NEWS OF THE TEXAS MEDICAL CENT JUNE 2018 A Surgical Theater of Firsts p. 16 Thank You for Sharing, p. 5 Focus on Men's Health, pp. 24-35













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President and Chief Executive Officer William F. McKeon

 $\label{local_problem} \emph{Vice President of Communications} \\ \textit{Christen Bagley}$

Pulse Editor Maggie Galehouse mgalehouse@tmc.edu

Assistant Editor Cindy George cgeorge@tmc.edu

Staff Writers
Alexandra Becker
Christine Hall
Ryan Holeywell
Britni R. McAshan
Shanley Pierce

Photojournalist Cody Duty

NEWSROOM

713-791-8812 news@tmc.edu

ADVERTISING

Felicia Zbranek-Zeitman 713-791-8829 newsads@tmc.edu

DISTRIBUTION

Daniel Martinez 713-791-6136 distribution@tmc.edu

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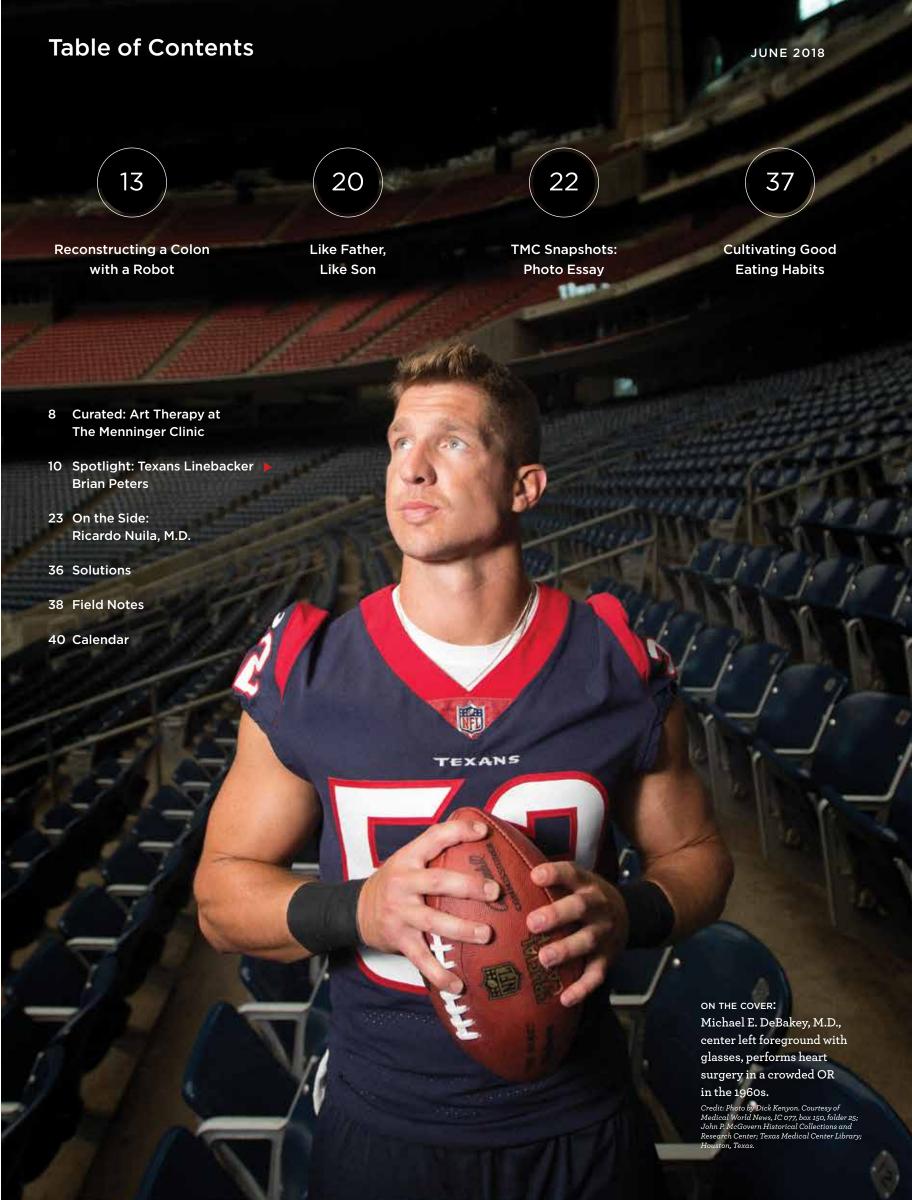
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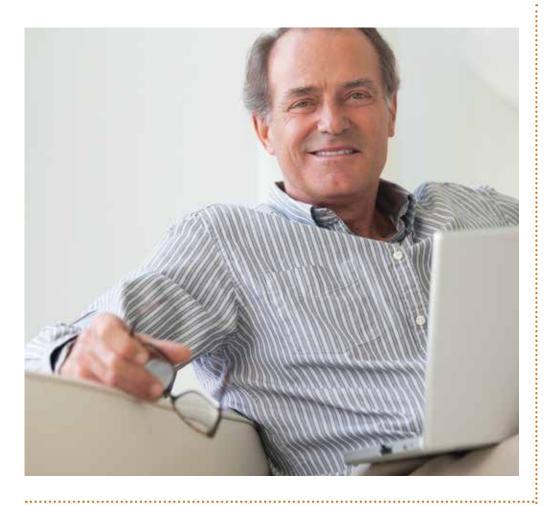
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Thank You for Sharing

It's getting easier to share health records in real time, but progress is slow

By Ryan Holeywell

uring a trip last summer, Sanjay Mishra, M.D., collapsed in the Philadelphia International Airport. The child psychiatrist recovered after a weeklong hospital stay for undiagnosed severe coronary disease. A 95 percent blockage in his main artery was cleared by cardiac catheterization.

On his way home, his wife, Seema Verma, who oversees Medicare and Medicaid for the federal government, asked physicians for Mishra's medical records. She wanted to take them to his health care providers in Indiana.

"The doctors looked a little uncomfortable and they said they would get back to me," Verma said during a speech to health information professionals in Las Vegas earlier this year. Eventually, she received five pieces of paper and a CD-ROM. After finding a computer that could read a CD-no easy task in 2018—Verma discovered the disc was missing several test results, including her husband's MRI.

The experience left Verma, one of the most powerful health care administrators in the nation, deeply concerned about the challenges of sharing patient records.

"I couldn't help but contemplate the disconnect between the genius of the medical system that used the latest technology and science to save my husband's life, but didn't have the tools available to just give me his medical records—which I thought would have been the simplest task out of all they had performed," she said at a conference of more than 40,000 health IT professionals.

In the greater Houston area, health leaders say we're on the verge of a major development for electronic health records accessibility. Greater Houston Healthconnect, which launched in 2010, has created the infrastructure and policies to allow the region's health care

providers to share patient data in real-time—even when doctors and hospitals use different systems to manage patient records.

"To do that is easier said than done," said Nick Bonvino, the nonprofit's CEO. Health care institutions, he explained, "were not built to do this."

So far, Greater Houston Healthconnect includes most Texas Medical Center hospitals and their suburban affiliates, as well as clinics, locally-based insurance plans, health districts and large physicians' practices in two dozen counties in southeast Texas. But until recently, the network had one serious shortcoming: it lacked two major regional health care providers, Memorial Hermann and HCA Gulf Coast, which, together, include more than two dozen area hospitals. However, in recent months, both have joined the network. Though neither is fully live quite yet (integrating records requires more than just flipping a switch, Bonvino noted), both should come online imminently, he said.

The stakes, federal officials and other experts say, are tremendous. For starters, an inability to share patient data in real time can jeopardize safety and lead to suboptimal care. A prolonged period without

medical information could prevent providers and patients from fully benefiting from the growing power of 'big data' and artificial intelligence-twin technological powers beginning to unlock the secrets of diagnoses and treatments.

Nearly 15 years ago, President George W. Bush announced a 10-year plan to create a network that would allow health care providers to share medical records, but that vision still hasn't fully come to fruition. The aim was for physicians to be able to share patient data easily to prevent medical errors, reduce costs, provide information during emergencies and improve care. The plan, announced in 2004, also envisioned giving patients the option to carry all their health information on a key chain—the modern smartphone hadn't been invented vet.

So far, regional health care information-sharing networks are making progress across the country, including here in Houston. Still, there are gaps in coverage: records aren't connected nationally and patients often lack full access to their own information.

(continued)



- SEEMA VERMA, MPH

Administrator of the Centers for Medicare and Medicaid Services



Seema Verma speaks during a news conference in 2017.



Ryan Walsh, M.D., is the chief medical information officer at UTHealth.

Even today, instances in which patients or physicians have to track down hard copies of records "are unbelievably the norm," said Hardeep Singh, M.D., a patient safety researcher at the Center for Innovations in Quality, Effectiveness and Safety, based at the Michael E. DeBakey VA Medical Center and Baylor College of Medicine.

Health care providers often order duplicate tests and imaging for data simply because electronic records are not available, several experts say.

"It's getting better, but I think it's going to take longer than we thought, and I think we aren't moving fast enough," Singh said.

Other experts who place more urgency on the current situation argue that a lack of communication and connectivity leaves patients and providers in a state of ignorance.

"Frightening," is the stark term used by Lamar Pritchard, Ph.D., dean of the University of Houston College of Pharmacy.

"A lot of patients believe we've been sharing this information all along," said Pritchard, a former board member of Greater Houston Healthconnect. "But when you speak to an ER doctor, and they're treating someone for a car accident in League City—and the patient lives in The Woodlands—the doctors will tell you they're practicing in the dark."

* * * * *

So why, exactly, has data sharing been such a challenge? Singh said the problem is more political than technical. In many instances, the culture of competition provides little incentive to share information. In other cases, the firms that maintain patient records for providers have been accused of resisting an integrated system.

In Houston, two major factors have slowed progress on sharing electronic health records, said Ryan Walsh, M.D., chief medical information officer for The University of Texas Health Science Center at Houston.

