

# TMC | PULSE

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NEWS OF THE TEXAS MEDICAL CENTER — VOL. 5 / NO. 3 — APRIL 2018

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The background of the entire page is a white surface covered with colorful streamers (red, orange, and white) and small, multi-colored confetti pieces, creating a festive and celebratory atmosphere.

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**WILLIAM F. McKEON**

*President and Chief Executive Officer,  
Texas Medical Center*

Five years ago, the leadership of the Texas Medical Center (TMC) and our major institutions set forth to pursue a bold vision: the creation of an innovation institute unlike any other in the world.

Our goal was to develop an environment that would serve as the nerve center for the next generation of therapies, medical devices and digital health applications. Since that, we've come a long way: more than 175 companies have called the TMC Innovation Institute home, including 46 pharmaceutical firms, 42 medical device companies and 82 health technology businesses. We're proud that today, the TMC Innovation Institute is the largest business accelerator of its type in the U.S.

Getting to this point required the leadership of the TMC and its members, who came together for the first time in our more than 70-year history to share perspectives and define a strategic plan that would set our course for decades to come.

We looked at "innovation clusters" in the leading cities across the nation and world. In doing so, we recognized that while we had many of the attributes of these places, some of our own innovation efforts were fragmented, isolated and lacking the resources required to turn brilliant ideas into viable solutions.

We knew that by aligning our efforts and resources centrally, we would have the most prolific life sciences ecosystem in the world.

So what have we done to get there?

First, we needed a site to house such an undertaking that had the size to scale for future growth and the aesthetics to support an innovation community. We selected the iconic former Nabisco cookie factory, which fit both those criteria.

Second, we built the TMCx accelerator and recruited a talented team of individuals dedicated to providing the support our start-up companies need, including business plan refinement; free legal advice to establish or protect intellectual property; prototype design and development; regulatory guidance; and introductions to both medical center partnerships and venture capital.

Third, we set out to attract industry to Houston. We convinced Johnson & Johnson to establish its JLABS @ TMC incubator for life sciences at the Texas Medical Center. When J&J leadership started visiting the TMC, they were so intrigued with the opportunity that they decided to build the J&J Center for Device Innovation at the TMC (CDI @ TMC), the company's only facility of this type in the world. This center is headed by renowned cardiac surgeon and entrepreneur Billy Cohn, M.D.

Finally, we launched the \$25 million TMC Venture Fund, dedicated to investing in early stage technologies that can advance human health.

These are big wins, no doubt, but this work is just the beginning. We are only now starting to hit our stride, and we plan to expand further to support the growth of the TMC Innovation Institute. We have so many more opportunities to leverage the synergies across the Texas Medical Center to further establish Texas as the "third coast" of life sciences.

What's next for innovation at the TMC? Stay tuned for important announcements in the coming months.

## TMC | PULSE

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## Congrats, TMC Pulse

The Texas Medical Center congratulates *TMC Pulse* on being named a finalist for a **2018 Ellie Award**. Given by the American Society of Magazine Editors, the Ellie Awards honor the best work of magazines across the nation.

"Alan Dickson's Final Days," written by Alexandra Becker, was nominated in the Feature Writing category, alongside stories that appeared in *The Atlantic*, *GQ*, *The New York Times Magazine*, *Virginia Quarterly Review* and *Wired*. At a ceremony in New York this spring, *GQ* won the award.





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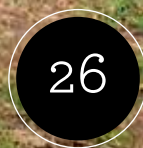
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How Our Astronauts  
Make Us Healthy



De-Stressing  
in School



A Post-Cancer  
Push



One Last  
Thing

ON THIS PAGE: Members of Christi Fisher's family  
play in their back yard. (Page 20)



# How Our Astronauts Make Us Healthy

## *A SXSW panel examines how health in space can impact health on Earth*

BY CHRISTINE HALL

Astronauts are among the healthiest people on Earth, but when they blast into space, medical issues often arise. Zero gravity can contribute to muscle atrophy and fluid redistribution.

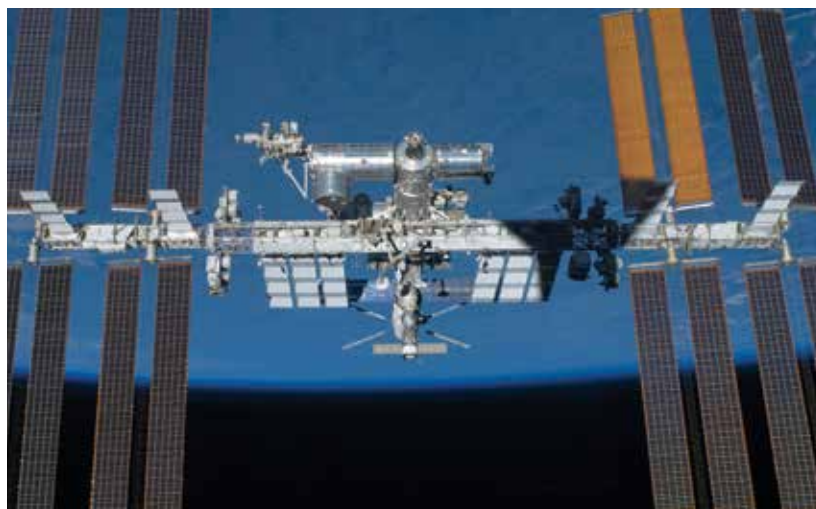
With humans projected to travel into deep space for longer periods of time, NASA is hunting for solutions to a broad range of space health problems that could also help people on Earth. Not only do these solutions need to be stable and safe over the long term, they must be adaptable to remote areas with limited resources, portable, minimally invasive, accessible with low power, and easy to use by individuals with little medical training.

At South by Southwest (SXSW), Austin's annual film and music festival that has also become a place to debut and discuss health care innovation, experts came together in a panel titled, "How Our Astronauts Make Us Healthy," to discuss how health in space impacts health on Earth.

"We have to design a way to keep folks healthy for two to three years with limited resources," said Dorit Donoviel, Ph.D., director of the Translational Research Institute for Space Health, a NASA-funded, Baylor College of Medicine-led consortium with the California Institute of Technology and the Massachusetts Institute of Technology, based in the Texas Medical Center (TMC) Innovation Institute.

"If you can do that in space, away from a hospital, you can do it in the home, making health monitoring more accessible to people who have to keep healthy in other ways because they don't have a fancy medical center nearby or access to experts," she added.

Kidney stones, for example, are common in space. Bone loss that is known to occur in zero gravity



*The International Space Station appears against the Earth's horizon.*

significantly increases the amount of calcium in the urine, which can lead to the formation of kidney stones. But NASA researchers found that the stones can be broken up with ultrasound waves, allowing them to move through the kidney and out of the body.

The same treatment would be effective on Earth. Instead of going to the emergency room with kidney stone pain and being told to go home and wait for the stone to clear, an ultrasound could break up the stone, Donoviel said. In addition, a non-invasive kidney surgery created for space is now being tested on Earth, she said.

At SXSW, Donoviel moderated a panel that included William Cohn, M.D., vice president of Johnson & Johnson Medical Device Co. and director for the Johnson & Johnson Center for Device Innovation at the TMC; Esther Dyson, founder of the Way to Wellville project;

Lee Shapiro, managing partner at 7wire Ventures, a health care venture fund; and Michael McConnell, M.D., clinical professor of cardiovascular medicine at Stanford University School of Medicine and head of cardiovascular health innovations at Verily Life Sciences.

Verily has developed a wearable system, called the Study Watch, that captures and analyzes physiological and environmental data through sensors in order to track the transition from health to disease. McConnell said the Study Watch could provide data that is useful to space health and could also help extend health care into remote areas and underdeveloped countries. The company aims to recruit 10,000 people to wear the device.

Dyson's nonprofit, Way to Wellville, is a 10-year project to invest in health and eliminate the factors that send so many of us to hospitals, clinics and pharmacies

in the first place. The end goal is to create a healthier society from the get-go that doesn't need so much medical care. Way to Wellville hopes to improve the quality of food that people eat on Earth and, perhaps, in space.

"Astronauts can't have fresh pasta with fresh salad and salmon, but it doesn't have to be so processed or sugar-heavy," Dyson said. "We could do a lot to the inflight diet that could be better."

Meanwhile, Cohn spoke passionately about replacing technique with technology, explaining that he often "practices sick care, not health care." While there is skill and a certain knack involved in medicine, Cohn said, he believes simple devices that leverage the most recent technology can empower everyone to treat disease.

He spoke about Butterfly Network, a company he is involved with that has transferred ultrasound technology onto a semiconductor wafer. The Butterfly iQ is a small, handheld device that plugs into an iPhone and offers users a portable medical imaging system that costs less than \$2,000.

"It's been great watching that technology unfold," Cohn said.

A recurring theme in many of the health care panels at SXSW was the need for technology that could function like a check-engine light in a car, letting individuals know when they need to see a doctor. This sort of wearable could work for both astronauts and Earthlings.

Shapiro said people look to companies to provide technology and tech-enabled services that help them understand how a healthy body should function.

"We want to watch for and to prevent bad things from happening and be more in control of our health," Shapiro said. ■

**“We have to design a way to keep folks healthy for two to three years with limited resources. If you can do that in space, away from a hospital, you can do it in the home ...”**

— DORIT DONOVIEL, PH.D.

*Director of the Translational Research Institute for Space Health  
at Baylor College of Medicine*

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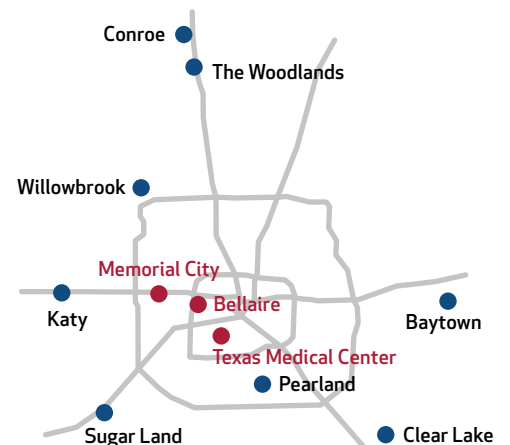
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# De-Stressing in School

*A collaboration between Texas Children's Hospital, Baylor College of Medicine and the Institute for Spirituality and Health brings yoga to DeBakey High School*

BY ALEXANDRA BECKER

*Just breathe. In and out of your belly. When you inhale, feel your belly inflate. Then exhale. Draw the breath toward your spine. Sense your belly inflating, then deflating. Just like a balloon. This is where the breath starts.*

• • • • •

Korin Brody spoke from memory, her voice steady and composed. The room was filled with ninth graders on yoga mats lined neatly in rows on the cafeteria floor at the Michael E. DeBakey High School for Health Professions. This was the first session of a new semester-long program designed to measure the impact yoga could have on the stress levels of students.

"Kids these days are under a lot of stress, and this may impact their mental health," said Kirti Saxena, M.D., director of the Pediatric Bipolar Disorders Program at Texas Children's Hospital and associate professor in the department of psychiatry and behavioral sciences at Baylor College of Medicine. "If you look at mental health disorders—anxiety, depression—many can stem from stress, and we're hoping to intervene early enough so that we can perhaps offset some of these issues."

The program aims to identify the early onset of mental health issues and provide psychiatric interventions, if appropriate.

A collaboration between the Institute for Spirituality and Health, Baylor College of Medicine, Texas Children's Hospital and DeBakey High School, the program includes two yoga classes a week for 12 weeks. Approximately 40 students participate in the yoga class in addition to the physical education already included in the school curriculum; another 30 to 40 students sit out as controls, completing their physical education only. All students anonymously complete rating scale assessments at the beginning and end of the semester to measure stress, attention and sleep. Participation is voluntary and classes take place within school hours during freshmen health science classes, so it is not an additional activity for these busy and ambitious students.



*Freshman Sunaina Ayyagari holds a yoga pose during health science class at DeBakey High School.*

The program has been approved by the Baylor College of Medicine Institutional Review Board for research.

"The idea is to imbed the practice of yoga into the school's curriculum each semester and assess how it will reduce students' stress and improve attention or concentration, sleep and just overall wellbeing," Saxena explained.

Recent research suggests that mindfulness practices such as yoga are especially beneficial in school settings, as they help students manage stress and anxiety and boost their potential to focus and perform. In 2016, the *Annals of the New York Academy of Sciences* published a collective review of research specifically focused on yoga in schools and found that yoga "is a viable and potentially efficacious strategy for improving child and adolescent health and therefore worthy of continued research," with students reporting less stress as well as improvements in mood and emotion-regulation.

