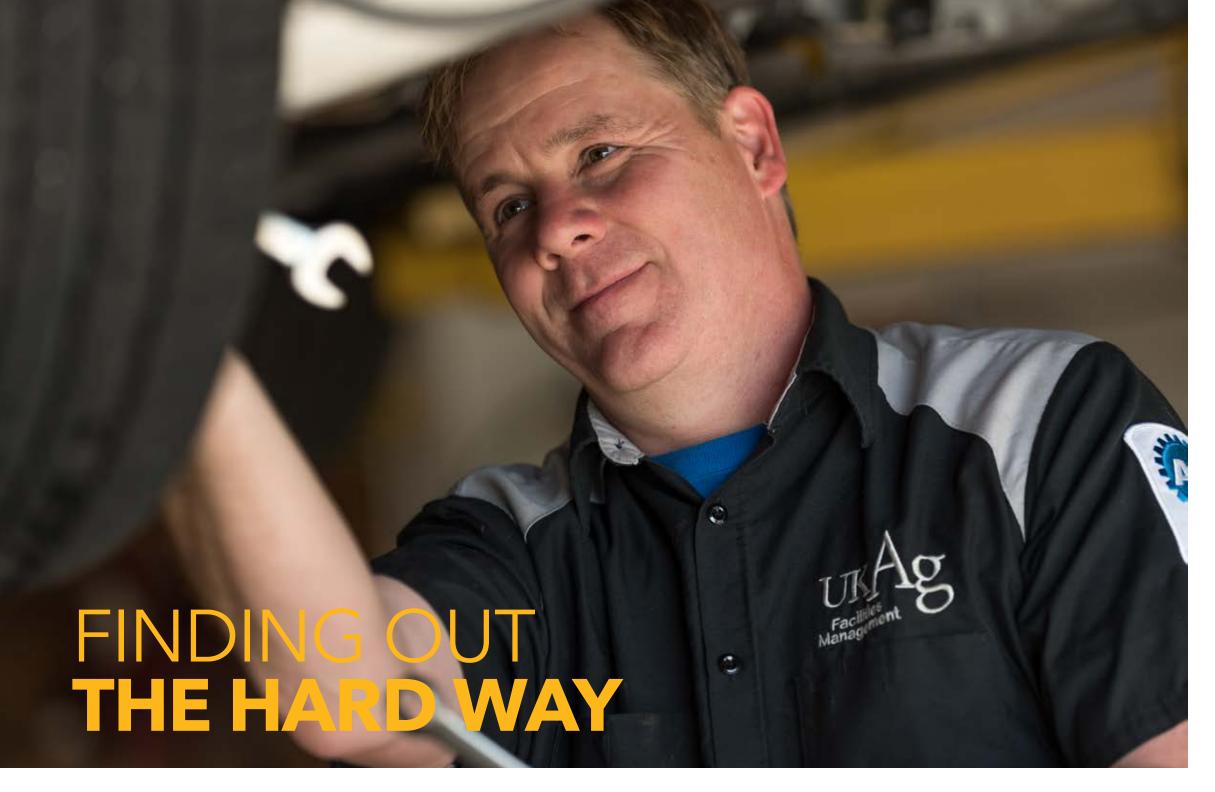
– Phillip Tibbs, MD

In the case of surgical patients, Vasquez and other surgeons realize surgery deemed a success from a technical standpoint might not always be seen as a success by a patient if the results are not as they had hoped. The questionnaire delves into quality of life issues: Did surgery ease their pain as much as they expected? Have they returned to work as they planned? Are they able to enjoy things they did before their back problems? If their back problems had caused them to be anxious and depressed, have those issues ended after surgery?

The registry is a database that can be used in many ways to advance patient care and treatment, said Phillip Tibbs, MD, chair of neurosurgery and director of the UK Spine Center.