First, unlike many communities, there isn't a lone dominant health care provider in the greater Houston area. Many hospitals, physician groups and independent practices have autonomous electronic health data systems.

Second, Walsh said, there are fewer accountable care organizations, or ACOs, in southeast Texas compared with other areas of the nation. In ACOs, providers share medical and financial responsibility for providing patient care with the goal of limiting wasteful or unnecessary spending. Data sharing can reduce the cost of health care by eliminating redundant tests and procedures as well as helping providers get the information they need to diagnose and treat patients more effectively. In those cases, there can be a big payoff when providers invest in data-sharing infrastructure.

Would you use a bank that didn't have an app? It's going to be that way with health care. Eventually, the market will demand that you offer interoperability, or you're going to go out of business.

— RYAN WALSH, M.D. Chief medical information officer at UTHealth

Still, the economic factors that encourage sharing aren't as strong in Houston, he said.

"A lot of times, it takes financial motivation to do what's right, and doing what's right can be expensive," Walsh explained. "That financial motivation hasn't hit Houston as hard as it's hit the coasts."

Some have suggested more patient-centric solutions. If systems struggle to share the data, can patients serve as gatekeepers of their own records on smartphones or other portable data devices?

Most experts agree that this isn't the optimal solution. For starters, patients have not shown enthusiasm about accessing their medical information electronically. Health care providers report success if half of their patients sign up for access to data portals, Singh said.

Most critically, doctors don't want to rely on patients during an emergency.

In addition, health care providers must access information independently and in real time to provide the most informed care for individuals and groups. Storing health records with individuals would prevent doctors from benefiting from the broader insights that population data can provide. For example, software could theoretically analyze all patients who meet a certain profile nationwide and determine which treatments have the best outcomes.

So, what's the fix for electronic patient medical data accessibility? Experts agree that health care providers will only make seamless record-sharing a priority when patients and their employers—specifically, those employers who offer health insurance—demand connectivity. Eventually, providers that don't share data will be viewed as dated, unsophisticated and ineffective.

"Would you use a bank that didn't have an app?" Walsh asked. "It's going to be that way with health care. Eventually, the market will demand that you offer interoperability, or you're going to go out of business."

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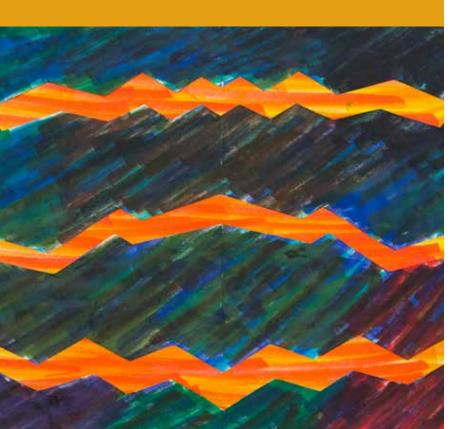
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CURATED

The Intersection of ARTS and MEDICINE

By Britni R. McAshan



ula Moore, a psychiatric rehabilitation specialist at The Menninger Clinic and a board-certified art therapist, combs through an oversized folder of her patients' latest work to share with colleagues.

She lays out brightly-colored abstract drawings and flaming red pieces made with chalk pastels, markers, crayons and pencils on the surface of a table. Moore presents each drawing and shares what each patient was trying to express when they made each piece.

"Art therapy is not about making masterpieces or things that you would necessarily hang on your wall," Moore said. "A lot of times the art people make is very personal and it deals with treatment issues."

Moore's evidence-based, mentalization art therapy groups at Menninger help her patients externalize their thoughts, emotions, feelings and relationships. Mentalizing helps patients connect with other people in their therapy group, to the therapist and even to family and friends.

Moore starts each session by giving her groups a prompt sometimes she asks them to express emotions in a landscape, or she might invite them to represent a relationship that is important to them.

"Artwork is an accelerant to that process because they don't expect to put as much on the page as they do," Moore explained. "With our words, we can filter and we can hide and we can do more image control verbally than we can visually with art materials and paper. I think sometimes it is unexpected for patients—they don't expect for it to be as powerful as it is."

In addition to her roles at Menninger, Moore is the founder of Art Therapy Houston, an organization that provides art therapy and counseling services to children, adolescents and families. She is also working with a group from the United Kingdom to publish research that focuses on the difference between how patients understand visually as opposed to how they understand verbally.



One of Moore's patients in Menninger's Compass Program, which serves individuals ages 18 to 30 who are struggling to manage the transition from adolescence to adulthood, found that art therapy unlocked feelings she had no other way of releasing.

"She came in with a lot of difficulties internally. She had a lot of difficulty expressing her emotions," Moore said.

The patient made her first drawing with chalk pastels, filling an 8×10 page with fiery blasts of red, yellow, orange and black, surrounded by a large black border.

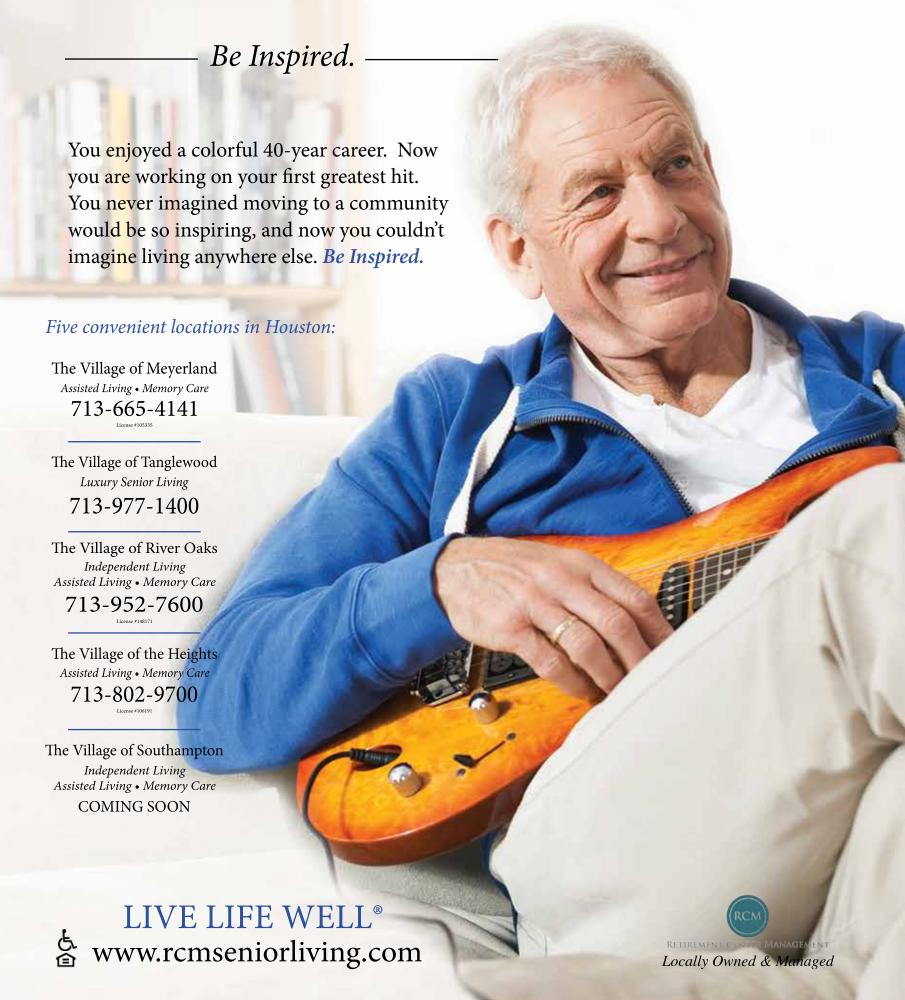
"She said that is how her anger feels, that it can destroy anything it touches and she is afraid of it and to let it out, afraid of it destroying her relationships and other people," Moore said. "I remember perfectionism was a huge thing for her, so the fact that she pushed herself to use a more loose, messy material was a big step."

After five weeks of working with the patient, Moore saw a shift in her art. Moore showed the group her patient's final piece—a drawing made with markers that also included lightning bolts she added, using collage.

"The collage, I think, is interesting because it shows depth, how she used the cut and paste method," Moore said. "It was consistent in what she was trying to represent—that there is complexity, that it's not all bad. She can have moments of light where she feels like herself and lively again, which is what these bolts represented, versus the dark, which still exists. She's still struggling, but the fact that she could recognize the moments where she could be fine, I think, is helpful."

Top Left: Kula Moore a psychiatric rehabilitation specialist at The Menninger Clinic and a board-certified art therapist.

Retired Geologist. Now Community Rock Star.



BRIAN PETERS joined the Texans in 2015. The 6-foot-4-inch linebacker, #52, played football at Northwestern University and took a circuitous route to Houston. He played for the Arena Football League, the United Football League and the Canadian Football League before reaching his ultimate goal: the National Football League. Peters, 29, spoke with *Pulse* about diet, mental discipline and giving back.

Q | What do you eat over the course of a day when you're training?

A | I'm 237 pounds, pretty close to my maintenance weight, give or take two pounds. My diet is pretty simple; I'm routine-based. I wake up, turn the oven on, and bake eight or nine pieces of bacon—uncured, so no nitrates or nitrites. I eat that, drink a cup of coffee and head in. Post workout is the only time I'll intake carbohydrates, so it's protein, vegetables, a little bit of fruit or a smoothie, and that's it. I eat a lot of red meat. I eat pork and salmon and cod. If it's a lower-fat fish, I'll cake a lot of ghee on it, which is a fattier butter.

Q Is there a name for this diet?

A It's kind of a few different diets—a ketogenic diet and a paleo diet kind of merged into one. To get into ketosis [a metabolic state in which the body does not have enough glucose for energy and begins to burn stored fats instead], you have to eliminate carbohydrates so your body starts to use the fat as energy. So I usually don't eat after 8 p.m. in order to slip into that in the morning. When I go full ketogenic, I don't do any carbohydrates. I have to increase my fat intake, add a few extra shots of extra virgin olive

oil, whatever I can do to make up that fat deficit. On keto, I'm very high energy but it's hard for me to maintain weight.