"Learning a practice and a skill like yoga will stay with you wherever you go, throughout high school and college and the rest of your career and life," Saxena said. "That's going to help you with everything you're doing—academics, relationships, sports. Even more, you're teaching them this skill at an important time in their development; they're still under that protective umbrella of school and faculty."

Students are encouraged to practice what they've learned at home and to reflect on how the poses, breathing and meditation techniques make them feel.

*(continued)*



*Ninth-graders at DeBakey High School practice yoga with instructor Amber Foster.*





Ninth-graders at DeBakey High School practice yoga in the cafeteria.

“There’s a lot of emphasis put on the breathing, because the fastest way to calm the mind is through the breath. If you have an even breath, you can have an even mind,” said Lex Gillan, who certifies yoga teachers and is part of the faculty at the Institute for Spirituality and Health. Gillan tailored the syllabus for the course specifically for DeBakey. “The real emphasis is to quiet these kids down and let them focus.”

Despite some initial skepticism, students participating in the program have embraced the opportunity to be quiet and still, and they’ve already noticed a change in how they react to their demanding academic curriculum.

“Right after yoga, I go to homeroom, but then I go to biology class. And for me, biology is a little bit hard to manage, so I’m always stressed about that,” said Karishma Varghese, one of the students enrolled in the program. “When I come to yoga, the instructors create this very relaxed, soft atmosphere. I’m always around my peers, so I

also get that relaxed sense. And then while you’re doing the yoga, you’re focused on stretching out the muscles, really feeling your strength, and you’re not so focused on what’s going on in the mind, like, ‘Oh, what do I have next? What’s the next assignment?’”

The classes are taught by six different yoga teachers. Everyone involved in the program volunteers their time, including both Gillan and Saxena.

“We really believe this is going to be helpful,” Saxena said. “It’s a way of creating awareness about what tools and skills are out there to help with stress. The hope is, if students continue to practice yoga, they’re going to feel a difference—they’re going to begin to see that their very busy day goes very smoothly. The stress will still be there, the tests and the projects will still be there, but the energy behind all of it will be a calming energy. We hope they get to experience that.”

Saxena and Gillan hope to collect the data

from the student rating scales and present their findings to educators and the medical community to help contribute to the growing field of research focused on yoga in schools. Because one of their primary aims is to identify how the assessments and yoga intervention impact early recognition of mental health problems in students, Saxena plans to provide psychiatric consultations at her mood disorders clinic at Texas Children’s Hospital to students in need.

“Practice helps demonstrate how scattered our minds are,” Brody said evenly, as she wrapped up the students’ very first session.

• • • • •

*Sit nice and tall while you’re lifting the waist and the hips and the ribcage. Your head is nice and straight and relaxed. Your eyes are soft, the shoulders are loose, your belly is full. Complete the breath. ■*



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# Could a Handheld Ultrasound Replace the Stethoscope?

*A UTMB course teaches students how to use the device*

BY CHRISTINE HALL

As medicine evolves, so do the tools used by health care professionals.

Masood Ahmad, M.D., professor of internal medicine and director of the Cardiac Echocardiography Laboratory at The University of Texas Medical Branch at Galveston (UTMB), has all but traded his stethoscope for a newer device to gather information about the heart more quickly and efficiently.

Instead of using a stethoscope to “auscultate,” or listen for heart sounds, Ahmad uses a handheld ultrasound. He prefers the GE Healthcare Vscan Pocket Ultrasound Dual Probe, but Phillips makes a similar device called Lumify, he said.

The device, which looks like an old flip phone, is easy and convenient to carry. A small screen on the device shows images of the heart that can be recorded and transferred to an archiving system or shared with a colleague. When Ahmad is on call, he can even communicate with his colleagues by video and share the ultrasound.

“It’s very helpful in emergency situations in deciding what to do with a patient,” Ahmad said.

While a stethoscope allows the user to hear the heart, the handheld ultrasound probe allows a clinician to “see the sound,” which is helpful to that segment of the population with hearing deficiencies.

When Ahmad’s students saw him using the device, which has

been gaining in popularity in recent years, they wanted to try it out. That prompted him to create a two-week course to teach point-of-care echocardiography at the bedside.

A number of other medical schools across the country are offering similar courses, Ahmad said, because cardiologists, intensive care physicians, ER doctors and critical care units are finding that ultrasounds are indispensable for interventions and quick bedside evaluations.

“Medical schools are adapting and locating this technology early on in medical education, and I think it is a trend that will continue,” Ahmad said.

In a 2014 commentary published by the *New England Journal of Medicine*, Scott D. Solomon, M.D.,

and Fidencio Saldana, M.D., from the cardiovascular division of Brigham and Women’s Hospital and Harvard Medical School in Boston, Massachusetts, stated that diagnostic ultrasound has all but replaced auscultation in obstetrics, cardiology and gastroenterology. But they also noted that a “generation of physicians will need to be trained to view this technology as an extension of their senses, just as many generations have viewed the stethoscope.”

Ahmad’s UTMB course includes lectures on the device and its cardiac applications. Students practice with volunteers and learn to read a normal ultrasound. Then they learn to use the device and to detect



*The Vscan is used for point-of-care imaging. Credit: Courtesy of GE Healthcare*

conditions that range from pericardial effusion (fluid around the heart) to heart failure. At the end of the course, students are tested on basic techniques and their knowledge of common diseases.

The only factor that would prohibit the mass use of handheld ultrasounds is cost, Ahmad said. Portable ultrasounds are expensive—between \$10,000 and \$12,000—but he expects that will change as the use of the device becomes more widespread.

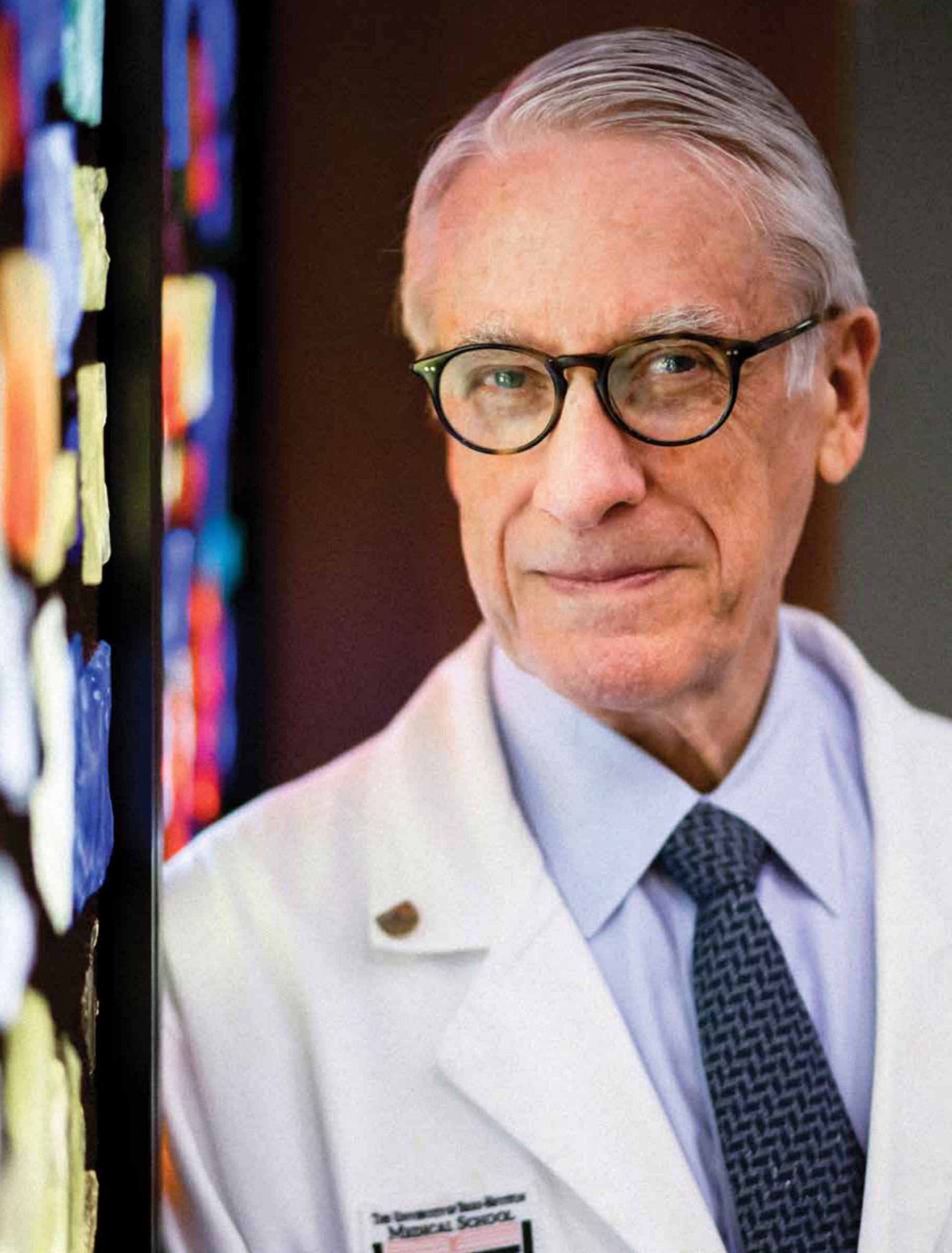
“It won’t ever be as cheap as a stethoscope,” he admitted.

And to be fair, Ahmad still uses a stethoscope when he wants to listen to breath sounds that may help diagnose conditions that range from bronchitis to heart failure.

But in addition to carrying a stethoscope, Ahmad believes clinicians will someday carry portable ultrasounds in the pockets of their white coats. ■



*Masood Ahmad, M.D., far right, professor of internal medicine and director of UTMB’s Cardiac Echocardiography Lab, supervises students as they practice using a handheld ultrasound on a patient.*





For decades, **K. LANCE GOULD, M.D.**, a cardiology physician-researcher at Memorial Hermann, has been studying PET imaging technology to determine how blood travels through the heart. Gould developed a way to pinpoint abnormal blood flow that works much like the Google Maps feature that shows traffic in real time, allowing cardiologists to predict a patient's risk of heart attack five years into the future. He spoke with *Pulse* about creating PET scan software, growing up in rural Alabama and taking cardiology cues from nature.

**Q | How did you come up with the idea to use PET [positron emission tomography] scans to map coronary blood flow?**

**A |** I've always been interested in coronary blood flow and did some experimental studies. The way we used to deal with coronary disease was to take an angiogram and do bypass surgery. There was no measurement of the pressure flow characteristics, so I did a number of experiments and discovered what's called coronary flow reserve: the capacity in the coronary arteries to increase their flow and to meet tremendous physical demands.

You could normally increase your blood flow four times, so you could run a marathon. In between, you don't need that much blood flow. This flow capacity was limited by a narrowing of the artery—it didn't affect resting flow, but it would impair the increase in flow.

Then, I developed the idea that physiologic imaging of the flow capacity was a measure of the effects of stenosis. It's the idea that the angiogram [an X-ray test that helps doctors evaluate blockages in the arterial system] is the anatomic severity, but the blood flow is the physiologic or functional severity. It was the first time that anybody ever put that down.

**Q | You developed this idea while you were completing your cardiology residency and fellowship at the University of Washington School of Medicine in Seattle. How did you end up in Houston?**

**A |** I realized that to make this work, I'd have to go somewhere other than Seattle. At the time, I got an offer to be chief of cardiology here [at UTHHealth]. That was in '78, and I said, 'Okay, on condition that you'll find the support to set up the whole PET system.'

The first really whole heart PET scan was a brain scanner that was quite small. We built the first system and proved that you can find early heart disease. Since then, research has been driven toward better scanners and better protocols.

What it boils down to is that if the condition

is severe, you need the procedures, but then it rules out a lot of unnecessary procedures. A fair amount of angiograms and procedures don't do much good because they don't have the measurements to treat the patients right.

**Q | You currently have an agreement with GE Healthcare System for PET scan software that you and your team developed, but you are working with GE as an unpaid consultant. Why?**

**A |** Texas law says that intellectual property can't be given away to a commercial operation. But my team and I were strongly opposed to the conflict of interest that we see in so much of medicine where docs patent stuff, hawk it out and sell it. Half the time it's garbage. And there's a lot of patented garbage that docs do. We didn't want to get into that.