"In an academic medical center, we want to be able to step back and learn from all the experiences, all the outcomes, the pluses and minuses, the successes, the failures, the complications," said Tibbs. "We feel it is our duty to society to not only do the care, but to advance medical education. We want to keep analyzing and studying our results so that we can document, write, submit our findings to the medical literature and improve care in the future."

Paula Coffman, DNP, APRN, collects information from patients pre- and post-treatment as part of a new spine registry. Their honest feedback is used to advance the quality of patient care and treatment.



UK employee Jason Conn is one of a growing number of adults who have survived congenital heart disease into adulthood. Although treated in childhood, the disease's effects follow them through life, requiring a strong bond with a specialized care team.

Jason Conn was not about to miss the first meeting of a support group for adult congenital heart (ACH) patients at UK Chandler Hospital's Gill Heart & Vascular Institute in May 2017.

Conn is a mechanic for the University of Kentucky's motor pool and a fan of anything with wheels, so he rode his bike the couple of blocks from home to the meeting.

Meghan Frost, MSW, CSW, a social worker in case management for UK HealthCare Ambulatory Services,

Jason Conn was born with congenital heart disease, which he thought was behind him after three surgeries as a child on a bicuspid aortic valve. He was wrong.

was at the support group meeting, too. She works with congenital heart patients like Conn and had first met him a year earlier when he was so sick he could not stand up. Back then, on top of serious health problems, Conn was worried he might run out of sick leave and lose his job, so Frost had walked the worried patient through paperwork required for the Family and Medical Leave Act.

Now, he was fit and well, looking robust. Frost said, "I got chills, he looked so healthy. I kept saying, 'Gosh Jason, you look so good!'"

CONGENITAL HEART DISEASE REQUIRES LIFELONG SPECIALIZED CARE

Jason Conn is among a growing population of cardiac patients with adult congenital heart disease, many of whom had surgery in childhood. By the time he was 13, Conn had had three surgeries in his home state of Ohio on a bicuspid aortic valve.

Four or five decades ago, children with heart problems were not expected to see adulthood; now because of improved surgical procedures and the care of pediatric cardiologists, these patients are surviving and, in many cases, living normal lifespans. That has resulted in adult congenital heart (ACH) programs, a new specialty area in cardiac care. Cardiologist Andrew Leventhal, MD, PhD, launched an ACH program at the Gill Heart & Vascular Institute when he joined UK HealthCare in early 2016.

"The care of these patients is extremely complex and requires coordination among many cardiac subspecialists," said Leventhal. UK HealthCare, has a multidisciplinary team of health care professionals – sonographers, nurse practitioners, obstetricians and electrophysiologists, to name a few – who specialize in adult congenital heart disease. Such a team is required to care for the complex issues faced by ACH patients.

FIRST, CONVINCE PATIENTS THEY NEED YOU

One of the challenges of treating ACH patients is convincing them that they need specialized medical attention.

"Many of these patients aren't being followed, so a big part of my job is identifying and convincing patients to come to our clinic," said Leventhal. "Some were told as children that they were cured, and they were not.

16 | MAKING A DIFFERENCE SUMMER 2017 | 17



Leesa Schwarz, APRN, NP-C, called to check on Conn when he missed his clinic appointment. By the time he arrived at the clinic a few days later, he was in a wheelchair and could barely stand. Her quick and accurate assessment of his condition is credited with saving Conn's life.

And, when they leave home at 18, the last thing they want to do is go see a doctor."

And that, said Leventhal, is where trouble begins for patients like Conn. Over time, Conn's follow-up appointments with a cardiac specialist in Ohio faded away. As an adult, he steered clear of doctors, seeing one only when he absolutely had to. By the time Conn came to Leventhal's clinic, he was very sick.

"WE NEED TO SEE YOU."

Getting reminders about an upcoming doctor's appointment is not unusual. But few practices track down patients who fail to show up for their appointments as Leventhal's does. "If a patient doesn't show up in the clinic, we are going to find them and get them in," said Leventhal.