☐ Is there a certain calorie in take you're shooting for each day?

When I switched from safety to linebacker when I was transitioning from college through Canada and all those other leagues to get here, I counted calories. For me to gain weight, it's 5,500 calories and up, usually. There was a time where I had to get from 215 to 230-plus pounds in a span of six to eight weeks, so I was eating 7,200 calories a day. It was a chore, but it got me to where I wanted to be. Right now I probably sit between 3,800 and 4,400 calories a day.

What's your cheat food?

A | My big cheat food in Houston is Tiny's Milk & Cookies. I'm a sucker for cookies. I'm not a candy guy, really. If I am, I go dark chocolate-covered almonds or something like that.

Q Can you talk about the breathing exercises you do to help with mental focus? Is this something all the Texans are doing?

A Not really. It's something

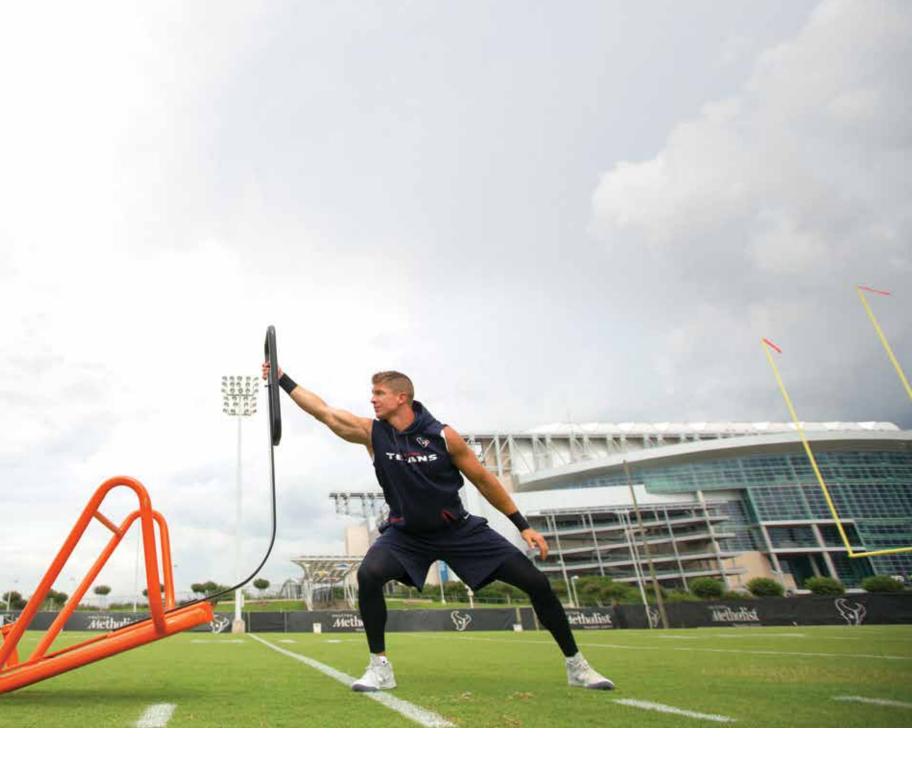


I took up off-season more than anything. I've experienced a little bit before with yoga and meditation. I used to work one-on-one with a yoga teacher who took me through guided meditation, and from there I got intrigued and curious about it. I am part of a group up in Minneapolis called the MindStrong Project, where we develop optimal performance for kids and other individuals. The president is one of my friends from high school, Harvey Martin. He teaches professional pitchers. One of the main aspects of his coaching is basically tying your breath to your mental performance. The breath controls the body. You learn to do a lot of breath holds with oxygen in your lungs, without

oxygen in your lungs. You start to learn that your body can work without actual oxygen in your lungs. The more you control your breath in a stressful state the more you can stay aware and perform optimally.

What kind of results are you seeing?

A I've seen some big jumps with it pretty quickly. I can hold my breath underwater for over three minutes now. My record is three minutes and nine seconds. Now, if anybody is reading this, don't try to do this alone. There's also performance breathing where you take longer inhales, shorter exhales, and you over-oxygenate your body. What you learn quickly



with the breathing coaching is that it's the body and the tissue that need oxygen, not your lungs. So when you hear guys huffing and puffing, you know they're not as efficient as they can be. Now, even when I'm out running and conditioning against my own teammates that are definitely in better running shape than me, I control my breath better than them.

I do the same thing in the cold tub. I go up to my neck in the cold tub and I do two different types of training. I jump in, go all the way under and then I come up and do 10 breaths, in through my nose. I try to drag those breaths out as long as I can. Now, my 10 breaths take anywhere from a minute, 15 seconds to a minute and 40 seconds. Then

you submerge and get out. It's a wake-up refresher. Then, for muscle recovery, I'll go up to my neck in the full tub for 15 minutes, three to four days a week.

Sounds like you spend a lot of time on muscle recovery.

A You'll see a lot of the most successful guys in our locker room take care of their bodies like professionals. It's kind of a pattern I've seen. The guys that are the most successful spend the most time on the right things. In the NFL, durability is more important than ability, sometimes. A lot of guys get opportunities because other guys break down.

Q You chose Northwestern for the athletics and the academics, and you left there with two degrees. So, you're smart, right?

A Well, football helped me get in. But Northwestern definitely has more strict standards as opposed to other schools. I have my masters in sports marketing and PR. My undergraduate degree is a mouthful: Learning and Organizational Change and Integrated Marketing Communications.

And that really means ...?

A Business consulting and marketing, basically. We didn't have a marketing major so we had to build from multiple schools to get this IMC certificate.

How old were you when you left Northwestern?

A: I red-shirted [when an athlete sits out of competition for a year and then gets another year to complete four seasons], so I got out of there at 23. And then the whole saga started.

Q | Let's talk about that saga.

A So when I got out of school, I got no calls on draft day. My college coaches networked me in for mini camp tryouts. I went to the Tampa Bay Buccaneers for two days and then the Chicago Bears for two days. Had good practices, didn't get signed. It was summertime, so I was working odd jobs in Chicago ...

(continued)

Q How odd?

A | Anywhere from babysitting to personal training to demolition. Then I got an opportunity to try out for an arena league football team, the Iowa Barnstormers out in Des Moines. I made that team for the last three or four weeks of their season, playing for \$300-a-week kind of deal.

Was it fun?

A It was a blast. Good people. If I'm getting to play football, I'm a happy man. So I then came back, and still no phone calls from the

NFL. My agent got me a tryout with a UFL team, the Omaha Nighthawks. The league actually doesn't exist anymore—they went under. So I went out there, made the team, and then they cut me after training camp. When I got released from there, I thought football was over. I went back to Chicago, worked the same odd jobs.

How did you end up playing football in Canada?

A | My agent kind of dropped me. He didn't want me to go to

Canada because you have to go for a two-year commitment. So I ended up emailing all the CFL guys. I had a highlight tape from Northwestern, I was Big 10. One team responded about 10 days later: the Saskatchewan Roughriders. They brought me up for practice squad. After that, I signed a contract for the following two years, 2013 to 2014. We won the Grey Cup in 2013.

Q You signed with the Texans in 2015?

A I got signed by the Vikings that February. I worked out with them all off-season and then they cut me and put me on practice squad for the first three weeks of season. And then the Texans signed me, so I've been here ever since.

lt's been a long and winding road. How do feel now that you've been in the NFL for a few years?

A I've played through all the leagues and I'm very grateful for the opportunity. But also, I'm trying to grow and add as much value to the team as I can. It's how I'm wired. I want to contribute. I try to bring the young kids along. because I think we've got an absolutely savage football team right now. We've got all the pieces and parts; we've got great chemistry.

Are you one of the older players on the team?

A I'm in the upper echelon—29 is definitely old in football years. It's like dog years. It goes quick.

O Do you think your history and maturity make you a better player?

A Probably the best thing for me was when I came out and did the two mini-camps, initially, with the Bucs and the Bears. I got a taste of it. I was like, 'I know I can play.' As much as working those odd jobs sucked, it got me some sense of grit. I'd work all day, take my workout at 9 p.m. at this bum boxing club, and then I'd

come home at midnight, eat and go to sleep. I had good friends that let me stay at their place for cheap.

☐ The Texans have a relationship Texas Children's Hospital. Have you spent time there visiting patients?

A I've organized a few visits, and our community director has sent me over a few times, too. I started visiting kids at the hospital when I was at Northwestern. Just the simple thing of giving a football or signing an autograph—it's huge. In 2009, when I was playing at Northwestern, I met this one kid, Jack Marshall. He went to sleep one night, woke up and told his parents his legs were burning. He got diagnosed with transverse myelitis [a rare neurological condition causing inflammation of the spinal cord and, in extreme cases, paralysis]. He was in a wheelchair when I first met him. We played video games—Madden. The next time I saw him, he was walking. He walks with a limp, had a lot of bullying issues and stuff. Eventually, I met his family. Then my family came with me to meet him. My mom and his mom hit it off. Stuff like that just reinforces reasons why you keep going. Motivating him helped motivate me. You see a kid who has all the odds stacked against him, who can't use his left leg properly, but he still couldn't have a more positive attitude as he approaches life.

You've played football in seriously cold weather in Illinois, Saskatchewan and Minnesota. And now you're in Houston, Texas. Would you rather play in the cold or the heat?

A | I played two games in -26 degrees in Saskatchewan. A practice outside one day was-41. So, I'm liking the comfort zoneanywhere between 32 and 70 degrees.