We talked to the university to have them agree that whatever property they gave GE, they would have a minimum charge that met state law requirements, and that any royalty that came in would not go to us but it would go to research or to medical scholarships, because we didn't want a dime of that. From my point of view, that's dirty money. Now, a lot of people do it, they think it's okay, it's a way of stimulating development. But not for me, and not for my team.

**Q | You grew up in a small, rural town in South Alabama and spent much of your childhood tagging along with your father, who was a family doctor, during patient visits. Did that exposure to medicine steer you towards a career in medicine?**

**A |** I used to go on house calls with him in his old Jeep. He would talk to me and take care of the people, and I'd help boil the instruments for delivering a baby. But it was overwhelming—all that stuff you had to know.

I decided on physics in college, not medicine. Physics was fun, but I realized I wasn't gifted in that position, which you have to be to be a physicist. My senior year, I took my first biology

course and fell in love with it. Plus, my lab mate was a very beautiful girl. I loved it so much that I switched over to medicine, and physics was a wonderful background for medicine. Right away, because of physics, the fluid dynamics and the pressure fluid equations, it just kind of fell into place.

**Q | In your book, *Heal Your Heart: How You Can Prevent or Reverse Heart Disease*, you write about early childhood experiences with your father that were the source of your interest in cardiology. What were your father's early years like?**

**A |** He was born in Ludhiana, India. His mother was a missionary doctor and his daddy was a missionary preacher. He grew up in the British school system, very strict, but ran around the jungles with his two brothers and spoke Urdu as well as English for a long time. He has this kind of foreignness about him. He left home very early and then bummed around the world. He was a boxer for a while, cleaned windows in Chicago, was a taxicab driver and so on.

But he was smart. His uncle put him up to medical school. He settled down, went to medical school in Louisville and went into practice—as all doctors did then—in general practice in the Kentucky mountains. He had some odd quirks about him.

**Q | What kinds of quirks?**

**A |** He grew up in India, so he was used to snakes. He made house calls on horseback. He had a couple of rattlesnakes in a big cage by the window in his cabin. One day, he got this call and takes off on his horse for a six-hour house call. He comes back home and the window's been jimmied open and all the jimmy tools were left on the ground. Somebody ran. What happened was that this burglar jimmied open the window, put his foot in, stepped on top of the rattlesnake cage and set them off. The guy said, 'I've gotta get out of here!'

(continued)

**Q | How did your parents end up in a small town in Alabama?**

**A |** My father met my mother and they were traveling around to find out where to live. They stopped in a little town in Alabama called Wilsonville. It had no traffic lights, no painted houses, no cars. The mayor knocked on the door and said, 'Well, if you stay, we'll help you build a clinic and give you the land.' He said, 'Okay.'

My mother has a Ph.D. in European architectural history. She found herself in southern Alabama, cooking greens for the hospital, with barefoot boys, teaching them a little bit about the civilized world. She was really smart. We had a museum. We collected rocks. We collected animals and had a big zoo of odd creatures running around the porch all the time. She collected shells. She taught us music. She was our professor for the first four years.

Before they got the house built, we lived in an old abandoned bank building. My father delivered all three kids himself, and I was born in the bank vault. Then he turned the vault into a little clinic.

**Q | It sounds like your parents were the perfect combination of adventure and academia. How did those traits shape your career?**

**A |** Daddy was the adventurer. Mother was the real academic. From my daddy, I learned not to be afraid of anything.

A lot of research is a gamble. You don't know where it's going; you don't know the answer. You have to go with your instincts and the signals from the data. The data isn't always clear, but I find if you open up and don't be afraid, the ideas come out of the signals.

**Q | You've received numerous awards. Most recently, the American College of Cardiology named you a Distinguished Scientist for Translational Medicine. What has motivated you throughout your 54 years as a physician and researcher?**

**A |** Nature has these marvelous survival tools. The mammalian heart, with four chambers and coronary arteries, actually evolved even before the dinosaurs. There were small, furry marsupial creatures that were running around the forest while the dinosaurs were chomping each other up.

The reason that's so important is that their blood flow, the extreme flow capacity with stress and their fur, allowed them to survive extreme environments. There were massive glaciers and then there were five great die-offs of sea life, land

life, dinosaurs, either because of massive glaciation or because of volcanic activity.

But these little creatures survived, and the reason they survived is because they had a heart like [ours]. This was before their brains were even very developed.

Nature's there. Nature tells us the signals of what it takes to survive. It comes down to: if you have enough blood flow, you will. If you don't, you won't.

It's just a matter of discovering these things and that's what's exciting. It has nothing to do with me; it has to do with having the tools and eyes that let you see what nature's signals are. And sometimes docs get a little ego involved and say 'My way is the better way,' without realizing that [nature] is the way. We just need to discover it.

That's what keeps me going—discoveries that are just endlessly interesting in every patient. Every patient teaches me something new, and it's just astonishing, day in and day out. ■

*K. Lance Gould, M.D., was interviewed by Pulse writer and columnist Shanley Pierce. This interview was edited for clarity and length.*



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## HOW TMC EMPLOYEES SPEND THEIR SPARE TIME

During the 2017 World Series, the Houston Astros became hometown heroes to a city that needed a win more than ever. Still recovering from the devastation left by Hurricane Harvey two months earlier, Houstonians rallied behind a team that distracted them from their grief and gave the nation one more reason to respect the mantra that grew out of the city's post-Harvey resilience: Houston Strong.

Shelby Garza, a registered nurse at Ben Taub Hospital's trauma intensive care unit, cheered alongside thousands of spectators during the World Series home games at Minute Maid Park not just as a fan, but as a cheerleader for the Astros' Shooting Stars.

"To be around that atmosphere while the Astros are winning their first title ever, and to have these fans who have been fans for the last 50 years come out and show that passion for the team, is crazy," the 25-year-old Pearland native said. "I'll remember that for the rest of my life."

Garza began training in gymnastics and dance at age 3, which laid the foundation for her love of cheerleading. Because of her petite frame, she quickly excelled in tumbling, jumping and flying through the air to execute a variety of cheerleading stunts. She cheered competitively from elementary school through 11th grade and continued for three years at Stephen F. Austin State University, where she majored in nursing and minored in sign language.

During college, Garza also took care of her cancer-stricken



Credit: Courtesy photo

NAME: **Shelby Garza, RN**

OCCUPATION: **Trauma nurse at Ben Taub Hospital**

INTEREST: **Cheerleading**

grandmother. Although her grandmother ultimately lost her battle with cancer, Garza remembers the gratifying feeling of being at her bedside as a caretaker.

"It all made perfect sense to me to go into nursing," Garza said. "I never thought of pursuing anything else."

Inspired by her mother, who has worked in trauma services at Ben Taub for nearly 20 years, Garza decided to focus on treating patients suffering from traumatic injuries or illnesses. She joined the hospital's trauma ICU team in 2015.

The trauma ICU is not for the faint of heart. Garza has treated people on the brink of death after being shot, stabbed or beaten. She has

cared for people involved in vehicle accidents, as well as people who jumped off of buildings.

"Every story is unbelievable. Of course, we want to know the back side of them. 'How did that happen? Why did they do that?' But that's not our job," Garza said. "No matter what this person did—they could have been shot or could have gone out, killed people and shot themselves—our job is to take care of them and keep them alive."

Because of the high-stress nature of her job as a trauma nurse, Garza knew she needed to find an outlet beyond the hospital. She had seen the Shooting Stars cheerleaders during televised games and on social media, and in 2016 her mother convinced her to try out for the team. After a weekend-long audition, Garza was one of 20 women selected to join the squad.

As a member of the Shooting Stars, Garza entertained fans at home games—tossing souvenirs into the

crowd, dancing on the dugout and singing along to "Take Me Out to the Ball Game" and "Deep in the Heart of Texas" during the seventh-inning stretch.

"Our main responsibility was to go out, make someone's day and make them feel like they were at home at Minute Maid," Garza said.

Garza and her Shooting Stars team brought smiles and spirited energy to the Houston community off the field, as well, by volunteering at the Houston Food Bank and visiting with patients at local hospitals.

But as much as she enjoyed her two years as an Astros cheerleader, Garza has decided not to audition for a spot on the team this year. Instead, she will study for her upcoming critical care nursing certification exam and plans to try out for the Houston Texans cheer squad.

In the meantime, she'll be rooting for the Astros as a devoted fan. ■



ON THE SIDE

BY SHANLEY PIERCE

# Energy Drinks

## Health Risks Behind the Boost

BY SHANLEY PIERCE

Despite the popularity of caffeine- and sugar-laden energy drinks, their adverse health effects are leaving a bad taste in doctors' mouths.

John Higgins, M.D., a sports cardiologist at McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth) and a member of the American College of Sports Medicine (ACSM), said athletes often ask him and his colleagues about energy drinks. Is it healthy to consume them? Do they really improve athletic performance?

"There wasn't a whole lot of really good information out there about energy drinks, so we put together a review," said Higgins, who also serves as a sports cardiologist for Rice Athletics and the Houston Rockets. "What surprised us ... was that a lot of individuals who were consuming them were experiencing problems and having to go to the ER. We thought, 'Something's not right here.'"

The popularity of energy drinks in the United States surged between the late 1990s and early 2000s, when major companies—including Red Bull, Monster Beverage Corp. and Rockstar Energy Drink—introduced highly-caffeinated beverages laced with a cocktail of vitamins and herbal ingredients to give consumers a boost

of energy. Advertisements for these drinks promised to enhance athletic performance and improve mental sharpness. One ad suggested that consumers would feel energetic enough to fly.

Over the years, people grew increasingly thirsty for energy drinks, and beverage companies upped their game to meet the high demand. Between 1999 and 2014, energy drink sales in the U.S. skyrocketed 5,000 percent, according to data from market research firm Euromonitor International. Sales have tapered off in recent years, but energy drinks remain popular among teenagers, high school and college students, athletes and office employees who want to push through a workout or avoid the mid-afternoon slump.

Yet there is limited data on the health risks surrounding energy drinks.

In 2010, Higgins launched an investigation into the popular beverages. His research showed that energy drinks have an adverse effect on the cardiovascular system and can cause neurological, gastrointestinal, renal and endocrine system problems, as well.

Higgins' findings were used as the basis for an official statement recently released by the ACSM, announcing new recommendations and warnings for energy drinks.

### ACSM RECOMMENDATIONS AND WARNINGS FOR ENERGY DRINKS

#### Protecting children at risk:

Children and adolescents appear to be at particularly high risk of complications from energy drinks due to their small body size, being relatively caffeine naive, and potentially heavy and frequent consumption patterns. The message that these beverages are not intended for children needs to be reinforced and widely disseminated.

#### Stop marketing to at-risk groups, especially children:

Marketing should not appeal to vulnerable populations. Currently, manufacturers of energy drinks advertise on websites, social media and television channels that are highly appealing to both children and adolescents. Target marketing to sporting and other events involving children and adolescents should not be permitted.

#### Do not use energy drinks before/during/after strenuous exercise:


Regardless of health and fitness level, and until such time that proper safety and efficacy data are available, energy drinks should be avoided before, during or after strenuous activities. Some of the deaths allegedly due to energy drinks have occurred when a person consumed energy drinks before and/or after performing strenuous activities.

#### More education and data needed:

Investment in awareness and educational resources highlighting the potential adverse effects and safe use of energy drinks is required. Significant efforts should be made to educate consumers regarding the clear and present differences between soda, coffee, sports drinks and energy drinks. Energy drink education also should be a priority in school-based curricula related to nutrition, health and wellness.

Source: American College of Sports Medicine





A majority of volunteers who participated in Higgins' study experienced arterial endothelial dysfunction, a condition in which the arteries are unable to open properly for blood to flow, after consuming an energy drink. Pair that with arduous physical activity or exercise—when the heart demands more blood flow—and a serious cardiac event could arise.

"There's going to be a flow-demand imbalance—the classic setup for ischemia—in the heart muscle, which we know can lead to things like ventricular tachycardia, ventricular fibrillation and sudden cardiac arrest," Higgins said.

A 2014 report by the Substance Abuse and Mental Health Services Administration found that the number of emergency department visits among patients age 12 or older involving energy drinks—either consumed alone or in combination with alcohol or other drugs—doubled from 10,068 in 2007 to 20,783 in 2011. In this group, 1 in 10 energy drink-related emergency department visits resulted in hospitalization.