Conn, in fact, missed his very first appointment at Leventhal's clinic in spring 2016, prompting inpatient cardiology nurse practitioner Leesa Schwarz, APRN, NP-C, to call him.

She reached Conn at home. He was sick, on antibiotics, unable to work, running a high fever. "I said, 'We need to see you," said Schwarz.

When Conn arrived at the Gill adult congenital heart clinic a few days later, "His friend was pushing him in a wheelchair; he couldn't even walk," said Schwarz. "He was so weak he couldn't stand up."

Conn told Schwarz he had not felt well since late 2015. He had lost weight and was running fevers. Schwarz had worked with ACH patients when she was at Emory University, and she immediately suspected endocarditis, an infection of the heart lining that often affects people who have damaged or artificial heart valves.

A sonographer trained in ACH issues did an echocardiogram that showed Conn indeed had endocarditis. It had caused an abscess to form on his aortic valve. The abscess extended to the tissue separating the heart's bottom chambers and had caused a hole to open between them.

A SERIES OF IMPORTANT CALLS

Schwarz had also called Leventhal about Conn because she realized the magnitude of his illness. "Leesa probably saved his life," said Leventhal. Now, it was Leventhal's job to find the right cardiothoracic surgeon to handle the complex case.

Conn's damaged valve would have to be replaced; infection would have to be cut away and holes in his heart tissue would have to be patched. "It was a massive undertaking," said Leventhal, "and you need not just any adult cardiac surgeon but someone who understands congenital heart disease."

Leventhal called Hassan Reda, MD, whose areas of clinical interest include aortic valve replacement and aortic root surgeries. "Being able to pick up the phone and call a guy like Reda is a huge luxury," he said.

Before Reda could operate, Conn's multiple infections had to be treated. He was admitted to the hospital. The UK Infectious Diseases team recommended the blood cultures needed to identify Conn's infection so that a targeted course of antibiotics could be prescribed to fight it.

Reda first introduced himself from the doorway of Conn's room; the doctor had a cold, and he did not want to further endanger Conn's precarious health. "He told me he'd be back to see me soon," said Conn.

When Reda returned, he spoke honestly about the

surgery he would perform. Opening Conn's sternum the fourth time was extremely dangerous, he said. "When someone reaches their 40s, what worries us most is the need to go into their chest again," said Reda.

"Each time, you are losing material and you are working closer to the heart." Conn remembered he was told.

Calling on his experience despite the lack of symptoms, Reda ordered tests to see if infection had spread to Conn's brain. Infection can cause aneurysms in the brain, which left untreated before surgery, could cause fatal brain bleeds.

Reda also said that there was a good chance that there was infection in the blood vessels around Conn's brain. "It was a silent infection, he didn't exhibit any symptoms but based on previous experience we look for it before we do surgery," said Reda. The infection could cause aneurysms in the brain and if those were not treated before surgery, the blood thinners required for Conn's heart surgery could cause him to have fatal brain bleeds.

REDUCING SURGICAL RISK

Just as Leventhal was able to turn to Reda, Reda turned to another capable colleague, surgical neurointerventionalist Abdulnasser Alhajeri, MD, who specializes in endovascular surgical neuroradiology.

Alhajeri would do a series of increasingly sophisticated tests to check Conn's brain for aneurysms. Unconvinced that an MRA – an MRI with angiogram – was conclusive, Alhajeri performed a conventional cerebral angiogram, a minimally invasive test that accesses arteries from the groin and reaches blood vessels in the neck and brain via catheters. The catheters are then used to inject contrast media into arteries of the brain, guided by an X-ray camera. That test showed multiple infected brain aneurysms.