Brian Peters was interviewed by Pulse editor Maggie Galehouse. The conversation was edited for clarity and length



Reconstructing a Colon with a Robot

A minimally-invasive robot helps surgeons at Houston Methodist Hospital

By Shanley Pierce





Left: Carter Tomsu waits in the preoperative room for colon surgery at Houston Methodist Hospital. Right: Erik Haas, M.D., is the chief of the division of colon and rectal surgery at Houston Methodist Hospital.

n Fall 2013, Carter Tomsu was a Rice University freshman in the middle of his first round of finals when he began experiencing unusual bowel movements. The then-18-year-old had to use the restroom nearly 30 times a day, excreting mostly blood or mucus. He dropped more than 20 pounds in a few weeks.

His doctors diagnosed him with ulcerative colitis, or UC, an inflammatory bowel disease that causes the lining of the colon to develop ulcers that produce pus and mucus. This can lead to abdominal discomfort and frequent diarrhea.

"For the typical person who comes in seeking surgery for UC, the bathroom is like jail," said Eric Haas, M.D., chief of the division of colon and rectal surgery at Houston Methodist Hospital. "They can't get out of the bathroom. There's urgency. They go to the bathroom, get up and 10 minutes later feel an awful urge to go back. It's miserable because you always feel like you have to get back to the bathroom."

Tomsu joined the Rice football team as a quarterback during his freshman year, but his symptoms became too severe for him to continue to play. His condition affected his academic performance and caused his grades to drop.

In addition, he was hospitalized twice for Clostridium difficile colitis, an infection known as C. difficile that can cause symptoms ranging from diarrhea to life-threatening colon inflammation.

It was pretty alienating ... having to live at home and putting life on pause, but it's made me who I am and I have to be thankful. If I can do this, I can do anything.

— CARTER TOMSU

Colitis patient at Houston Methodist Hospital

He received fecal transplants to treat the infection.

Ultimately, the illness overwhelmed Tomsu. He made the difficult decision to withdraw from Rice and returned home to Austin to live under the care of his parents.

"I had incontinence so bad that I would always be looking for a restroom," said Tomsu, now 22. "Even if we're driving 15 minutes to a restaurant, I would be concerned about if something happened in the middle of the drive or at a sporting event and there's a line outside the restroom."

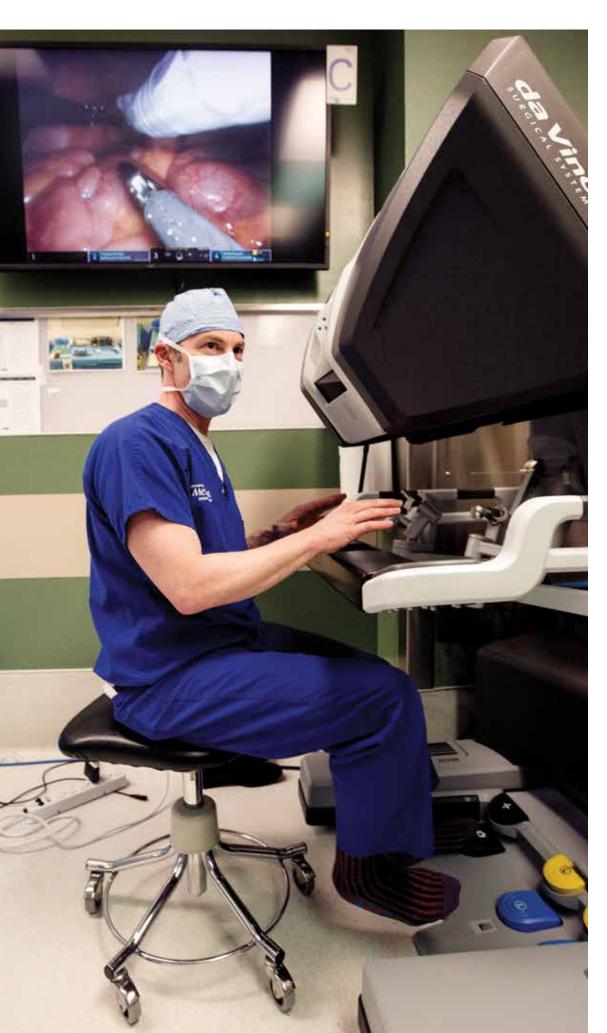
Tomsu participated in three clinical trials over the span of four years and tried medication after medication, but nothing worked. After a colonoscopy revealed precancerous polyps that would eventually develop into colon cancer, Tomsu and his family decided that a higher power was directing them to a surgical intervention that might solve the problem.

(continued)

"This was God telling me that it's time to have the surgery. We had been fighting for so long and left no stone unturned," Tomsu said. "I knew it was going to happen at some point in my life whenever some medication would stop working, but I never got any relief from medication. Surgery is the first relief I've felt in four or five years."

Rerouting the plumbing

Haas performed the "J pouch" surgery using the



da Vinci Xi surgical robot to reconstruct Tomsu's intestines. During the first stage, performed in January 2018, Haas removed Tomsu's entire colon and rectum through a tiny 1.5-inch incision in the belly button. The surgeon created a J-shaped pouch using the last few inches of the small intestine and attached that to the top of the anal canal. This effectively "reroutes the plumbing" without committing Tomsu to the lifelong use of an ileostomy bag, Haas said. During the second leg of the surgery in April 2018, Haas reattached both ends of the bowel.

"Traditionally, you'd cut the patient wide open, remove everything first and then do all the reconstruction," Haas said. "But with modern medicine and innovations, we do it all minimally invasively. Because we have to create this pouch and such specific technical considerations, the robotic technology helps us overcome a lot of barriers and has become our preferred approach to remove the colon ... and reconstruct the colon so that he can have normal function."

Colon reconstruction and the J pouch surgery have been around for years, but the robot-assisted, minimally invasive approach using the da Vinci Xi only recently emerged as an option. This approach boasts many advantages over traditional methods, including increased safety, a decreased chance of needing a transfusion and lower risk of surgical site infection. Most importantly, patients experience significantly less pain and, as a result, require fewer painkillers.

Considering the opioid epidemic sweeping the nation, Haas added, the ability to treat a patient's post-surgical pain using non-opioid medications is a major benefit.

"After colon surgery, you're in pain. We've noticed an amazing reduction in the need of opioids after surgery," he said. "In fact, most times we send patients home with just Tylenol or Advil. We don't even take the risk of getting them hooked on opioids."

Tomsu is expected to heal in six weeks. Then, he will have his ileostomy bag and stitches removed—finally ending his long battle with UC.

"Once you're done with surgery, you don't need to be treated any more medically," Haas said. "It cures the disease."

After the surgery, bowel movements are reduced from 30 daily to four to six times a day.

"[It] may seem like a lot, but to the patients, it's amazing because you can eat, have one or two movements, and be done until your next meal," Haas said. "It's a tremendous difference and the lifestyle is a 180-degree turn."

Haas handles the controls of the da Vinci Xi surgical robot to remotely reconstruct Tomsu's colon.

We've noticed an amazing reduction in the need of opioids after surgery. In fact, most times we send patients home with just Tylenol or Advil. We don't even take the risk of getting them hooked on opioids.

— ERIC HAAS, M.D.

Chief of the division of colon and rectal surgery

at Houston Methodist Hospital

Paying it forward

Tomsu was accepted to The University of Texas in Austin and, depending on his recovery, will resume his education in the summer or fall.

Although he once had the aspiration to play football professionally, Tomsu has decided "to protect my brain and become a doctor," he said. Inspired by his personal experience with physicians and caregivers, he now plans to go to medical school to become a pediatrician.

"This has made it more of a goal of mine to accomplish. I know I can empathize with someone



Haas positions the flexible arms of the da Vinci Xi surgical robot mounted above Tomsu. This minimally invasive approach has been proven to be safer than open surgeries and reduces the risk of infection and recovery time.

going through it," he said. "If I can make their journey easier, then mission accomplished."

Tomsu is eager to close this chapter of his life and proceed to his future, but he appreciates how the past five years have shaped his character. "It was pretty alienating ... having to live at home and putting life on pause, but it's made me who I am and I have to be thankful," Tomsu said. "If I can do this, I can do anything."



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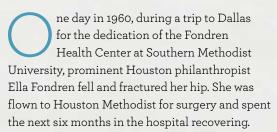




A SURGICAL THEATER OF FIRSTS

As Methodist prepares to open Walter Tower to patients, surgeons say goodbye to the Fondren-Brown OR

By Shanley Pierce



Perched in Room 807, which she later proclaimed her "favorite room," Fondren often looked out the window, but not to gaze up at the stars or contemplate what lay beyond the horizon.

Instead, she began to study an undeveloped parcel of land north of the hospital that she could see from her bed. Soon, she became consumed by an idea.

"We've got to build something on that property over there, and right away," she said, repeatedly, to Ted Bowen, the hospital's president.

Chief of orthopedic service, Joe King, M.D., and world-renowned cardiac surgeon Michael E. DeBakey, M.D., proposed an expansion to house orthopedic and cardiovascular research.



On Oct. 27, 1964, Ella Fondren and George R. Brown plunged their ceremonial silverpolished shovels into the parcel of land Fondren had admired from her hospital room.

This was the beginning of a new era in Houston Methodist's history.



The red line

In April 1968, the Fondren-Brown Cardiovascular and Orthopedic Research Center began opening in stages.

The center consisted of two adjoining structures: the Ella F. Fondren Building and the Herman Brown Building. The six-story Fondren Building occupied 165,000 square feet devoted to orthopedic and cardiovascular research, including 50 beds for

teaching and research. The neighboring fivestory Brown Building consisted of 108,000 square feet and housed clinical and laboratory areas for cardiovascular conditions. Over the next decade, additional floors were added to the buildings to accommodate more research facilities, cardiovascular inpatient care and medical services.

The center's pièce de résistance? Eight specialty operating rooms and a cardiac intensive care unit.

"To be able to do the surgeries that we were doing at that time was a real thrill. We were right on the cutting edge of the whole development of cardiovascular surgery," said George Noon, M.D., DeBakey's surgical partner of more than 40 years. "When I finished my residency and joined the faculty, we were doing more procedures than anyone else in the world."