"We've definitely seen kids who have been associated with energy drinks, but not solely based on that. A lot of times ... it's poly-ingestion. They'll have an energy drink and some alcohol or an

energy drink and some pills," said Robert Lopus, M.D., an emergency medicine physician with Children's Memorial Hermann Hospital and UTHealth. "They come in after getting hit by cars, accidents, falls, etc."

The ACSM issued four recommendations around energy drinks: protect children and teens who are at high risk of complications from energy drinks; stop marketing to youths; do not use energy drinks before, during or after strenuous exercise; and increase education and research to better understand the safety and efficacy of energy drinks.

"We have a situation of something potentially dangerous that is freely available," Higgins said. "The entire culture has to change until we know what's going on."

The growing number of cardiovascular incidents involving energy drinks demands further research into the ingredients packed into each can, as well.

"You read the label and it'll say 50 to 100 mg of caffeine, but I think it's the other ingredients in there that are almost like caffeine—the guarana, the ginseng, the taurine—which we can't really put an amount to or know exactly what they do," Lopus said.

*(continued)*

*Research led by John Higgins, M.D., a sports cardiologist at McGovern Medical School at UTHealth, was used as the basis for new energy drink recommendations and warnings released by the American College of Sports Medicine.*



Because of the regulatory “labeling runaround,” Higgins said, energy drinks lack transparency. The classification of some energy drinks as “dietary supplements” allows energy drink companies more latitude in terms of which ingredients and how much of each ingredient they can add to their product, he said.

Although both dietary supplements and traditional beverages—such as carbonated soft drinks—must comply with U.S. Food and Drug Administration (FDA) rules and regulations, there are significant differences between them. The National Center for Complementary and Integrative Health, part of the U.S. National Institutes of Health, observed that “natural” does not always mean “safe” when it comes to dietary supplements, and that “an herbal supplement may contain dozens of compounds and that all of its ingredients may not be known.”

Some energy drink companies—including Monster and Red Bull—converted from dietary supplement to beverage, but not all have made the switch.

“These energy drinks are stacked with caffeine, stacked with sugar, stacked with all of these things that we don’t even know. Some of these ingredients, I can’t even pronounce their names.”

— JOHN HIGGINS, M.D.

*Sports cardiologist at McGovern Medical School at UTHealth and a member of the American College of Sports Medicine*

“There are components in these energy drinks that we still don’t know what they do,” Higgins said. “These energy drinks are stacked with caffeine, stacked with sugar, stacked with all of these things that we don’t even know. Some of these ingredients, I can’t even pronounce their names.”

One specific ingredient in question is taurine, an amino acid naturally found in meats and fish. Some energy drinks contain up to 2,000 mg per can of taurine, which can have an adverse effect on cardiovascular function when combined with caffeine.

“The effects in terms of speeding of the heart rate and heart pumping were more related to the taurine interaction with the caffeine,” Higgins said. “They’re trying to stimulate your heart, but your body is a mastermind. It knows how to speed the heart rate up and how to affect the blood pressure when you’re exercising better than anyone. We don’t need some artificial thing to crank it up.”

Some countries in Europe have cracked down on energy drink sales to minors. In 2016, Latvia banned the sale of energy drinks to children 18 and under, and earlier this year, the United Kingdom banned supermarkets from selling energy drinks with more than 150 mg of caffeine per liter to people under the age of 16.

Higgins said he’s not looking to put energy drink companies out of business, but he hopes the U.S. will follow suit and stop kids 18 and under from putting their health at risk until more information about the long-term health effects is known.

“I don’t want to say, ‘Ban all energy drinks,’” Higgins said. “All I want is to protect vulnerable populations.” ■



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# CURATED

The Intersection of ARTS and MEDICINE

By Britni N. Riley



Top photo: Kayla Jefferson selects stones for her bracelet. Bottom photos: Patients enjoy the Kendra Scott Color Bar at The University of Texas MD Anderson Children's Cancer Hospital.

A line has formed outside of the PediDome—a multi-purpose room on the pediatric oncology floor at MD Anderson Children's Cancer Hospital. Children of all ages—some walking with IV drips and some in wheelchairs—are waiting with their families to make their very own piece of Kendra Scott jewelry.

For Kayla Jefferson, 20, the Kendra Scott Color Bar has become a respite through her seven months in the hospital to treat osteosarcoma, the most common form of bone cancer in children and young adults. After undergoing a massive surgery in her right leg to remove her knee joint, Jefferson must complete 30 weeks of chemotherapy.

"Losing your hair is pretty hard," Jefferson said. "I had really long hair and I just buzzed it all off because it kept falling out in clumps."

Jefferson is wearing a large knee brace and chatting with her mother and new friend, Anne, about the jewelry she will make.

"I like that they use stones," she said. "It's just nice to have a little bit of oomph when you feel like you're losing your hair and you don't feel the prettiest and then all of a sudden you get someone who brings you jewelry and tells you that you're beautiful."

Kendra Scott jewelry designs are known for their geometric shapes and bright colors. Once a month, the designer's team brings an in-store shopping experience straight to the patients at MD Anderson, at no cost to them or the hospital. The Color Bar, part of the Kendra Cares Program, is one of the hospital's best-attended events.

"It's a fun experience for anyone because you are designing and creating something," said Mackenzie Cash, community relations and events manager for Kendra Scott. "Once they pick their silhouette—they can choose from two different types of earrings, a necklace, and two different types of bracelets—

they decide if they want silver or gold and then from there, they pick the color option for the stone. We have 12 different stone options."

Jefferson decides to make a new bracelet for herself.

"Each piece of jewelry I make symbolizes my journey and what I have gone through," she said. "This bracelet I got ... the color of the slate gray stone—it's kind of dark, but it also has this light side at the same time. It reminds me that even though there will be stormy times, I know that I can make it through."

Lifting patients' spirits has been a mission for Kendra Scott since her stepfather was treated for brain cancer at MD Anderson.

"It was a really pivotal point in her career. She was young when that happened and she has remained involved with MD Anderson," Cash said. "Kendra always says, 'We always have something to give.' We did the first mobile Color Bar here at MD Anderson three years ago and now in 2018 we are moving into 30 children's hospitals."

In addition to donating the jewelry and staff time for the Color Bar, Kendra Scott donates proceeds from the sale of MD Anderson hand and heart "give back charms" to support programs for pediatric patients at MD Anderson. The store also offers pop-up shops around the country and other philanthropic initiatives that give back.

Jefferson has been so inspired by the Kendra Scott team that she hopes to work with them when she completes treatment.

"I am supposed to be done with treatment in April and I'm going to go apply at the store in The Woodlands," Jefferson said. "They have helped me feel better when I have been having my worst days, and I want to do that for other people." ■

To purchase Kendra Scott jewelry and learn about the Kendra Cares Program, go to [kendrascott.com](http://kendrascott.com).







# Giving Kids a Lift

## HOW DePELCHIN CHILDREN'S CENTER HELPS HOUSTON'S MOST VULNERABLE

BY ALEXANDRA BECKER

The little boy arrived with a human bite mark on his cheek. It was deep. He was so frightened he refused to utter a word. Christi Fisher, his new foster mom, wasn't even sure if he understood English. But that first night, he did finally lay on her chest. He clutched her hair and wouldn't let go. They slept like that, and the next day when she took him to work with her, he let himself laugh. Later, a full-body scan revealed a broken arm and ribs. At the hospital, they told Fisher that sometimes, when the abuse is so pervasive, children grow accustomed to the pain.

The boy was one of 11 children Christi fostered through DePelchin Children's Center, Houston's oldest foster care and adoption agency.

Seven years ago, as a single mother of a 6-year-old, Christi was surprised to learn she was not automatically disqualified from becoming a foster parent. On the contrary, DePelchin welcomes applicants from all backgrounds, regardless of marital status, sexual orientation, gender, faith, ethnicity or age. Her son, Karsen, whose father passed away after he and Christi separated, was enthusiastic about the idea of a temporary brother or sister, so she completed the extensive application process and training requirements.

Adoption, she said, was never in her mind.

Christi got her foster license on a Tuesday and received her first placement that Thursday: a newborn girl who had tested positive for drugs and her

10-month-old brother. Over the course of nearly a year, she watched the siblings thrive in a nurturing environment with her and Karsen. Eventually, the sister and brother returned to their biological parents—who had spent those months overhauling their lives—but not before another child entered the Fisher home.



Jaxsen was found abandoned in what was essentially a live-in meth lab. He was five months old and severely malnourished. Child Protective Services (CPS) placed him with a family friend at first, but the father was diagnosed with cancer shortly thereafter and the family was no longer able to care for Jaxsen. After bouncing between homes, he finally arrived at Christi's front door. But

before the social worker set him down, he asked Christi if she was open to adoption. She took one look at Jaxsen and surprised herself by saying yes.

After Jaxsen, she fostered and adopted Bailey, who had been hospitalized for the first three months of her life due to drug exposure in-utero. Then there was Ember, who came to Christi at six months old—it would be Ember's fifth and final home.

Christi cared for several other foster children—including the little boy who had been bitten on the cheek and who was ultimately placed in another adoptive home—until Kyron came along. At 3 pounds, 12 ounces, Kyron would be Christi's last adoption, making her a single mother of five.

(continued)

**Facing page:** Christi Fisher's biological son, Karsen, helps his brother, Kyron, dunk a basketball. Kyron is one of four children Christi adopted through DePelchin Children's Center. **Above:** Christi twirls Bailey, Jaxsen and Ember on the tire swing in their backyard.

## Children of trauma

When abuse or neglect is suspected, children are removed from their homes by CPS and placed with a relative or into foster care. Sometimes, children end up returning to their families, as long as those families are able to sustain a safe and loving environment.

“The purpose of foster care is to provide safety and treatment, and it should be a therapeutic experience for the child regardless of the outcome,” said Avia Benzion, LPC, program manager of Integrated Mental Health at DePelchin.

“Many in our field believe that the best outcome is for them to return to their biological family, but only if it’s safe. As one parent said, ‘They need our love more than we need to protect our hearts.’”

Foster families are in high demand. Just last year, 6,551 children in Harris County alone were victims of abuse and neglect, according to the Texas Department of Family and Protective Services. Throughout the month of April—National Child Abuse Prevention Month—DePelchin Children’s Center will tie 6,551 blue ribbons to its fence line for each of those children.

DePelchin focuses on children in the state’s welfare system and those at risk of entering the system, working to break the cycles of child abuse and neglect while improving the physical and emotional well-being of the city’s most vulnerable citizens. Programs target both children and adults, including biological families at risk of losing their children, as well as foster parents and adoptive families learning the unique skill set required to help victims of trauma—be it physical abuse, sexual abuse, emotional abuse, neglect, or even exposure to drugs or domestic violence while in the womb.

“We now understand that trauma has a significant impact on the development of a child’s brain,” said Corrine M. Walijarvi, Ph.D., LMSW, vice president of Child Welfare and Strategic Planning at DePelchin Children’s Center. “If children have experienced trauma, especially multiple forms of trauma over many years, caregivers need to provide them with more than a safe environment. It is essential for parents and other caregivers to know how to connect with the child and help promote healing.”

Christi connects with her children through play, music, art and family trips to the coast. Karsen loves football, basketball and fishing; Jaxsen is a whiz at technology; Bailey is a gifted artist; Ember, a social butterfly, is a self-taught cartwheel expert; and when the music turns on, Kyron keeps the beat.

On a recent morning, Christi sat on her couch in

Porter, Texas, and told her family’s story. All the kids were in school except Ember, who was playing in her bedroom and would periodically interrupt to ask for a juice or applesauce. On weekdays, Christi is usually at work, but her company, an underground water sewer

drainage supply house owned by family friends, has been extremely supportive of her need for flexibility. At one point, she said, her office was filled with baby swings and cribs.

Christi will never know the extent of her children’s traumas. She will never know what drugs Bailey’s mother used while carrying her, or exactly what Jaxsen saw as he sat crying for food and inhaling the gaseous

byproducts of methamphetamines. But she does know that they are all still struggling.

“Jaxsen doesn’t know what happened to him, but his brain does, and that’s how it developed,” Christi said. “It formed over fear and neglect and drugs and abandonment. He’s almost 7 and that’s still with him today. And I fear it will be with him for the rest of his life. He’s going to be paying for the neglect and abuse and the trauma for the rest of his life. It doesn’t go away no matter how much love I give him—and that goes for all of them.”