Using the catheters to access the blood vessels, Alhajeri cut off the blood supply to the aneurysms. The procedure posed a high risk of stroke because an artery that supplied viable areas of the brain was being blocked, but the painstaking procedure was a

Adult congenital heart patients require a care team with specialized knowledge and experience in congenital heart disease. Patient Jason Conn now refers to cardiologist Andrew Leventhal, MD, PhD, director of the Gill's ACHD Program, (right) as "the boss." Conn trusted cardiac surgeon Hassan Reda, MD, (left) to perform the risky surgery that replaced his damaged





Unconvinced by the first test, neurointerventionalist Abdulnasser Alhajeri, MD, performed another to take a better look at blood vessels in Jason's neck and brain. He found multiple infected brain aneurysms. If left untreated, surgery could have caused

success and Conn awoke with no damage. Now, the risky surgery on his heart could go forward.

15-HOUR SURGERY IS A SUCCESS

"I told him his chances were 50-50," said Reda, "and that was being generous."

Although having the surgery scared him, Conn was impressed as Reda explained what could go wrong and how he would deal with it if it did. For example, excessive bleeding was a possibility.

"He said he would make an incision near my collarbone so that he'd be able to get blood into me. "This man was prepared to do everything he had to do to save my life," said Conn. "The choice I was facing was to go home and die or face a very risky surgery with Dr. Reda," Conn said. He put his faith in the surgeon.

The surgery lasted 15 hours as Reda removed infected tissue and replaced Conn's aortic valve with a donor valve. Reda credited Gill's multistep team approach. "This sort of teamwork is a routine occurrence at the Gill."

CONN WORKS TO REGAIN STRENGTH IN CARDIAC REHAB

After surgery and time in the Cardiovascular Intensive Care Unit (ICU), Conn immediately began his physical rehabilitation three days a week at the Gill's Cardiopulmonary Rehabilitation and Wellness Center at UK Good Samaritan Hospital. According to program supervisor Jacob Stone, MSEP, CSCS, the center designs a specialized exercise regimen for

In Conn's case, because his job requires lifting tires and other heavy objects, rebuilding upper body strength was crucial. A team that included exercise physiologists and a nurse first did tests to see how

well Conn was doing physically – for example, how far and fast he could walk. They also evaluated the effects his medications would have on his heart rate and blood pressure.

"He did everything we asked of him and sometimes he wanted to do more," said Stone. "We were always trying to progress him safely."

Conn was surprised by the social aspect of rehab.

Like a lot of the center's patients, Conn was surprised by the social aspect of rehab. "I really enjoyed talking to the older gentlemen," he said. Many are regulars at the center – after their rehab ends, they join the center's wellness program so they can exercise in a safe place with medical professionals and a crash cart nearby and enjoy the company of other patients with whom they have become connected.

"Many of these people have made friends," said Stone. "They go out to lunch after rehab or have other group activities. It is kind of a big support group really."

COUNSELED TO TAKE BETTER CARE OF HIMSELF

A "champion" at cardiac rehabilitation, as Leventhal called him. Conn has also been attentive to Leventhal's instructions on ways to live a healthier life as an ACH patient. "He is now my boss," Conn said.

Leventhal has counseled Conn on everything from avoiding tattoos to the importance of regular dental cleanings and check ups. Most infections begin in the mouth.