The cardiac ICU was staffed with nurses specially trained by the surgeons. It was a relatively novel concept at that time, but DeBakey appreciated the importance of post-operative care.

DeBakey served in the U.S. Army's Office of the Surgeon General during World War II and had the vision to create a ward where surgical residents would train with the same exacting, militaristic approach under his civilian command. He suffered no fools and demanded unyielding excellence from his staff. His training program became famous.

(continued)

Facing page: Michael E. DeBakey, M.D., in the operating room in 1971.

Top: Ella Fondren, center, with DeBakey, right.

Bottom: George R. Brown, far left and Fondren, right, at the groundbreaking ceremony for the Fondren-Brown Cardiovascular and Orthopedic Research Center.

"Long before I knew that I was coming down to Houston, we all knew about the Fondren-Brown OR with a combination of terror and awe because it had a reputation as being a fearsome environment for surgeons to work in," said Alan Lumsden, M.D., who joined Houston Methodist in 2008 as the medical director of the Fondren-Brown OR and chief of cardiovascular surgery at Houston Methodist DeBakey Heart & Vascular Center.

"Most of the trainees were scared of Dr.

DeBakey when they came through the program,"

Noon said. "That's because, if you didn't get
things done the way they were supposed to get
done, he would strongly criticize you. But he was
able to get the most out of everybody who worked
for him."

DeBakey's residents were required to undergo a rigorous two-month stint in the cardiac OR and ICU, where they remained on call 24/7 without leaving the unit. Their confinement was demarcated by a physical red line that was taped around the unit.

"The red lines are famous in the [cardiovascular] world because the fellows who were going in the ICU rotation were shown the red lines and told that if they stepped across that red line in the next two months, they'd be fired," Lumsden said. "I assumed it was part of the urban legend about the place."

Accounts of DeBakey's ICU were passed down and shared cohort after cohort, generation after generation. To those who never endured his training, it was hard to tell fact from fiction. But it wasn't an urban legend at all.

Michael Reardon, M.D., a cardiac surgeon at Houston Methodist who trained under DeBakey in 1978, recalled only getting to see his wife and two baby girls on Saturdays when they visited him at the hospital to deliver clean socks and



Alan Lumsden, M.D.



George Noon, M.D.

underwear. He would see them for half an hour at a time and then go back to being sequestered in the ICU.

"There was a window at the back, or the front, of the ICU that would open about [an inch]. At about two in the morning, I'd go open the window and stick my nose out just to smell the air," Reardon said.

The training wasn't meant to be cruel. The purpose was plain and simple: to ingrain responsibility and accountability in surgeons.

"[Patients] can die at our hands, or they can get much better in our hands. If they die after you've operated, it is on you. You made a contract with that patient," Reardon said. "That's one thing that Dr. DeBakey taught us: it's attention to every detail because, if you don't and if they die, it's your fault."

A great leader

Because of DeBakey's intense approach, many who trained with him—including Noon and Reardon—became part of an elite league of surgeons who ascended to the highest rungs of their profession, pioneering new surgical interventions and making their own marks on medical history. But the price of admission was trial by fire in the Fondren-Brown OR.

"The great leaders in surgery aren't the individual surgeons," Reardon said. "The great leaders know how to spot talent and develop talent. Dr. DeBakey was a great organizer: He organized one of the greatest operating rooms and ICUs that allowed them to do these things. Then he spotted talent, organized that talent, and gave that talent not just permission, but incentive to achieve."

The OR was ground zero to many firsts, starting in its inaugural year. DeBakey and Noon performed the world's first simultaneous multi-organ transplant in August 1968. Noon led a surgical team that performed the first angioplasty and the first rotational atherectomy that same year.

But national momentum in cardiac surgery was plateauing around the time the center began construction. Interest in heart transplants waned due to poor survival rates from organ rejection. Between 1964 and 1980, no new major landmarks in transplantation were made in the country, but there was important progress in immunology research that helped lay the groundwork for future innovation. In particular, the development of cyclosporine—an immunosuppressive drug that prevents the body from rejecting kidney, heart and liver transplants—significantly improved transplant success rates and renewed hope in the field.

In 1985, surgeons performed the first heartlung transplant in Texas. In 1998, Reardon performed the first successful autotransplant for cardiac malignancy. In 2005, Lumsden and Reardon pioneered the first hybrid procedure in the country to repair a large aneurysm of the aortic arch, during which they lowered the patient's body temperature until it reached a deep hypothermic state to effectively stop the heart.

"If I see further, it's because I stand on the shoulders of giants. We didn't get here all on our own," Reardon said. "We got here because people worked really hard and went through a time when

The great leaders in surgery aren't the individual surgeons. The great leaders know how to spot talent and develop talent. Dr. DeBakey was a great organizer: He organized one of the greatest operating rooms and ICUs Then he spotted talent, organized that talent, and gave that talent not just permission, but incentive to achieve.

 $- \, {\tt MICHAEL} \, {\tt REARDON, M.D.}$ Cardiac surgeon at Houston Methodist Hospital



Michael Reardon, M.D.

mortality in heart surgery was common. They would fight through these tough cases, people would die, and they would pick themselves up and go back to work the next day. If they hadn't had that type of self-discipline and courage, we wouldn't be where we are today."

'The next great thing'

This summer, more than 50 years after Ella Fondren envisioned Houston Methodist's burgeoning future from her bed in Room 807, the hospital will open a gleaming new facility. Walter Tower features state-of-the art operating rooms that will replace the Fondren-Brown OR. After running 24/7 for half a century, the

Fondren-Brown OR will be demolished and turned into recovery rooms.

It's a bittersweet finale, considering the groundbreaking innovation and history-making surgical procedures that took place within those walls. But even DeBakey wouldn't let nostalgia impede progress. His sights were always set on the future.

"It's a little sad, but you know what? If you asked Dr. DeBakey, he'd be the first to move on to something better. He would move on in a heartbeat," Reardon said. "He was always looking for the next great thing. If the next great thing required him to get rid of the Fondren OR, he would have done it in a nanosecond."

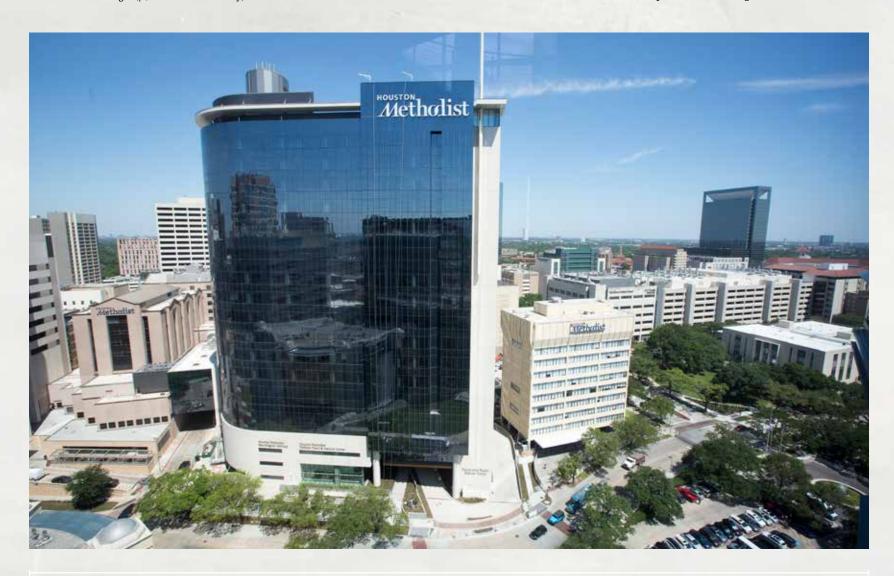
DeBakey died in 2008 at age 99. Reardon recalled talking to DeBakey a month just before his death.

"The guy was still talking about trials he wanted to do and things he wanted to achieve at 99. He was always moving forward," Reardon said. "He would not mourn the Fondren OR. He would be appreciative of what it has given everyone, but he would look forward to the future."

For Noon, who shares DeBakey's progressive outlook, the Fondren-Brown OR's legacy will live on as new innovations are made.

"Of course, I'm going to miss it," Noon said.

"But then you have to realize you have to miss it ...
to come up with other things."



WALTER TOWER

n July 2018, 50 years after the Fondren-Brown center opened, Houston Methodist Hospital will premiere the Paula and Joseph C. "Rusty" Walter III Tower. The 21-story building will boast 366 patient beds, 18 high-tech operating suites for neurosurgery and cardiovascular surgery, two intensive care floors, six acute care floors and a helipad.

"The OR is as modern as modern

can be," said Alan Lumsden, M.D., who joined Houston Methodist in 2008 as the medical director of the Fondren-Brown OR and chief of cardiovascular surgery at Houston Methodist DeBakey Heart & Vascular Center. "I've described what is going to open as the most technologically advanced operating rooms in the world."

Thanks to a new joint venture

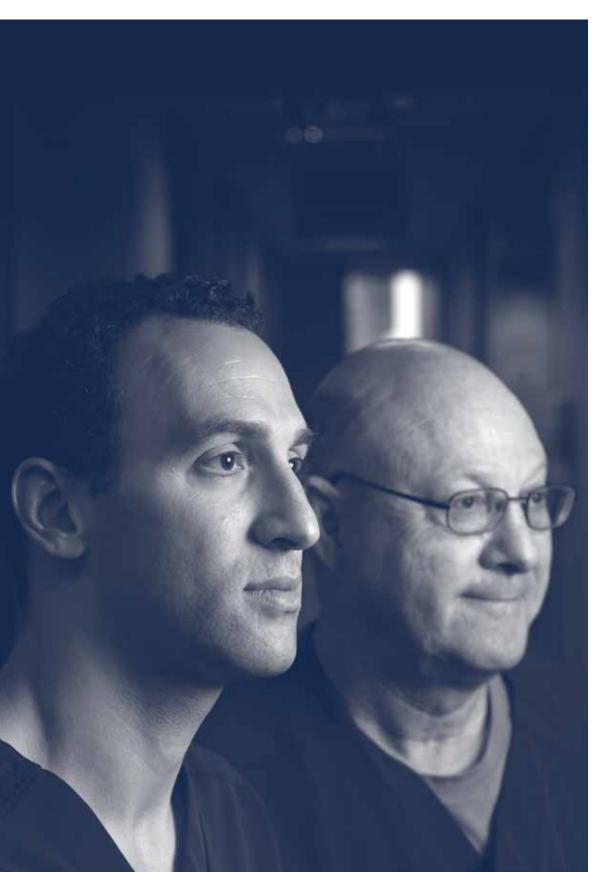
between Houston Methodist and Siemens Healthineers, five of the operating rooms will be "hybrid" operating rooms equipped with the latest technology in medical imaging. By incorporating medical imaging and diagnostic tools—such as angiograms, magnetic resonance imaging and computed tomography—with 3-D and augmented reality technology in the operating room, surgeons

will be able to perform safer, more effective procedures.