Jaxsen lives in “fight or flight” mode, sometimes trying to kick out car windows or escape from classrooms because he is wired to feel trapped. He feels safest outside, where there are no walls or locked doors. And although his special education classes help him with his fears and aggressive tendencies, he still must take medication prescribed by his psychiatrist, something Christi reluctantly abides.

“I feel like I’m having to give him poison to help with the effects of the poison he was exposed to as a baby,” she said, wiping away tears.

When Ember arrived in Christi’s home she was severely malnourished. Although the 5-year-old has lived with Christi since she was 6 months old, she is still obsessed with food and remains laser-focused on her next snack or meal.

“She has a ton of support and family and friends that just shower her with love, so you wouldn’t think you would find her digging food out of the trash can or at the park picking up food off the ground that someone had left, but she does,” Christi said, adding that all of her children have an intense need to be in control.

“Being a mom who parents children of trauma, that’s the part that is difficult and sometimes very frustrating for people who don’t understand.”

*(continued)*

“Jaxsen doesn’t know what happened to him, but his brain does, and that’s how it developed. It formed over fear and neglect and drugs and abandonment. He’s almost 7 and that’s still with him today.”

— CHRISTI FISHER  
Adoptive parent

**Facing page:** Christi Fisher colors outside with Bailey, Jaxsen, Ember and Kyron; she fostered and later adopted all four children through DePelchin Children’s Center.







## Love is not enough

DePelchin Children's Center understands that foster parents need specialized training, as well as ongoing support. Years ago, the organization put a trauma team in place for crisis situations—the late-night calls from families struggling to cope with a child who has lost self-control and is damaging property or threatening to harm someone.

But thanks to private funding, DePelchin also created a team that aims to foresee and address potential problems before they ever escalate. The FIRST program, which stands for Family Integrated Relational Services

Treatment, blends mental health services—including home-based therapy for children and families—with DePelchin's core child welfare program to provide foster families and those working toward adoption with early awareness, needs assessments, trauma-informed care and ongoing support.

A team of social workers serves every foster family, and children who are identified as high-risk receive ongoing mental health services within the home.



*Above: Jaxsen Fisher plays on the swing set in his backyard.*

It's a proactive system but also a way to reinforce DePelchin's availability and resources.

"Behavioral issues are to be expected," Walijarvi said, "so we want to make sure that from the first day a child is placed in the home, we provide the environment and

support that promotes healing. That is why we provide intensive, trauma-informed training to prospective foster and adoptive parents before we place a child in their home."

These parents quickly realize that love is not enough.

"Love is necessary but not sufficient," Benzion said. "That's what we're there for—to provide parents with

the understanding, knowledge, tools and skills so that they know how to help the child. We view the parents as therapeutic agents. When a child experiences trauma such as abuse or neglect, it happens within the context of an interpersonal relationship, and so it must be healed within the context of a safe interpersonal relationship."

The program is working. Now more than ever, DePelchin foster kids are staying put. Walijarvi explained that it is considered a good outcome if



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85 percent of the children have two or fewer moves while in foster care. DePelchin, she said, now exceeds 99 percent placement stability.

"You hear about children who go from foster home to foster home, and every single one of those moves is traumatic," she said. "We can help improve their outcomes and help the families. And many of the families are now moving toward adoption of the children instead of sending them off to another foster home."

### Siblings

Unfortunately, many children are never adopted and eventually age out of the foster care system. For those young adults, DePelchin's TAGS program, or Transition to Adulthood through Guidance and Support, provides an intermediate living environment to help them complete school, get job training and save money before heading out on their own.

"The young adults who age out of foster care are some of the most vulnerable youth in our community," said Julie Crowe, DePelchin's vice president of Prevention and Early Intervention Services. "They are the ones who are most likely to become homeless, to commit a crime or to end up in the justice system. They're also much more likely to become victims of crimes themselves."

Christi's kids are among the lucky ones because they now have Christi as their mother. But she also

understands the value of birth parents, and when appropriate, she stays in contact with her children's biological families knowing that someday, her kids will start asking questions.

Kyron's birth father is, perhaps, most involved. Last July, when Kyron turned two, Christi agreed to bring him to a local Chuck E. Cheese's for cupcakes and presents with a few members of his biological family.

"I'm grateful that he wants to be in Kyron's life," Christi said. "Kyron is African-American, and he's going to know that we look different. He's going to ask me, 'Who's my birth mom? Who's my birth dad?' I want to leave a healthy, open path for them when that day comes."

Karsen, now 13, loves having four other siblings: Jaxsen, 6, Bailey and Ember, both 5, and 2-year-old Kyron. Most days when they're out of school, they can be found together in their back yard, swinging wildly on the large play-scape donated by the Academy Sports + Outdoors Texas Bowl.

Christi might watch them from the kitchen window—Jaxsen balancing on the swing, Karsen lifting Kyron up to dunk a basketball, Ember and Bailey twirling. Her chest might tighten when she thinks about their pasts, but the present is undeniably encouraging. They are coping, they are resilient, and they have each other. ■



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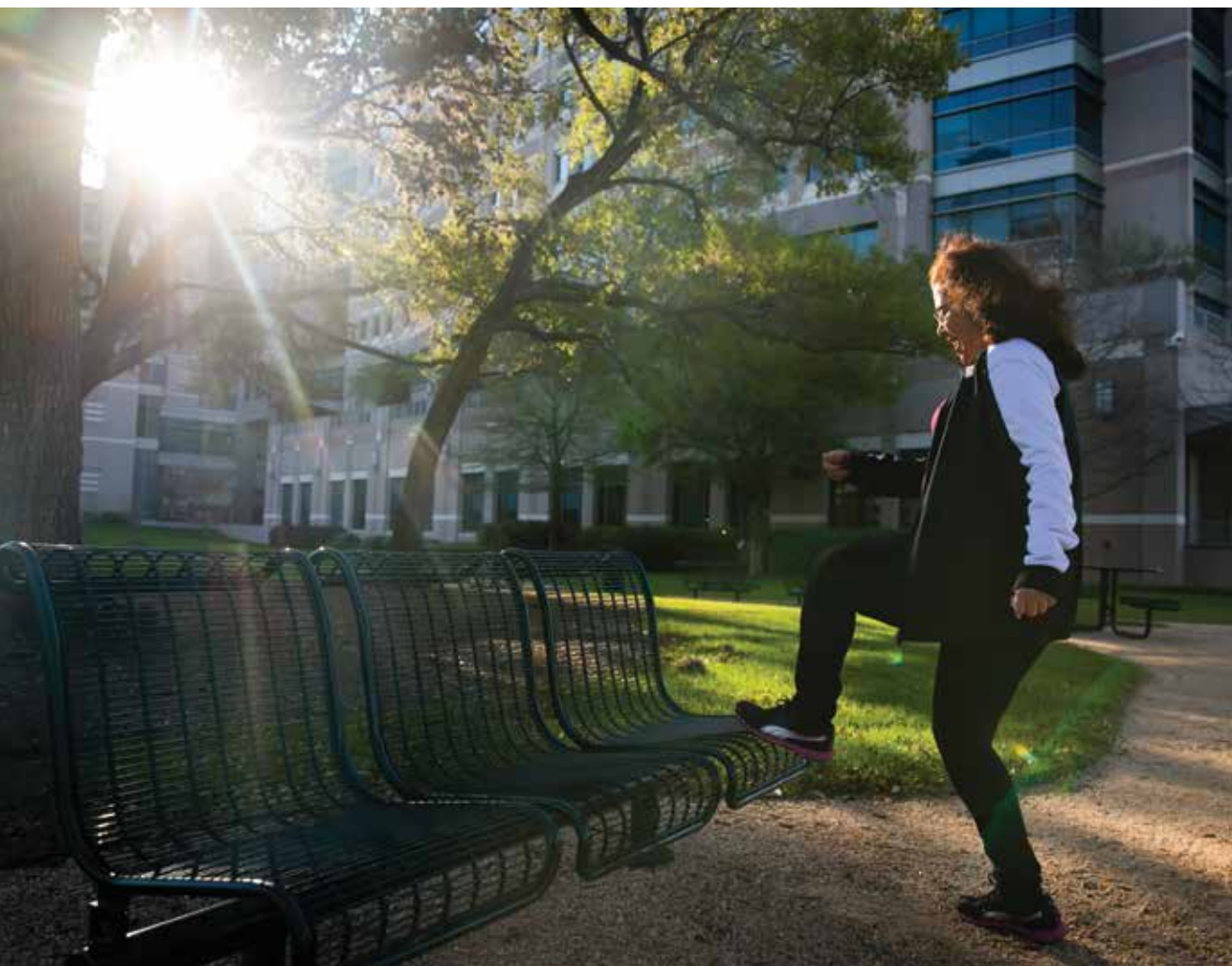
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# A Post-Cancer Push

*Pursuing an active lifestyle offers long-term benefits for cancer survivors*

BY BRITNI N. RILEY



*Yadira Peña, a two-time cancer survivor, prepares for a run around the MD Anderson Prairie in the Texas Medical Center.*

**“Y**ou have cancer.” Yadira Peña never wanted to hear those three words again. After surviving cancer twice—breast cancer in 2002 and ovarian cancer in 2009—Peña decided to turn her physical life around, to seek a healthier, more active existence.

“I remember when I got the second cancer diagnosis, I was ready to leave the hospital and go home,” Peña said. “I think it was more difficult because I knew what was coming—the chemotherapy, the surgeries.”

After completing her treatment for ovarian cancer, Peña’s care team at The University of Texas MD Anderson Cancer Center approached her about participating

in a program they had been working on with the Kelsey Research Foundation, called Active Living After Cancer. Different iterations of the program have existed at

**“I was not planning to do any exercise, but when I was finishing my treatments, they told me the benefits of physical activity and that it would take me far away from the recurrence of cancer. ... That got me.”**

— YADIRA PEÑA  
Cancer survivor

MD Anderson since the 1990s, under the direction of Karen Basen-Engquist, Ph.D., MPH, and Cindy L. Carmack, Ph.D.

“We got interested in physical activity as a program to help cancer survivors recover better after cancer and improve their quality of life,” said Basen-Engquist, professor of behavioral science and director of the Center for Energy Balance in Cancer Prevention and Survivorship at MD Anderson. “Around that time, there was some work being done by a researcher in Canada showing that exercise was not only safe for people with cancer, but also had benefits. We were interested in bringing some of that type of research to MD Anderson, but we took a little bit different approach.”

As behavioral scientists, it was the goal of Basen-Engquist and Carmack, a professor in the department of palliative, rehabilitation and integrative medicine at MD Anderson, to make a long-lasting impact on the women enrolled in the program, rather than promote short-term weight loss or fad dieting.

“We are talking about incorporating physical activity into daily life, as well as going to the gym,” Basen-Engquist said. “For example, I took the stairs today. We encourage people to take the stairs, park far away from their office, count their steps with pedometers—increase their step count. It’s really focused on short bouts of moderate intensity and getting them to increase their overall activity.”

Basen-Engquist explained that many cancer survivors do have issues after their cancer treatment—they are deconditioned, their physical functioning has declined and they experience early aging.



She said the main goal of the program is to get people feeling better, to boost their energy and to regain some of the strength they lost over the course of their cancer treatments.

"I used to be very sedentary before cancer and after, too," Peña said. "I had the best excuse: I had cancer. I was not planning to do any exercise, but when I was finishing my treatments, they told me the benefits of physical activity and that it would take me far away from the recurrence of cancer. ... That got me."

When Peña began the 12-week program in 2015 with two of her sisters who are also cancer survivors, she averaged around 300 steps a day and was conserving as much energy as possible.

"I had a saying—'economic movements.' My family knew me for that," Peña said. "Don't do that twice—do it once and that's it. If there's a car, why walk? I used to keep one box downstairs and one box upstairs. That way, when I

needed to take things downstairs, I would take them in one flight."

Reaching the class goal of 10,000 steps per day seemed nearly impossible for Peña at first, but soon that became a light day of walking for her.

"There is one part of the program that sets SMART—Specific, Measurable, Attainable, Relevant, Time—goals, and you have to set a goal," Peña said. "My sister said, 'I'm going to run three blocks.' The other sister said, 'I'm going to run five blocks.' And I said, 'I'm going to run a half marathon.' The thing is that we wrote those goals. Once they are written, you have to stick to them."

Peña began running several miles a day to train for the Aramco Houston Half Marathon in 2017. She trained for more than a year.