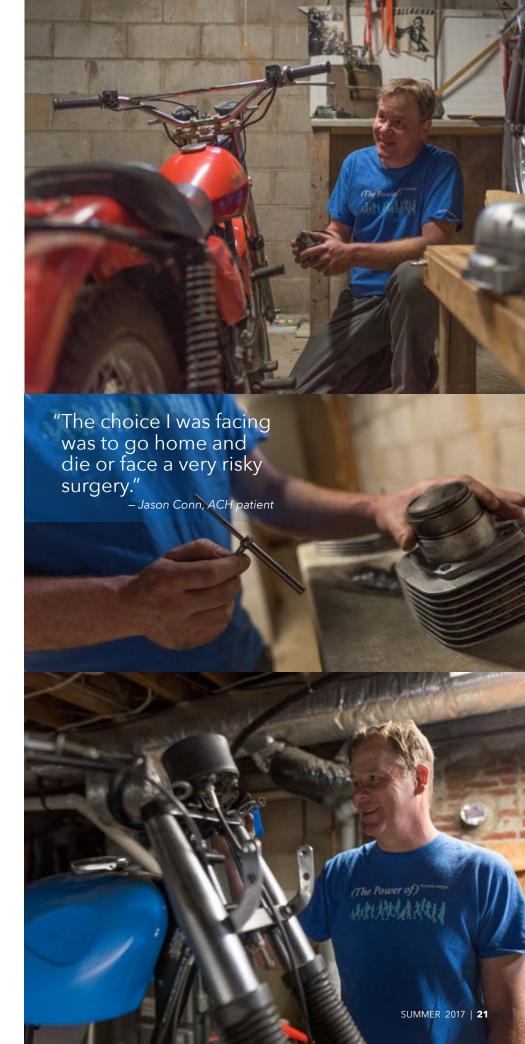
Among Leventhal's goals is to help his patients avoid acquired heart diseases, which would further compromise their health. He talks about proper

diet and exercise and advises giving up harmful habits such as smoking. He helps them understand that little things like slight fevers are big deals for them. "These patients have to treat a fever seriously and always get a blood culture." said Leventhal.

Conn knows he is never to take an antibiotic prescribed by another doctor without checking first with Leventhal. He has regular dental checkups and cleanings at the UK Dental Clinic. He has given up what he calls "gas station food," and is eating healthier and drinking less alcohol. He tries to avoid cuts and scrapes that are common in his work and keeps his hands and feet "immaculate."

After 20 years in auto repair, Conn knows well the benefits of preventive maintenance. Now, he realizes preventive maintenance is also critical to his health.

After 20 years in auto repair, Conn knows well the benefits of oil and filter changes, tire rotation and other preventive maintenance. Now, he realizes preventive maintenance is also critical to his health. "I've taken care of cars more than of myself. Before, I went to the doctor when something was wrong," he said. Now, he says, "I'll be doing preventive maintenance and taking better care of myself."



A RETURN TO WORK AND A NEW SUPPORT

Conn has been back at work since early July 2016, less than three months after his April 20 surgery. When he is not repairing cars in the UK motor pool, he might be working on a two vintage cars – a Fiat and a Thunderbird – that he owns. He also works on cars for friends, and as the summer of 2017 arrived, a VW Beetle that had not run in about 15 years awaited.

He also plans to attend future meetings of the adult congenital heart disease support group. Conn's not a big talker, yet he connected with several other patients at the first meeting.

He thinks of the young woman who four months earlier had had a successful heart transplant. "That was not too long ago and she looks great," he said. "It reinforces confidence in the clinic and what they do."

Being at those meetings shows his support for patients who have driven hours to talk to others who share similar experiences, Conn said. "A lot of them have to drive from out of town, and I'm only four blocks away." His presence also is a way to say thank you. "It is," he said, "a way to support the clinic" that saved his life.



A 9 a.m. Saturday message from a patient, "Is there a pill for chest pain?" is an example of how ACH patients are encouraged to reach out to nurse coordinator Jessica Turner, RN, with questions and concerns. "We are like a mother hen," she said.

UK HEALTHCARE'S ADULT CONGENITAL HEART PROGRAM

People who had heart issues as children now have a program dedicated to their care at UK's Gill Heart & Vascular Institute.

Andrew Leventhal, MD, PhD, started the Kentucky Adult Congenital Heart (ACH) Program in early 2016. It currently follows some 250 patients, a number that is growing through physician referrals.

The program is listed online as an official adult congenital heart site, which helps patients and doctors find it.

Spreading the word

Leventhal travels throughout Central and Eastern Kentucky to tell physicians about the program, and he hopes to establish a satellite clinic in West Virginia. UK HealthCare's ACH program is the only one in Central and Eastern Kentucky and West Virginia.