As Houston Methodist continues to compete with major hospitals around the country, the move into the modern age of digital technology is an important step in the hospital's evolution.

LIKE FATHER, LIKE SON

For some TMC employees, medicine is a family affair



David Goldfarb, M.D., and father Richard Goldfarb, M.D.

Richard Goldfarb, M.D., will always remember one of the first surgeries he performed with his son, David Goldfarb, M.D.

The urologists regularly perform a procedure in which Richard, 65, removes a patient's bladder, and David, 36, builds an artificial one.

"The first time we did that, David called me and said 'I'm finished. Do you want to come take a look at it?" Richard recalled. "I told him, 'I have total confidence in you. There's no reason for me to come and look.' That was very exciting for both of us."

The father and son, who practice together at Houston Metro Urology in the Texas Medical Center, said their working relationship is successful because of that mutual respect.

David has followed a career path strikingly similar to that of his father: Both attended Baylor College of Medicine and became urologists. They work together in the same office of the same practice, and both teach at Baylor College of Medicine and Houston Methodist Hospital.

But father and son say David chose his path on his own

"To me, doctoring is a special thing," Richard said. "It's not something you can encourage a child to do. It has to be in his heart."

But once David chose to become a doctor, his father helped with training and served as a mentor during his residency. "As cool as it is for anyone to do a big surgery and take out a kidney, and you're holding it in your hands after it's out ... it's even cooler to look up and see your dad smiling at you," David said.

David said he chose to enter urology, like his father, because the specialty allows doctors to offer patients immediate relief. For example, after removing a kidney stone, the patient feels better right away, David said.

The Goldfarbs also highlighted their role in treating patients with cancer. Prostate cancer is a leading cause of cancer death in American men, and three of the cancers urologists address—prostate, kidney and bladder—represent a large portion of the cancers men face.

Urology is a unique field because the physician makes the diagnosis, provides the treatment, and often continues to care for the patient for years because conditions like cancers and enlarged prostate require lifelong follow-up, Richard said.

"For other doctors, it's a minus, but for us it's a plus," he added.

After 35 years of practice, Richard is transitioning some of his patients to David. "The patients' comfort in doing that has been unbelievably gratifying," Richard said. David has even treated the children of some of Richard's patients.

Today, David noted, their different ages reflect the patients they see. The elder Goldfarb often treats patients in their 60s and 70s who have trouble urinating, while the younger Goldfarb often sees young adults who want to address fertility challenges.

Once he decided to become a urologist, David said, there was no question about whether or not he would work with his father. The opportunity that presented itself was too perfect.

"[We had] the unique opportunity to work for ourselves, to be our own bosses, and to be partners together," David recalled. "I always thought this was the best choice."

— By Ryan Holeywell

Todd Siff, M.D., and father Sherwin Siff, M.D.

hen Sherwin Siff, M.D., offers to lock palms and arm wrestle with his son in a display of family unity, you can tell the two men have a playful relationship.

"He's always right," said Todd Siff, M.D., who followed his father into medicine and chose the same specialty. "When you meet my dad, he is infectious. His passion exudes."

Not only are father and son both orthopedic surgeons at The Bone & Joint Clinic of Houston, which is affiliated with Houston Methodist Hospital, they live in close proximity, play tennis with each other weekly, vacation together and, occasionally, carpool to work.

Todd, who specializes in the hand and upper



extremities, is the middle of five children and the only one to go into medicine. His three sisters and brother became lawyers.

Working together feels natural to the Siffs. In fact, Todd, who is also an assistant professor of clinical orthopedic surgery at Methodist's Institute for Academic Medicine, started collaborating with his father when he was a child and Sherwin worked as a licensed plumber.

"Ever since Todd was a little guy, he was my intern, and he would go around with me everywhere, and we would fix things together," said Sherwin, a joint specialist.

"Orthopedics is a lot of carpentry—working with tools and putting things back together—and he was super-good as a repair man. So, unbelieving and unthinking, I probably got him into enjoying mechanical stuff, and he has done well with it."

A particularly inspiring moment came during a family vacation by a lake when Todd was in high school. As the Siffs were preparing to go out in the water, another vessel sped to the shore with someone whose leg had been damaged by a boat motor.

"I watched my dad take charge and help to piece this poor person back together and get him transferred to the hospital," said Todd, whose father was a physician by then.

Instead of going into medicine right away, the younger Siff studied art history at the University of Pennsylvania while also exploring business and law. At one point, he denied any interest in becoming a physician.

Nevertheless, the doctoring "bug" stuck with him, Todd said. While at Baylor College of

Medicine, he didn't choose a specialty right away, but went on rounds in different areas to see which one he liked the most.

When Todd told Sherwin that he planned to go into orthopedics, Sherwin said he was "warm and fuzzy on the inside," but on the outside, he wanted Todd to make the final decision.

"This is a lifetime occupation," Sherwin said. "I didn't want to be the one to give the wrong advice, because if he didn't like it, he wouldn't be happy with me and I would be less happy with myself."

Ultimately, Todd decided that if he was going to stay in Houston, he wanted to work with his father.

"Some sons say they can't work with their dads, but not me," Todd said. "In a family full of lawyers, there is an additional bond there that helps fortify our relationship and cement it in a fun way."

Sherwin agreed, joking that at family get-togethers, he and Todd talk medicine and the lawyers argue.

Father and son also worked together at CHI-St. Luke's. While there, their offices were two doors away from each other. Their request when they joined The Bone & Joint Clinic? To have offices side by side.

"One of the most unpleasant things is when Todd is on vacation, and I don't see my son working," Sherwin said.

"And vice versa," Todd said. "I don't take vacation that much, so I won't disappoint you."

— By Christine Hall

TMC SNAPSHOTS

A photo essay by Cody Duty

#TMCSnapshots









A | Conor Courtney, project lead for BioRhythm at Science Gallery Dublin, explains one segment of BioRhythm: Music and the Body, a traveling exhibit at The Health Museum through July 31. B | A man walks in front of reflections on the water wall of the John P. McGovern Texas Medical Center Commons building. The water was turned off due to freezing temperatures. C | Peyton Richardson holds a photo taken during her treatment at Texas Children's Hospital for acute lymphocytic leukemia. D | A surgeon at Memorial Hermann-TMC looks at a endoscopic view of a sinus surgery.

How TMC Employees Spend Their Spare Time

hen asked whether he'd rather be known as a famous doctor or a famous writer, Ricardo Nuila, M.D., doesn't hesitate.

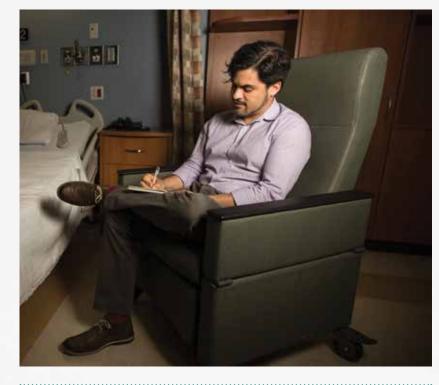
"Easily, writer," the Houston native said with unwavering conviction. "Most people think of great doctors as the ones coming up with great diagnoses. I just don't see it like that. That doesn't motivate me."

Instead, Nuila is driven to share the stories of his patients and their struggles. As a physician at Ben Taub, Houston's largest safety net hospital, Nuila treats individuals from some of the most vulnerable, indigent and underserved populations in the city, and has written extensively about medical ethics and health disparities within the health care system. His essays have appeared in Texas Monthly, Virginia Quarterly Review, The New York Times Sunday Review, The New England Journal of Medicine and at theatlantic.com and newyorker.com.

Nuila co-directs the Narrative Medicine program at Baylor, serves as a faculty member in Baylor's Center for Medical Ethics and Health Policy, and is a professor in the Medicine and Society program at the University of Houston Honors College. His upcoming book, *The Poor Unfortunates*, outlines some of his experiences at Ben Taub and argues for a national safety net system. The book is scheduled for release in 2020.

After graduating from
Georgetown University in 2000 with
his bachelor's degree in English,
Nuila set his sights on a medical
career as an orthopedic surgeon in
hopes of becoming the next Houston
Rockets doctor. He was accepted to
Baylor College of Medicine for medical training, but he couldn't deny his
love for the written word.

He found himself torn between his two loves. He could either become a doctor like his father, uncles and grandfather, or pursue a career in writing. In his heart of hearts, he knew he wanted to write.



NAME: Ricardo Nuila, M.D.

occupation: Internal medicine physician and hospitalist at Baylor College of Medicine and Ben Taub Hospital

INTEREST: Narrative medicine

"I told one of my script writing professors that I was thinking about giving away my spot at Baylor to become a writer. He said, 'You'd be nuts to do that,'" Nuila recalled. "He told me, 'You can go to MFA school and learn technique, but where are you going to get your stories?""

Nuila came to the realization that his two loves were not, in fact, mutually exclusive.

"Everything I do in writing helps out with me being a doctor. Everything I do being a doctor helps out with my writing," Nuila said.