"This is the thing I told my body when I was running: 'Okay, my arms, my legs worked together on the chemo and it was not for fun, and we did it—twice. We are going to do it right now. It's going to be hard; it's

not going to be easy, but we're going to have fun and get that medal that says you finished,'" Peña said. "I was mile by mile saying, 'We're almost there and everybody is going to be clapping.' It was kind of a release to me of the situation of the treatment."

But the goals and objectives of Active Living After Cancer go beyond physical activity.

"It's not a group where we only get together and do exercises. It's a behavioral skills program," Basen-Engquist said. "Idea tools for problem-solving or overcoming barriers to being more physically active—SMART goals. We talk about finding social support, identifying people who can help you meet your goals."

Peña began to apply these new skills to other parts of her life.

"When I got to this program, I got this idea, too, of going back to college," she said. "I graduated in December 2017. I finished my bachelor's degree from the University of Houston - Clear Lake and then they

offered me a partial scholarship for my master's, so now I am getting my MBA. It's applying all of these SMART goal idea tools."

In addition to going back to school, Peña is now a health educator for the Active Living After Cancer program.

"This combines everything for me," Peña said. "I'm a survivor, I can talk to survivors, I was there at the beginning and this program has changed so much. It has been so rewarding to be able to provide to others what has really helped me." ■



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# A More Colorful, Comfortable Stay

*Starlight Children's Foundation partners with Texas Medical Center hospitals*

BY ALEXANDRA BECKER

Sitting on the edge of her hospital bed surrounded by her best-loved stuffed animals, Evie Baxter looked comfortable as she contemplated her next move in the board game Life. Her reddish blonde hair was tied into a loose, messy ponytail, and her face, flush with freckles, was quick to smile. Instead of a conventional hospital gown, she wore a brightly-colored garment made of soft, T-shirt-like material. It was purple and pink and sported an image of a superhero lightning bolt covered in sprinkles. For Evie—an 11-year-old with common variable immunodeficiency—the kid-friendly gown had been a significant source of comfort during her hospital stay.

The gown was one of more than 3,000 donated to Children's Memorial Hermann Hospital late last year by Starlight Children's Foundation, which works to improve the experience of hospitalized children and their families across the U.S. through entertainment and distraction.

"Our mission is to provide moments of joy and comfort for kids who are in the hospital," said Chris de Haan, Starlight's senior vice president of communications and public relations. "We want to take a moment that is very difficult and stressful and full of anxiety and nervousness and transform it into a moment that preserves the wonder and the magic and the joy of childhood. Because every child deserves to experience that."

Starlight Children's Foundation provides entertainment, education and technology to more than 800 hospitals and health care facilities across the U.S., as well as sites in the United Kingdom, Canada and Australia. The nonprofit serves numerous Texas Medical Center institutions, including Children's Memorial Hermann Hospital, Texas Children's Hospital, UTMB Health Children's Hospital - Galveston, Shriners Hospitals for Children - Houston, MD Anderson Children's Cancer Hospital, Ben Taub Hospital and Ronald McDonald House Houston.

Colorful, comfortable hospital gowns are just part of Starlight's toolkit, which also includes donations of toys, stuffed animals, books, crafts and games; celebrity visits from actors, entertainers and athletes; virtual reality experiences that transport pediatric patients outside the hospital environment and into immersive and exotic adventures; as well as Starlight Fun Centers stocked with family-friendly video games, movies and other sources of entertainment.

Children's Memorial Hermann Hospital has a Fun Center on every floor and is currently constructing a new Starlight Site playroom, and Texas Children's Hospital offers 75 Fun Centers in their campuses across the Houston area.

"Texas Children's Hospital saw the value of our program, and you can now walk onto any floor on any campus and you'll find a Starlight Fun Center there," said Samantha Martinez, director of programs for Starlight Children's Foundation.

**"We want to take a moment that is very difficult and stressful and full of anxiety and nervousness and transform it into a moment that preserves the wonder and the magic and the joy of childhood."**

— CHRIS de HAAN  
Senior VP at Starlight Children's Foundation

Founded 35 years ago, Starlight has touched the lives of more than 60 million children worldwide. Last year in the U.S. alone, the organization provided more than \$2.5 million in Starlight Special Deliveries—including toys, crafting materials, Radio Flyer wagons and other items—that brought smiles to hundreds of thousands of hospitalized kids.

"Not only do we provide hospitals with tools for their patients, but we can also provide significant budget relief," de Haan explained. "A lot of our hospital partners are nonprofits—budgets are tight, and it's expensive to care for children—so to the extent that we're able to provide resources that help reduce budget constraints, that's an additional benefit."

Starlight works closely with hospitals to identify their needs and offer programs that best service their populations, which is how the gown program originated. Launched in 2016, the program has already delivered more than 150,000 Starlight gowns to pediatric patients throughout the country. According to de Haan, Starlight's goal is to "revolutionize" children's hospital gowns, which are typically faded,

uncomfortable and unattractive. By contrast, Starlight gowns are designed to be comfortable, colorful and fun to wear. Designs range from astronauts to princesses to veterinarians and artists, and, according to Evie, they are "super cute."

"The gowns make such a difference for the kids when they're in the hospital," said Evie's mother, Julie Baxter. "To have something that doesn't look like a hospital item, it gives them a little more personality, a little more individuality."

Starlight gowns are more practical, as well. They tie on the side rather than the back, which provides more coverage, and they have snaps on the sleeves for easier, less invasive access for IVs or chest ports.

In February, Starlight launched a Design-A-Gown contest and encouraged patients, as well as their families and friends, to submit a design for the next gown. As de Haan said, "Who better to design a gown for hospitalized kids than kids themselves?"

The foundation received more than 6,000 submissions and selected three finalists. Jack, age 6, who wanted to help his 7-month-old sister who was born with a congenital heart defect, designed a gown covered in hearts and glitter; 13-year-old Ava, a Girl Scout, and her brother Maxwell, 10, designed an out-of-this-world Starlight gown for their 6-month-old cousin who was diagnosed with a rare form of cancer; and Kimberly, 36, from San Luis Obispo County, California, dedicated her design—an elephant to symbolize strength—to her daughter, Violet, who suffers from three rare genetic conditions and faces numerous hospitalizations. Starlight asked the public to vote on their favorite design in late March and plans to donate at least 30,000 gowns featuring the winning image later this year.

"To see the smile on a child's face when you put something into his or her hands as simple as a colorful gown, it's phenomenal," de Haan said. "We've seen kids who are stuck in hospital beds who feel terrible, they feel sick, and we've watched them put on a gown and within minutes they're up and out of bed walking down the hallway like they're the cat's pajamas. It's incredible that something so simple can be so transformative." ■

*Facing page: Evie Baxter, an 11-year-old patient at Children's Memorial Hermann Hospital, sports her Starlight gown while holding an old, traditional gown for comparison.*



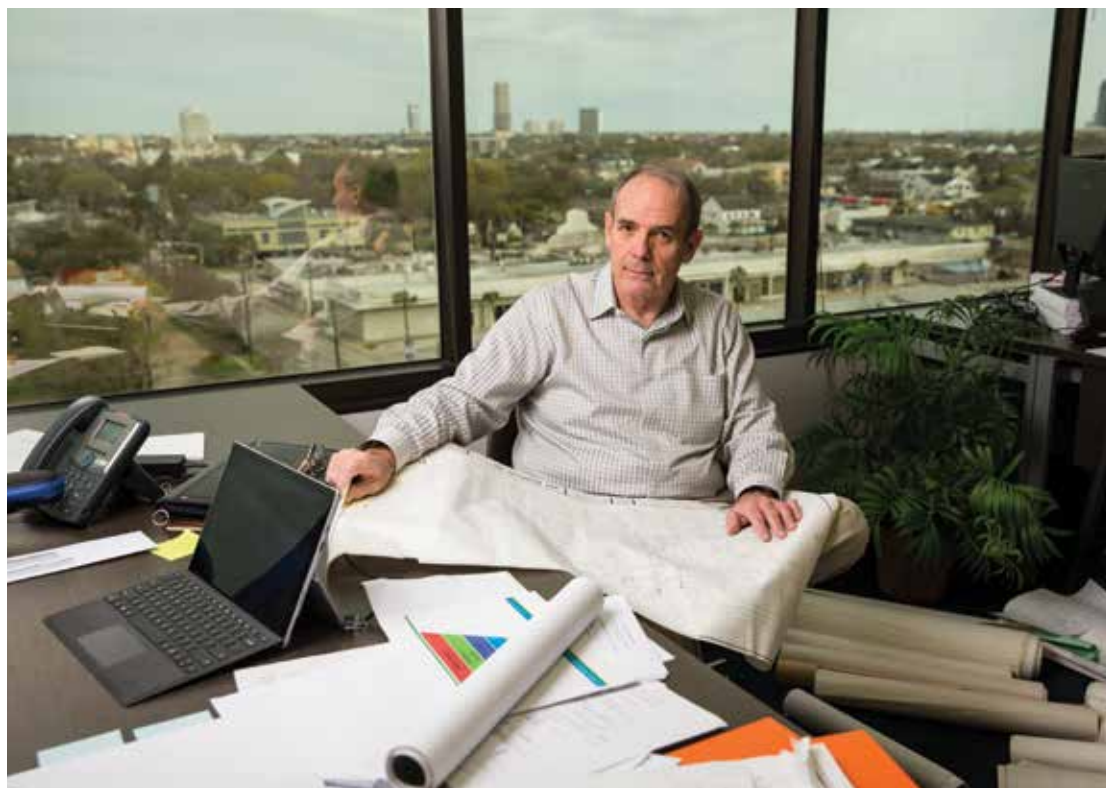




# Battling Professional Burnout

*Most patients in Menninger's Professionals Program work in medicine, law and business*

BY BRITNI N. RILEY



*Robert Loiseau, president and CEO of the Non-Profit Housing Corporation of Greater Houston, at his office.*

Ten years ago, Robert Loiseau's life unraveled. "I am a lawyer, but at the time I was running a business of which I was a principal, doing management consulting services on troubled businesses," Loiseau explained. "It's stressful when you are appointed by a court or hired by somebody to go in and take over a company. You have to fire people; you have to do unpleasant things—even shutting the company down. That takes a toll."

Although Loiseau had struggled with mental illness for the majority of his life, the stress of his

job compounded with the collapse of his 25-year marriage in the early 2000s, open heart surgery in 2005 and a cancer diagnosis in 2006, was more than he could handle. He started to have suicidal thoughts.

"I was just tensed up," Loiseau recalled. "It was hard to go to work, it was hard to be productive at work because of the pressures all around. The pressure of running a business, making a payroll, bringing in new business, taking over a business, dealing with personnel issues—and that's just the business side of it. Talk about the personal side:

you're divorced, you're single. It's draining."

Through his therapist, Loiseau learned about a professional burnout program at The Menninger Clinic. In a moment of desperation, he reached out.

"When I called, they said they had to check to see if they had a bed available," Loiseau said. "My heart sank. A few minutes later they came back on and said they did have a bed for me. I packed up a few things, went to Menninger and stayed for eight weeks."

Menninger's Professionals Program serves high-performance business personnel who are struggling to manage their careers and relationships because of stress, addiction or psychiatric disorders.

"We get our patients usually downstream of burnout, but burnout is not a psychiatric diagnosis yet," said Robert Albanese, M.D., program director of Menninger's Professionals Program. "That means we don't have specific diagnostic criteria that have been statistically validated."

Yet there are certain traits that these patients manifest time and time again: exhaustion, cynicism, detachment and a lack of a sense of professional achievement—the feeling that you are spinning your wheels and not getting anywhere professionally, Albanese said.

"Medicine, law and business make up 80 percent of our patient population," he added. "Overwork has a certain mystique in these fields and people tend to praise you for it. ... That lends itself to not being mindful. Sometimes, I observe to patients that they have sacrificed their relationships on the altar of their careers. There is a lot of pressure to do that—not only from the hierarchy of your career, but also your internal motivation to achieve and also your family's lifestyle—the big boat and the big house."

When Loiseau checked into Menninger, he had been self-medicating with prescribed Xanax and alcohol.