Adult congenital heart programs are relatively new because for many years, children with congenital heart problems did not live long. "If you were a congenital adult specialist 50 years ago, you wouldn't have many patients because kids didn't make it to adulthood," said Leventhal. Now because of improvements in surgical procedures and care by pediatric cardiologists, "95 percent make it to 18 years old," said Leventhal. Many live decades beyond.

Leventhal's message to other physicians is that these patients must be monitored closely and followed by specialists who understand their physiology is not the same as that of a person who develops heart problems as an adult.

Adult congenital heart patients have other challenges. As youth many were told, incorrectly, that they were cured.

"A lot of these patients will tell you that just going to the doctor as an adult gives them severe anxiety," said social worker Meghan Frost, MSW, CSW, who works with patients in the program. She teaches these patients techniques to relieve anxiety and sometimes

recommends therapy. Frost can also supply gas and food vouchers to those on limited budgets who qualify for assistance.

Keeping close tabs

To ensure they receive proper care, all adult congenital heart patients in UK's program are asked to carry Leventhal's card and instruct any doctor who treats them – especially in emergency departments – to call him to discuss their case.

Patients are also instructed to call or text nurse coordinator Jessica Turner, RN, with any questions or concerns.

"At 9 on a Saturday morning I got a message from a patient who asked, 'Is there a pill for chest pain?'" said Turner. "I got her into the emergency department and Dr. Leventhal saw her. We are like a mother hen."

Support group launched in May

When these adults were sick as children, "we didn't have the big shiny children's hospitals that we have now; it was a traumatic experience," said Frost. "That trauma causes anxiety as they get older. They also no longer have their parents taking care of them, making sure they are getting the follow-up care they should."

After calling more than 250 patients, Turner had about 25 people attend the first meeting of a new ACH support group in May 2017. Some patients traveled several hours to attend; several shared phone numbers so they can text and call one another.

Being able to talk to others who have shared a similar experience is important to this patient population. The group intends to meet on the first Monday of each month unless it is a holiday.

Meghan Frost, MSW, CSW, a social worker in case management, works with congenital heart patients and notes that many found their earlier experience as children with heart disease to be traumatic – an experience that still causes them anxiety.





PACEMAKER FOR THE BRAIN

In 2015, UK HealthCare became the first in Kentucky to implant Neuropace, a novel device that helps lessen the frequency and severity of crippling epileptic seizures caused by disturbances in the brain's electrical activity. In 30-40 percent of people diagnosed with epilepsy, seizures are uncontrolled and prevent one from driving or holding a job.

Since research has shown that electrical stimulation of the brain can stop seizure activity, Neuropace was developed to continuously monitor electrical activity in the brain, detect abnormal activity, and deliver faint levels of electrical stimulation to normalize the activity before the patient can even sense an oncoming seizure.

Sometimes called a defibrillator for the brain, Neuropace works much like a pacemaker for the heart in restoring normal rhythm or activity. While it is not a cure for epilepsy, the device can reduce the number and severity of seizures a person experiences.



ADVANCED EYE CARE CLINIC

The UK HealthCare Advanced Eye Care Clinic, formerly located at the Kentucky Clinic, now occupies the entire fourth and fifth floors of the new Shriners building. UK general ophthalmologists, ocular specialists and optometrists expect to see about 60,000 patients per year in the new state-of-the-art clinic.

Eye patients park in the UK HealthCare parking garage on Transcript Avenue and use a pedway located at level C of the garage to access the Shriners building. Once there, simply take the elevator to the fourth floor. The clinic's new location has nearly double the number of exams rooms compared to its previous location.

UK has the largest multispecialty eye care group based solely in Kentucky. In addition to this clinic, there are multiple outreach clinics throughout the state and UK works with community providers to offer comprehensive eye care. Outreach clinic locations include Campbellsville, Corbin, Harlan, Lexington, London, Maysville, Nicholasville, Morehead, Paris, Richmond and Somerset. To make

an appointment, call 859-323-5867.