As a physician, his true calling turned out to be internal medicine, a field in which he could channel his inner Sherlock Holmes.

"I like the process of figuring things out and thinking about the medical systems," Nuila said. "Internal medicine is detective work. It's this idea that you can put these different facts and exam findings together to figure out what's going on, and then parlay that for the patient into a treatment plan."

Another part of his job as a doctor and a writer, he said, is to help people understand medicine without all the medical jargon that can inhibit communication between doctors and patients. It's an important undertaking, he said, especially when lives are on the line.

Nuila follows the same line of inquiry at a patient's bedside as he does when developing a character for a story. After all, his patients are his muses.

"I'm looking for things beneath the surface," he said. "It's not just what people tell you; it's why are they telling me this? In literature and writing, you're always trying to delve deeper into that."

The purpose of Men's Health Month, celebrated each June, is to heighten awareness of preventable health problems and encourage early detection and treatment of disease among men and boys.

Intimacy After Cancer Treatment

A penile implant helps one couple stay close

By CINDY GEORGE

obert Fisher Jr. kept his longtime vanity project, a 1983 Chevrolet Monte Carlo, in storage for 17 years.

A few months ago, when he finally had the muscle car delivered to his southwest Houston home, Fisher was amped for his latest rebuilding project.

"I took the gas tank out, cleaned it, put new gas in it, topped off all the fluids and put a battery in it," Fisher said. "I stuck my arm in the door to crank it—one hand with the ether and took a little shot at the carburetor—and it fired up. I couldn't believe it."

The high-performance car wasn't the only thing he's been reactivating.

Fisher was diagnosed with bladder cancer in August 2016 by Run Wang, M.D., the Cecil M. Crigler, M.D. Chair in Urology at The University of Texas Health Science Center at Houston. His his bladder was removed in February 2017 by Neema Navai, M.D., an assistant professor of urology and a bladder cancer surgery specialist at The University of Texas MD Anderson Cancer Center.

Fisher's recovery over the last year has included the challenge of recouping intimacy with his wife.

"When they gutted me, I lost some specific ability," he said. "I'm 56. I'm not that old. My wife is a little younger than me, so we had a certain part of our lifestyle that was missing. So, we tried various methods to regain that. Pills. There's an injection. Neither gave the kind of fulfillment that, you know—it just didn't work."

Giving up wasn't an option for the couple.

"For us, that's a huge part of our relationship," Erin Fisher explained. "I said: 'We'll do whatever we have to do to get us back where we were before."

Robert Fisher Jr. reflects on his recent rebuilding efforts in the back yard of his southwest Houston home beside his 1983 Chevrolet Monte Carlo. In the last two years, he has survived bladder cancer and regained intimacy with his wife through a penile prosthesis. He also renovated his house that was flooded in Hurricane Harvey and began restoring his 35-year-old muscle car.

The couple opted for a penile implant and Wang performed the surgery in September 2017.

Robert experienced pain through the healing process and during initial attempts to reignite a physical relationship with his wife.

"It takes a while—I would say a few months before you start cooking. It's like using new equipment in your kitchen. At first, it's kind of scary,"



said Erin, a traveling PET scan technician for Memorial Hermann. "I think it's really important to talk to your partner about what works and what doesn't work."

She also encouraged couples to remain steadfast early on.

"Don't give up," she said. "There were times, we were like: 'Is this really it for us?' But we kept going with it and it worked out—and it's off the charts."

Re-establishing confidence

Although many survivors of gynecological or urological cancers face the challenge of physical intimacy with resignation and silence, there is hope.

The consequences of altered sexual function after cancer treatment can be devastating to relationships and mental health, said Wang, who is a



professor of urology at MD Anderson and also practices at Memorial Hermann-Texas Medical Center.

"We have patients that lost their erectile



Run Wang, M.D.

function after prostate cancer or bladder cancer or rectal cancer treatment, then lost their partner as well because they could not engage in sexual activity. They also get depressed," he said. "Not only do we help the patient's ability to engage in sexual activity, but we re-establish their manhood and re-establish their confidence."

Wang is a reconstructive surgery specialist whose mostly performs penile and urethra reconstruction to restore function. He is part of an elite group of physicians worldwide who perform at least 100 penile implant surgeries annually. In May, he ended a two-year run as president of the Sexual Medicine Society of North America.

According to Wang, a penile prosthesis provides the most effective and reliable results for patients with erectile dysfunction, in comparison to injections or to medications such as Viagra and Cialis. Recent research from the journal Andrology and other sources also reveals that the prosthesis provides more satisfaction for patients and partners.

Wang emphasized that a large part of a patient's success with an implant is the partner's presence, involvement and support—which is demonstrated by the Fishers' use of "we" and "our" while discussing their experience.

Wang believes the issue demands transparency and engagement by patients, physicians and partners to achieve the most positive outcomes.

"I will start a conversation with the patient about the therapy and we will talk about the pros and the cons regarding sexual function, ejaculation, relationship, incontinence and libido," he said Otis Brawley, M.D., chief medical and scientific officer for the Atlanta-based American Cancer Society and an expert in prostate cancer health outcomes, also encourages patients to initiate conversations with their oncologists before cancer surgery about the consequences of treatment and to invite their partners to those appointments.

"Some of these issues that we end up talking about are things that would make Stormy Daniels blush," Brawley said. "Most men don't realize that if you get a radical prostatectomy, the penis is probably never going to get as hard as it used to. You need to be involved and discuss your options with that health care provider. Most men should get a second opinion."

If a physician doesn't raise the issue early in the treatment process, patients should request access to a sexual medicine service or counseling, Brawley and Wang said.

One resource for patient information was created by Leslie R. Schover, Ph.D., a Houston clinical psychologist. She founded Will 2 Love, a webbased information and self-help portal designed to address sex and infertility issues related to cancer treatment. Users can access information privately and receive personal telehealth services with a professional counselor.



Leslie R. Schover, Ph.D.

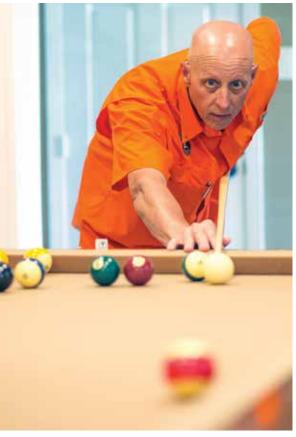
Will 2 Love
was among the
first startup
companies
selected for the
inaugural TMCx
accelerator
class in 2015.
The concept
sprang from
Schover's career

as a clinician and researcher. She is a former staff psychologist at the Cleveland Clinic Foundation and retired in 2016 as a professor of behavioral science from MD Anderson to work full time with her company.

(continued)

1'm 56. I'm not that old. My wife is a little younger than me, so we had a certain part of our lifestyle that was missing. So, we tried various methods to regain that. Pills. There's an injection. Neither gave the kind of fulfillment that, you know—it just didn't work.

- ROBERT FISHER JR. Bladder cancer survivor



After bladder cancer treatment and minimal success with sexual function solutions, Robert Fisher saved his physical relationship with his wife of five years, Erin, with a penile implant.

Although Will 2 Love was conceived as a consumer-facing portal, Schover's ambition for the company now includes licensing to hospitals.

"Often, people just didn't get timely, accurate information," Schover said. "We have a program for men and a program for women and each of them has information on all different types of cancers and treatments and what they do to sex and fertility."

'Bring happiness back'

These days, Robert Fisher has converging comeback stories about rebuilding a full life, a beloved car and a water-logged residence.

A few years after graduating from Westbury High School in 1980, he landed his first dream job working as a mechanic with A.J. Foyt Racing, the organization run by the legendary racing driver of the same name.

Fisher received formal training as a maintenance mechanic from Rice Aviation in 1990, then began working in oil fields offshore and internationally. For the last four years, he has been a sales executive with ABCO Subsea.

Since the implant surgery, Fisher and his wife have had the added stress of renovating their Westbury-area home, which flooded last year during Hurricane Harvey. The cancer survivor's muscular arms hint at his continued heavy lifting on projects and other work with his hands.

Cancer developed in some pockets of his lungs, so he went back on chemotherapy a few months ago. Bald as the 8-ball on his pool table, Fisher strives to take his mind off the treatment and to keep his energy high. He made some upgrades to his pickup truck and continues to work part-time.

"So far, everything has worked well. I feel very blessed and I'm sure every day I get is a gift and I'm happy I have it," Fisher said, explaining further why he was willing to speak publicly about his experience. "If I can't pass on anything, I've wasted everything. If this can help others, I'm happy as can be."

Having replaced the hood on his beloved Monte Carlo, which has traveled less than 60,000 miles, he now hopes to spend quality time with his wife and fellow classic car enthusiasts at shows and other gatherings across the country.

Robert and Erin Fisher celebrated five years of marriage in May.

"I had an opportunity to bring happiness back to her and that was the most important thing to me," he said. "Honestly, it's better than before."





Ashford Gardens

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When Breast Cancer Strikes Men

Research related to male patients is limited

By Shanley Pierce

fter Ron Lauve's mother and niece battled breast cancer in the 1970s, the Pearland resident had at least three doctors urge him to "keep an eye out" because of his family history. He took that advice and, from time to time, performed a breast self-exam.

"Of course, you hear so much about female breast cancer—rightfully so—that I really didn't think about it too much. Every now and then, I'd think about it and say, 'Well, let me just check,'" Lauve, now 79, said.

His vigilance paid off. In June 2012, shortly before his 73rd birthday, Lauve discovered an abnormal, painless lump under his right breast, just behind the nipple. It was a telltale sign of some sort of issue, but he decided to wait to see a doctor. Two weeks later, while working in the garden with his wife, he suddenly felt a sharp pain where the lump was located.

"I didn't have any problems, but then all of a sudden one day I had a big problem," Lauve said.

Lauve went to see Richard Ehlers, M.D., a breast surgical oncologist at The University of Texas MD Anderson Cancer Center, to investigate the growth and run a few tests. Lauve's mammogram confirmed what he suspected: He had stage 2 breast cancer.