"My dual diagnosis was and remains major depression and generalized anxiety disorder," Loiseau said. "The anxiety disorder piece of it is what you notice first. By anxious, we are talking about waking up in the morning with a knot in the pit of your stomach and not knowing whether or not that knot will go away. Having panic attacks,

**“By anxious, we are talking about waking up in the morning with a knot in the pit of your stomach and not knowing whether or not that knot will go away. Having panic attacks, sweating profusely, shaking, no appetite, just about unable to function.”**

— ROBERT LOISEAU

*Former participant in the Professionals Program at The Menninger Clinic*



sweating profusely, shaking, no appetite, just about unable to function. And this continues today, very irregularly, but there are times it still happens to me. You feel bad to begin with, and then on top of that, your body is reacting this way—jittery and anxious.”

The Professionals Program includes individual therapy, group therapy, family therapy, pharmaceutical therapy and exercise.

“The Professionals Program is a matrix and we individualize by diagnosis with the patients,” Albanese said. “We believe that a healthy body is a healthy brain is a healthy mind. Our patients have access to a personal trainer once a week, we have a chaplain service and an internal medicine team that the whole campus uses and they help manage our patients’ health.”

During his stay at Menninger, Loiseau shared a semi-private room and immersed himself in the healing process. He learned new coping techniques, including exercise, meditation, yoga, and the importance of telling somebody when you’re suffering.

“You’re in a very safe environment when you are in a place like that. You don’t have to worry about feeding yourself; you have a structured day,” he said.



After completing his treatment, Loiseau went back to work.

“It was one of the most difficult things I’ve ever done,” he said. “You have to not only reintegrate as the president of the company, but also do substantive work. And I picked a task that had a hard deadline; it had to be done and filed with the court. I did it and it was so painstakingly slow and difficult. Years earlier, I could have knocked it out in an hour. It took days, but I finished it.”

By the end of 2010, Loiseau was burned out

again. Only 57, he was too young to retire, so he made a career change and started working for nonprofits.

Although he is still fragile, Loiseau is in a much better place than he was when he checked into Menninger a decade ago. He has remarried and currently serves as the president and CEO of the Non-Profit Housing Corporation of Greater Houston, which offers affordable housing to seniors, veterans, the homeless and individuals with special needs in the Houston area.

While it may be impossible to find complete satisfaction at work all the time, Albanese recommends taking note when exhaustion or cynicism creeps up.

“Part of the way to avoid burnout is to be mindful,” Albanese said. “Being a good steward to one’s psychological resources requires monitoring those resources and noticing if you are getting irritable, cynical or feeling disconnected from people, feeling like you’re less effective at work. This is something that we don’t do as physicians, attorneys and executives. We are not good at that, but we have to learn to be good at it so that we don’t get burned out.” ■

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# Meet Professor Uche Anadu Ndefo

*The TSU College of Pharmacy and Health Sciences assistant professor is helping develop a Doctor of Pharmacy program in Nigeria*

BY CHRISTINE HALL



*Uche Anadu Ndefo, PharmD, wants Nigerian pharmacy students to spend their final year of school getting hands-on experience with patients.*

Pharmacology wasn't Uche Anadu Ndefo's first passion.

She actually wanted to be a broadcast journalist, but that wasn't the type of profession her Nigerian parents dreamed about for her. They told her she needed to choose one of the more traditional Nigerian careers: physician, nurse, pharmacist, engineer or lawyer.

"I think there are five acceptable things that we can be," Ndefo said. "They told me, 'Pick from that and find your happiness.'"

She became a pharmacologist, but found her true happiness as an educator, which gives her the opportunity to write and publish, "a back-door way" of doing what she wanted to do in the first place.

An associate professor of pharmacy practice at Texas Southern University College of Pharmacy

and Health Sciences, Ndefo was born in Nigeria, but moved to the United States as a baby when her father started a Ph.D. program and her mother entered a master's program.

Three years later, the family returned to Nigeria and stayed for a decade. Those were Ndefo's formative years, the stretch of time when she became immersed in her native language and culture.

The family ultimately headed back to the U.S. when Ndefo was a teenager so her mother could earn a Ph.D. in public health.

Since health and education are part of the family's DNA, Ndefo's Ph.D. in pharmacy is a source of family pride.

"My dad loves it. He brags about it. He addresses letters to me as 'Doctor,'" Ndefo said. "I'm like, 'Really dad? You're sending a letter to

your daughter. Why the formality?'"

Family is everything to Ndefo, and her townhome at the edge of West University reflects that. Outside, visitors will find evidence of a house full of boys: a driveway basketball goal and lots of toys in the back yard. Inside, family photos of Ndefo, her husband and their three sons adorn the walls. Eclectic wall paintings depicting international cities are souvenirs from her husband's travels. Everywhere, there are tributes to Africa, including native head statues from Zambia, a gift from her father-in-law to her husband to commemorate his birth.

It's that love of family that drove Ndefo to apply for the Carnegie African Diaspora Fellowship Program, awarded to academics born in Africa. Ndefo earned a spot to work with professor Godswill Onunkwo at the University of



Nigeria, Nsukka, on developing the curriculum for a new Doctor of Pharmacy program, which will emphasize preceptorship and rotations. Currently, pharmacy students in Nigeria only earn bachelor's degrees and receive little clinical training, yet they play a vital role in health care because a pharmacist may be the only health care professional a patient sees.

Ndefo's lack of confidence in her homeland's health care system boiled over about a week before she was to travel to Nigeria to work on the new curriculum. Her father, who was visiting family in Nigeria, fell ill with malaria. Rather than admit him to a hospital, Ndefo arranged for a doctor to come and stay with him.

"That's part of why I know that I'm not done with whatever I need to do in Nigeria," Ndefo said. "Just the thought of him having to go to a hospital, it scared me so much."

Her father recovered from his illness, and that was a sign to Ndefo that she was in the right place at the right time. Her goal was to change how pharmacists are educated and how they operate in Nigeria, so she won't be afraid the next time a loved one has to go to the hospital.

Education for Nigerian pharmacy students includes reading books and learning to follow the rules, but their only hands-on experience comes during six weeks of rotations with different types

of pharmacies, including community, hospital and ambulatory. In the U.S., pharmacy students spend their final year of school gaining this sort of tactile training, Ndefo said.

Ndefo wants Nigerian pharmacy students to do six weeks of rotation in each of the three areas, and she wants to get them in front of patients. But she has encountered some push-back.

At first, Nigerian educators and medical practitioners told her that they weren't interested in changing the program. To help make her case, Ndefo joined the Nigerian Association of Pharmacists and Pharmaceutical Scientists in the Americas and became a member of the education committee. As part of that committee, she spoke with colleagues about giving pharmacy students more tactile experiences with patients.

The association supported her quest for change.

"We had witnessed first-hand how it was being done in Nigeria," Ndefo explained. "The organization stood behind, 'It's time to make it a little more clinical and a lot less science-y.'"

The Carnegie African Diaspora Fellowship Program also supported the cause. One of the program's goals is to fight the "brain drain" African countries experience when people with means leave the continent to pursue other jobs and opportunities.

Ndefo says it is unlikely that Nigerian-born pharmacists making six-figure salaries in the U.S. would choose to return to work in Nigeria, where they might make \$100 a month. Most people are just not going to do that, she said.

"We kept making our case and eventually, they realized that, at the end of the day, it's really all about getting the best care that we can to patients, especially in Nigeria, where if I don't have the money to see a doctor, I'm just going to go to the pharmacy and buy something," Ndefo said.

Ndefo wants to ensure that pharmacists in Nigeria know how to interact with patients, know what to look for and know when to say, "This is way beyond my scope, and you really do need to go see a physician."

The program officially launches this summer, and Ndefo has applied to be one of the teaching pharmacists. She should find out if she has been accepted in the next couple of months. Until then, she will continue to fine-tune the program.

When students graduate, she said, they will understand the practice of pharmacy and they will know how to be pharmacists.

"Our goal," she said, "is to empower them with the tools they need." ■

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# One Last Thing

*Conversations about end-of-life care can reduce stress, honor patients' wishes and save money*

BY RYAN HOLEYWELL

When it's their time to die, Americans overwhelming say they'd prefer to go at home, living their final days without complicated medical treatment. Sadly, that's not the reality for a significant portion of seniors: 1 in 4 elderly people die in the ICU.

In the absence of clear directions, doctors' hands are often tied and they're obligated to try to save the patient's life, even if such attempts are futile.

"Right now, the assumption is—unless the family objects—to move forward with the most aggressive path," said Trevor Bibler, Ph.D., assistant professor at Baylor College

of Medicine's Center for Medical Ethics and Health Policy.

But a growing number of experts say that's a huge problem and they are urging families and health care providers to prevent unwanted treatments. Doing so can honor patients' wishes, reduce stress on families and make death more comfortable. And there is another benefit with real implications: it can save a lot of money.

The U.S. spends about \$205 billion annually on medical treatment given to patients in the final year of life. Medicare spending in the final year of patients' lives accounts for about 25 percent of



all Medicare spending. One of the leading ways of reducing soaring health care costs is to encourage the use of advance directives or statements that describe the type of medical care patients want as they approach the end of their lives, when they may be too ill to express those wishes themselves. For example, advance directives allow patients to indicate whether they'd want to be kept alive using machines, feeding tubes or CPR, and can describe the sort of treatment for pain they may prefer.

Despite years of publicity campaigns about advance directives, however, uptake has been slow. A 2016 Kaiser Family Foundation survey found fewer than 1 in 4 respondents over age 65 had ever had a conversation with a health care provider about end-of-life care wishes. Only half of the people that age have spelled out their end-of-life medical preferences in a written document. Experts warn those numbers are too low.

Chuck Stokes, president and CEO of Memorial Hermann Health System, has seen firsthand what happens when families don't discuss the issue before a health crisis.

"As a former ICU nurse, I have watched many times health care professionals perform CPR on an 80- or 90-year-old individual, and they break half their ribs performing CPR on someone who probably didn't really want the CPR done, and in reality, actually caused patient harm," Stokes said.

Those situations are common. A 2010 Dartmouth study focused on three common end-of-life treatments: endotracheal intubation, feeding tube placement and CPR. These procedures can save lives, but they're unlikely to help patients with advanced chronic illness. In fact, they can actually prolong suffering. The study found that in some parts of the country, more than 15 percent of patients received those treatments in their last year of life. But many patients who are involved in their end-of-life care decline them.

"Education is the key," Stokes said. "When you educate people, they come to their own conclusions about how they want this handled."

So how can the country move the needle on education about advance directives?

Stokes and others praise the "Respecting Choices" initiative used

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at the La Crosse, Wisconsin-based Gundersen Health System. In La Crosse, nearly every adult has a plan for end-of-life care, leading National Public Radio to call the town “the best place to die” in America. The hospital system trains nurses and other professionals, as well as community members, to guide conversations about end-of-life care. The system stores those plans and can easily retrieve them when necessary. The model has spread statewide.

“We do not have a community-wide initiative like that in Houston,” Stokes said. “It’s a model I think could be replicated.”

Another benefit of the La Crosse model is it saves money. By eliminating treatment that patients don’t want, the town spends about 40 percent less on health care during the last two years of patients’ lives compared to the national average.

Other end-of-life experts emphasize the importance of teaching community members and doctors about end-of-life care. Elizabeth Strauch, M.D., medical director of Houston Hospice, said it’s essential to remove barriers that may prevent physicians and patients from having conversations about end-of-life care. The former are often rushed, while the latter may want to focus conversations on treatment of symptoms. “Each is waiting on the other to broach the subject,” Strauch said.

Houston Hospice is trying to change misperceptions about end-of-life care. Teaching people about the limitations of medical treatment is an important early step, so, too, is informing people that they have the ability to create an advance

directive. Providers should discuss the topic clearly and frequently. “We don’t just hand someone a piece of paper and say ‘fill this out,’” Strauch said.

Staff members discuss advance directives with neighborhood groups and church organizations in order to get people thinking about the need for end-of-life planning, with the goal of making those conversations as routine as discussions about financial planning and life insurance. Houston Hospice also trains Houston-area physicians on how to have conversations about end-of-life care with patients—a topic that generally isn’t covered extensively in medical schools.

Stokes, of Memorial Hermann, agreed that doctors often face end-of-life care conversations with trepidation. He said that can be helped by ensuring physicians work with a team that’s trained in palliative care and hospice, who can support the patient after having that difficult conversation. Today, the system he oversees has 14 physicians trained in supportive medicine and hospice. But, Stokes acknowledged, that’s probably not enough for a system as large as Memorial Hermann, especially as the baby boomer generation ages.