Optical Shop

UK HealthCare Optical is located on the Shriners building fifth floor and offers a wide selection of eyewear and accessories. Designer frames, quality lenses, fashion sun wear, and eyeglass repairs and adjustments are all available through this full-service optical shop.

Also available:

- Nonprescription reading glasses
- Nonprescription sunglasses
- Sport/recreation goggles
- Custom fit prescription lenses
- Evewear for children/infants
- computer use Contact lenses with a valid

• Frames/lens options for

- prescription
- Pricing specials for multiple lens purchases

For more information, call 859-323-3045 or 800-333-8874. UK HealthCare Optical is open M-F, 8 a.m. - 5 p.m. Discounts available for UK employees.

UK HealthCare earns GoldPlus Elite status for stroke care

UK HealthCare has again earned the Get With The Guidelines® – Stroke Gold Plus award and this year the higher Target: Stroke Elite Plus recognition. Only an elite group of hospitals is recognized at this level by the American Heart Association/American Stroke Association. The award recognizes UK HealthCare's commitment and success in implementing a higher standard of stroke care by ensuring that stroke patients receive treatment according to nationally accepted standards and recommendations.



UK CHANDLER HOSPITAL NAMED AMONG **100 GREAT HOSPITALS**

UK HealthCare's Albert B. Chandler Hospital has been named among the 100 Great Hospitals in America by Becker's Hospital Review, a monthly publication offering business and legal news and analysis relating to



hospitals and health systems. The hospitals included on this list are known for excellence and are industry

leaders in innovation, quality and clinical research. Those considered for the Becker's recognition have previously received recognition across various publications and accrediting organizations.



UK WELCOMES THE SHRINERS HOSPITALS FOR **CHILDREN MEDICAL CENTER**

While health care providers at the Shriners Hospitals for Children Medical Center and Kentucky Children's Hospital have collaborated for decades to provide pediatric orthopaedic specialty care, the opening of the new Shriners facility at 110 Conn Terrace is good news for patients who need to see multiple doctors for complex medical conditions.

- Conveniently located across S. Limestone from Kentucky Children's Hospital
- UK pediatric orthopaedists are the specialists providing care at Shriners
- UK-HMO pediatric orthopaedic patients will be seen at Shriners

For more information, call 859-266-2101.



DanceBlue Kentucky Children's Hospital ^{*} Hematology/Oncology Clinic has a new home

UK HealthCare's new \$1.6 million DanceBlue Kentucky Children's Hospital (KCH) Pediatric Hematology/Oncology Clinic opened earlier this year at Kentucky Children's Hospital. The new, expanded clinic for pediatric patients and families battling cancer covers more than 6,000 square feet, doubling the space of the former location in Kentucky Clinic.

The UK DanceBlue organization and dance marathon raised more than \$1.3 million to upgrade the clinic, with additional support from donors inspired by the DanceBlue movement.

The clinic's waiting room features an interactive lighthouse, with a touchpad that allows children to choose the color of the light, as well as 300-gallon fish aquarium. The clinic is furnished with spacious exam rooms, four private infusion rooms for chemotherapy, and three semiprivate infusion rooms designated for specific age groups. The new clinic also houses a separate phlebotomy and port access station, as well as a dedicated child life coordinator. For information, call 859-257-4554.





University of Kentucky 2333 Alumni Park Plaza, Suite 330 Lexington, KY 40517 Non-Profit Org. US Postage PAID Lexington KY Permit #51





CONNECT WITH US!

GET MORE GREAT NEWS AND INSPIRING STORIES, PLUS TIPS FOR LIVING A LONGER, HEALTHIER LIFE.



@UKHealthCare



@UK_HealthCare



Sign up at **ukhealthcare.uky.edu/email-alerts**



Subscribe to our blog: ukhealthcare.net

VISIT US ONLINE AT UKHEALTHCARE.UKY.EDU