With enough training, doctors should be able to stop thinking of end-of-life talks as difficult, said Courtenay Bruce, former director of the Bioethics Program at Houston Methodist. But that requires training. “The conversations don’t need to be uncomfortable,” Bruce said. “It’s just that people don’t know how to have them.” ■

“As a former ICU nurse, I have watched many times health care professionals perform CPR on an 80- or 90-year-old individual, and they break half their ribs performing CPR on someone who probably didn’t really want the CPR done, and in reality, actually caused patient harm.”

— CHUCK STOKES

President and CEO of Memorial Hermann Health System



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# Texas Children's Hospital and Disney Partner on a New Experience

BY CHRISTINE HALL

The patient experience at Texas Children's Hospital is about to become a little more magical.

Walt Disney Company chairman and CEO Robert Iger and Texas Children's Hospital president and CEO Mark Wallace debuted a new initiative last month that aims to bring Disney's timeless stories to life within the walls of hospitals.

On March 7, against the backdrop of Texas Children's new Legacy Tower lobby, Iger outlined a \$100 million program that will roll out over five years at various children's hospitals around the world. But Texas Children's will be the first hospital to work with Disney on the program.

Texas Children's was a good fit to launch the initiative, Iger said, because the hospital is a global leader in pediatric care and the largest children's hospital in the country.

"We are committed to making a difference and reinventing the experience in children's hospitals all over the world," Iger said. "Hospitals can be a scary place for children, and we want to use Disney resources for bringing hope, happiness and laughter to the patients who have to be there."

Some of the new concepts, according to Walt Disney Co., include:

- A new system that allows patients to customize their hospital visit by choosing their favorite Disney stories and characters, which will surround them during their stay. The system will also unlock special elements to further personalize and enhance the experience, such as "enchanted" artwork that comes alive.
- Themed treatment and patient rooms featuring interactive murals of Disney stories, bed linens and gowns with each child's favorite

characters, and personalized in-room entertainment. Additionally, well-stocked mobile "play carts" will include Disney-themed games and activities for families.

- Disney first-run movies and television shows, available both in-room and in themed pop-up movie theaters in the hospital, along with other Disney entertainment options.
- Disney customer-experience training for doctors, nurses and staff. The Disney Institute, a part of Walt Disney Co. that provides professional development training focused on leadership, employee engagement and service, will create a customized program for health care professionals designed to foster a less stressful hospital experience that is patient- and family-centric.

Disney has put together a team of patient care experts, clinicians and "imagineers" to explore the

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“The partnership between Texas Children’s and Disney is a natural, magical fit. We have the ability to create a new paradigm in health care, and this is a shining example.”

— MARK WALLACE  
President and CEO at  
Texas Children’s Hospital

Left: Mark Wallace and Walt Disney Company chairman and CEO Robert Iger with Mickey Mouse and a young patient.

hospital experience and locate stress points for parents and patients.

“The partnership between Texas Children’s and Disney is a natural, magical fit,” Wallace said. “We have the ability to create a new paradigm in health care, and this is a shining example.”

While at Texas Children’s, Iger toured the

Family Center, where some of Disney’s iconic friends were on hand to meet the patients.

Wallace also presented Iger with a copy of an illustration Walt Disney made in 1952 after visiting Texas Children’s Hospital when it was under construction. ■

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[1] **RONALD McDONALD HOUSE HOUSTON** announced a new Board of Directors, including **SALLY BELL RUTHERFORD, MARILYN MOGAS, LESHA ELSENBROOK, GARY WILSON, LAWRENCE M. HANRAHAN, M.D., AGATHA BRANN** and **DEBBIE BAUER**.

[2] **ANDREW VALENZUELA** drops a dollar in a glass during Match Day at **THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON (UTHealth)**. All students feed the glass and the money goes to the final student matched, who has waited longer than anyone to find out where his or her residency will be.

[3] Makayla, a patient of **SHRINERS HOSPITALS FOR CHILDREN - HOUSTON**, uses a bow and arrow with her physical therapist, Alexandra, at an annual camp that allows patients to participate in various activities.

[4] Golfers, including **TOM OLINGER, BEV MELCHISEDECH, JUDY SMITH AND CHARLES H. DOLEZAL**, raised more than \$500,000 at the 20th annual Bad Pants Open, benefiting **TEXAS CHILDREN'S NEWBORN CENTER**, a level IV neonatal intensive care unit.

[5] **MARY ESTES, PH.D.**, professor of molecular virology and microbiology at Baylor College of Medicine, received two awards from the American Gastroenterology Association: the William Beaumont Prize and the Distinguished Mentor Award.

[6] **BRIAN ROE** has been promoted to vice president of tissue and communication center operations at LifeGift, the federally-designated organ and tissue recovery agency serving 109 Texas counties.

[7] **DONNA R. SMITH, RN**, has been promoted to vice president of organ operations for LifeGift.

[8] **JORDAN ORANGE, M.D.**, professor of pediatrics and chief of the section of immunology, allergy and rheumatology at Baylor College of Medicine, received the 2018 Edith and Peter O'Donnell Award in Medicine from the Academy of Medicine, Engineering and Science of Texas.



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Credit: Nos. 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14 courtesy photos; No. 2, Dwight C. Andrews, McGovern Medical School at UTHealth; No. 4, CJ Martin; No. 13, Paul Vincent Kuntz, Texas Children's Hospital; No. 15, Research!America





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[9] **SEAN BLACKWELL, M.D.**, professor and chair of the department of obstetrics, gynecology and reproductive sciences at McGovern Medical School at UTHealth and chief of service for obstetrics and gynecology at Children's Memorial Hermann Hospital, has been appointed president of the Society for Maternal-Fetal Medicine.

[10] **LYNN ZECHIEDRICH, PH.D.**, the Kyle and Josephine Morrow Chair in Molecular Virology and Microbiology at Baylor College of Medicine, was named a fellow of the National Academy of Inventors.

[11] **DAVID STALEY** has been promoted to vice president of human resources and organizational development at LifeGift.

[12] **WAYNE GOODMAN, M.D.**, professor and chair of the Menninger Department of Psychiatry and Behavioral Sciences at Baylor College of Medicine, was named a Distinguished Life Fellow of the American Psychiatry Association.

[13] Before his opening concert at the Houston Livestock Show and Rodeo, **GARTH BROOKS** visited the Child Life Zone at **TEXAS CHILDREN'S HOSPITAL**. Funded through the Teammates for Kids Foundation, which Brooks co-founded in 1999, the Zone provides a fun, safe environment for Texas Children's patients and their families.

[14] Student Appreciation Day at the **TMC LIBRARY** featured dogs from **FAITHFUL PAWS**, who visited with students.

[15] **PETER HOTEZ, M.D.**, dean for the National School of Tropical Medicine at Baylor College of Medicine, Baylor professor and endowed chair in tropical pediatrics at Texas Children's Hospital, was honored with the Research!America Award for Sustained National Leadership for his commitment to treating neglected tropical diseases that exist in developing nations as well as in parts of the United States.



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# April 2018

## 2018 EVENTS • REGISTER TODAY

Events hosted by the DeBakey Institute for Cardiovascular Education & Training

### NINTH ANNUAL

#### Re-Evolution Summit (MICS)

**APRIL 5-6** • [events.houstonmethodist.org/reevolution](http://events.houstonmethodist.org/reevolution)

Course Director: Mahesh Ramchandani, MD

### A WEEKLONG HANDS-ON WORKSHOP

#### Houston Methodist CMR

**APRIL 23-27** • [events.houstonmethodist.org/cmri](http://events.houstonmethodist.org/cmri)

Course Director: Dipan J. Shah, MD

### SECOND ANNUAL

#### Cardiology for the Non-Cardiologist

**JUNE 9** • [events.houstonmethodist.org/cardiology](http://events.houstonmethodist.org/cardiology)

Course Director: Alpesh R. Shah, MD

### SIXTH ANNUAL

#### Southwest Valve Summit

**OCT. 4-6** • [events.houstonmethodist.org/swvalve](http://events.houstonmethodist.org/swvalve)

Course Director: Colin M. Barker, MD

### INAUGURAL

#### Telemedicine in Cardiovascular Care: The Spectrum

**OCT. 9** • [events.houstonmethodist.org/telemedicine](http://events.houstonmethodist.org/telemedicine)

Course Director: Alan B. Lumsden, MD

### SECOND ANNUAL

#### Interventional Cardiovascular Imaging

**OCT. 15-16** • [events.houstonmethodist.org/ici](http://events.houstonmethodist.org/ici)

Course Director: Alan B. Lumsden, MD

### FOURTH ANNUAL

#### Adult Congenital Heart Symposium

**OCT. 27** • [events.houstonmethodist.org/achsposium](http://events.houstonmethodist.org/achsposium)

Course Director: C. Huie Lin, MD, PhD

Houston Methodist is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

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### THE FOLLOWING EVENTS ARE FOR TRAINEES:

#### Pre-Intern Training for Vascular Residents

**JUNE 6** • [events.houstonmethodist.org/pre-intern](http://events.houstonmethodist.org/pre-intern)

#### Cardiovascular Fellows' Boot Camp

**AUG. 10-12** • [events.houstonmethodist.org/2018cvbootcamp](http://events.houstonmethodist.org/2018cvbootcamp)

#### Open Aortic Training Course

**NOV. 1-2** • [events.houstonmethodist.org/2018openaortic](http://events.houstonmethodist.org/2018openaortic)

Course director for trainee events: Alan B. Lumsden, MD

### THE FOLLOWING EVENT IS FOR PATIENTS AND FAMILIES:

### SECOND ANNUAL

#### Houston Heart Failure Management Conference

**APRIL 7** • [events.houstonmethodist.org/hfmanagement2018](http://events.houstonmethodist.org/hfmanagement2018)

Course Director: Arvind Bhimaraj, MD

Contact [diket@houstonmethodist.org](mailto:diket@houstonmethodist.org) for further information.

4/7

#### Donate Life Texas

#### 2nd Chance Run: 5K and 1-Mile

Saturday, 8 a.m.

Sam Houston Race Park

7575 N. Sam Houston Pkwy. W.

Entrance fee starts at \$33 adults;

\$23 youth.

Registration: [2ndchancerun.org](http://2ndchancerun.org)

[ldavis@lifegift.org](mailto:ldavis@lifegift.org)

713-523-4438

4/11

#### Houston Venom Conference

Wednesday, 8 a.m. – 3:30 p.m.

Baylor College of Medicine

Cullen Auditorium

One Baylor Plaza

Tickets start at \$17.

Registration: [eventbrite.com](http://eventbrite.com)

[tropmed@bcm.edu](mailto:tropmed@bcm.edu)

713-798-1199

4/9

#### An Evening with a Legend

#### Honoring Shaquille O'Neal

Presented by

Texas Children's Hospital

Monday, 6:30 p.m.

Marriott Marquis Houston

1777 Walker St.

Tickets start at \$500.

Information and registration:

[waystogive.texaschildrens.org](http://waystogive.texaschildrens.org)

832-824-2945

4/23

#### Hot Topics in Aging

Monday, 8 a.m. – 5 p.m.

UTHealth

University Life Center

7440 Cambridge St.

Registration: via [uth.edu](http://uth.edu)

[shelby.boyer@uth.tmc.edu](mailto:shelby.boyer@uth.tmc.edu)

713-500-3921

4/26

#### Medical Bridges

#### Service Awards Dinner

Thursday, 6:30 – 9 p.m.

Rice University Cohen House

6100 Main St., Entrance 2

Tickets start at \$80.

Information and registration:

[medicalbridges.org](http://medicalbridges.org)

713-748-8131

4/10

#### U.S. Health Care:

#### Where Do We Go Next?

Discussion hosted by the

Texas Medical Center

Health Policy Institute

Tuesday, 5:30 – 7 p.m.

Third Coast Classrooms

6550 Bertner Ave.

Information and registration:

[healthcarenext.eventbrite.com](http://healthcarenext.eventbrite.com)

[rholewell@tmc.edu](mailto:rholewell@tmc.edu)

713-791-8809

4/28

#### UTHealth Stomp Out

#### Stroke Festival

Saturday, 9 a.m. – 3:30 p.m.

Discovery Green

Jones Lawn

1500 McKinney St.


Registration: [strokefestival.org](http://strokefestival.org)

[Sherri.A.Mccollum@uth.tmc.edu](mailto:Sherri.A.Mccollum@uth.tmc.edu)

713-500-6028

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