On July 3, 2012, Lauve underwent a mastectomy to remove the lump from his right breast.

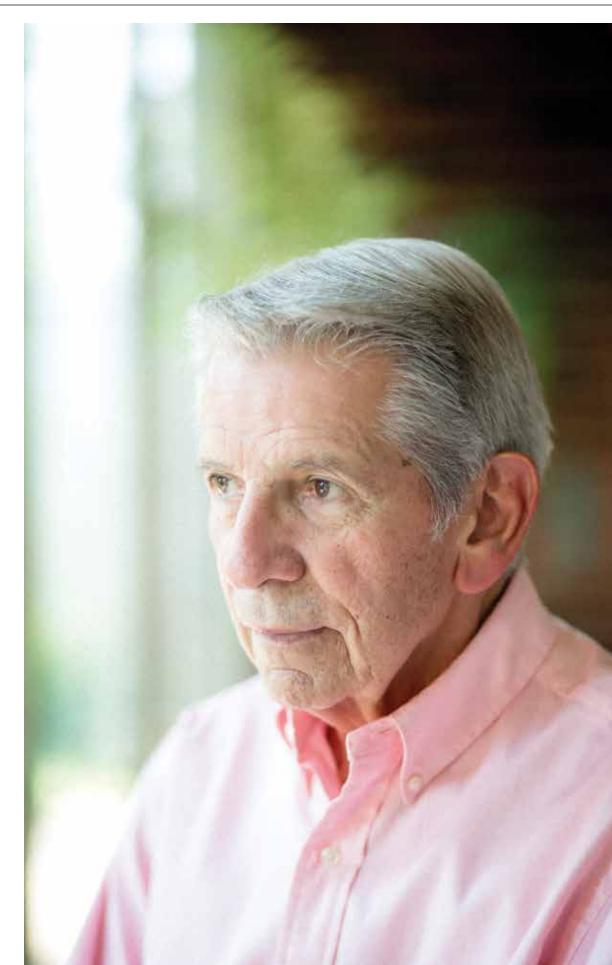
"I was determined from the outset that this was not my time to go," Lauve said. "I had enough confidence that I could live with it. I mean, I could overcome it, not necessarily cure. ... That's what you hope. But I knew I had enough fortitude to hit this thing head-on."

He underwent six months of chemotherapy and experienced all the symptoms associated with treatment, including losing his hair and dealing with neuropathy on the right side of his body.

After his surgery and chemotherapy, he began a five-year adjuvant treatment plan with tamoxifen, starting in January 2013. Tamoxifen, an anti-estrogen drug used widely in women with estrogen receptor-positive breast cancer to decrease the risk of recurrence, has been shown to be effective in men, as well.

(continued)

Ron Lauve had a mastectomy in 2012 after being diagnosed with breast cancer.



"I told my wife, 'You know, after the breast cancer surgery and the hot flashes [from tamoxifen], I'm beginning to think I'm moving more toward being a woman than I am a man," Lauve quipped.

But through it all, Lauve didn't let his diagnosis make him feel any less of a man.

"With a woman, breast cancer is really an attack and a siege upon her womanhood. That is a tremendous thing to have to deal with," Lauve said. "I was still the guy that I had always been, knowing full well I may be a different person at the outcome and later years, but it was not an attack on my manhood. I didn't view it that way at all."

1 in 1,000

One man in 1,000 will develop breast cancer, whereas 1 woman in 8 will be diagnosed with the disease. The American Cancer Society estimates approximately 2,550 new cases of invasive breast cancer will be diagnosed in men in 2018 and about 480 men will die from the disease this year. Currently, male breast cancer accounts for approximately 1 percent of all cases of breast cancer.

"A lot of the [male] patients aren't even aware that they could get breast cancer, or they don't think of themselves as having breasts," said Sharon Giordano, M.D., a breast medical oncologist at MD Anderson. "That often can lead to delays in diagnosis and treatment, because they're



Sharon Giordano, M.D., is chair of the department of Health Services Research in the division of Cancer Prevention and Population Sciences at MD Anderson

not aware that it's even a possibility."

Giordano, who also serves as the chair of the department of Health Services Research in the division of Cancer Prevention and Population Sciences at MD Anderson, has been studying male breast cancer for 20 years. Currently, a third of the patients she sees are men.

The precise cause of breast cancer is not well understood. However, researchers have identified genetics (including BRCA1 and BRCA2 mutations), age, family history and radiation exposure as risk factors for breast cancer in men.

Higher levels of estrogen can also play a role in tumor growth. According to Giordano and multiple studies, more than 90 percent of male breast cancers were estrogen receptor-positive.

"Most of them have estrogen receptor-positive tumors, which, again, is surprising to a lot of [men], but men have estrogen, and most of these tumors are driven by hormones," Giordano said.

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patients aren't even aware that they could get breast cancer, or they don't think of themselves as having breasts. That often can lead to delays in diagnosis and treatment, because they're not aware that it's even a possibility.

- SHARON GIORDANO, M.D.

Because male breast cancer is considered an "orphan" disease due to its rarity, there's a paucity of research dedicated to it. Most treatments for male breast cancer are derived from what is already known about breast cancer treatment for women, but illuminating gender-based similarities and differences will lead to better, more effective therapies.

In partnership with the European Organisation for Research and Treatment of Cancer, Giordano and other researchers are part of an international effort to create a consortium of investigators from institutions around the world to study the biology and potential treatment options for male breast cancer.

"In the past, most of the research [involved] one institution writing up their experience of 15 patients. There weren't big enough numbers to make meaningful conclusions," Giordano said. "Through this, we first were able to get tissue specimens for all the men who had come through these institutions in the past 20 years."

Giordano and the consortium hoped to enroll at least 100 patients for the research initiative, but within a year and a half of launching the study, they received 250 patients and about 1,500 tissue specimens for male breast cancer cases, allowing them an ample sample size to study.

"To us, this meant that it might actually be possible to do treatment studies in male breast cancer," she said. "It is exciting."

Giordano and fellow investigators hope to launch a research project to study the efficacy of targeting the androgen receptor for male breast cancer. Although a majority of male breast cancers are estrogen receptor-positive, a growing body of research shows that most male breast cancers also have androgen receptors that may cause cancer cells to grow. Thus, endocrine agents that block the androgen receptor could potentially work well in men with breast cancer, Giordano said.

"There's a lot of interest in [male breast cancer], and I think there's a collective will to get things done," Giordano said. "We're hopeful that, working altogether, we'll be able to move the field

forward and really make some advances for men with breast cancer."

Live your life

As Lauve was completing his five-year regimen of tamoxifen, personal tragedy struck. In November 2014, he was diagnosed with cancer again—this time, with thyroid cancer—and on June 25, 2017, his second wife passed away from ovarian cancer. Yet he maintained his optimism.

"You've still got to live your life and go on with it. After two cancers and losing two wives, I don't have any other approach to life other than take it every day, be happy, be positive and do for people what you can do for them," Lauve said. "Thank the Lord you're still here and eat healthy when you can. Pig out when you want to every now and then."

Today, Lauve is off the tamoxifen and enjoying life as a cancer survivor. He said he "wears pink a whole lot more than I ever did before" to show his ongoing support for breast cancer research and his fellow breast patients, both men and women.

He even participates in MD Anderson's annual breast cancer fashion show and wears his usual outfit: a tuxedo decked out with a pink vest, a pink tie, a pink ribbon and his black and white shoes.

"I'm out there to tell the world to see me," Lauve said. "They need to see the pink on a man."





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Could Baldness Predict Other Health Risks?

Male hair loss may indicate a higher risk of heart disease and prostate cancer

By Christine Hall

If you're among the millions of men losing hair at the crown of your head, you should know that medical research links those missing strands to a higher risk for certain diseases.

A 2013 study by Japanese researchers published in *BMJ Open* found that men with male pattern baldness had a 32 percent increased risk of developing coronary artery disease. When balding occurred in men younger than 55, that risk increased, as did the likelihood of heart disease for men with both frontal and crown baldness, compared to those with full heads of hair.

A major reason why men suffer from male pattern baldness, aka androgenetic alopecia, is a genetic sensitivity to dihydrotestosterone, or DHT.

The body's responses to DHT might influence the risk of illnesses such as heart disease, high blood pressure, insulin resistance, obesity and prostate cell growth.

"If someone is balding, it is because they have elevated testosterone, so the conditions could be explained on the basis that DHT is the underlying situation," said Dennis Villareal, M.D., professor of medicine-endocrinology, diabetes and metabolism at Baylor College of Medicine and a staff physician in medical care and research service lines at the Michael E. DeBakey VA Medical Center. "If you can find that association, you could maybe do an early intervention."

How hair loss happens

Although elevated testosterone causes baldness, not everyone with high levels of testosterone will lose hair, said George Cotsarelis, M.D., the Milton Bixler Hartzell Professor of Dermatology and chairman of the dermatology department at the University of Pennsylvania.

Most men who go bald also have acquired a genetic pre-disposition to baldness—but not like the old wives' tale that says if your maternal grandfather is bald, you'll go bald, too. In fact, baldness can be passed down from either parent, the dermatologist explained.

Studies have shown that by the age of 50, about half of all men will have some degree of male pattern baldness, Cotsarelis said.

Losing hair usually happens over time. The hair follicle becomes smaller and smaller in the genetically determined area. This can start in the early teens and progress over decades, or begin in middle age.

Normally, hair grows and falls out. The follicle rests, then makes a new strand. However, when the follicle shrinks, the hair becomes thinner and shorter, often becoming almost microscopic over time. If you look closely at a balding head, you may see a smattering of short, thin hairs.

Linking hair loss to disease

A high level of testosterone also can cause an enlarged prostate, Cotsarelis said.

A 2015 study published by U.S. researchers in the *Journal of Clinical Oncology*, showed that by age 45, men with male pattern baldness had a 40 percent increased risk of developing aggressive prostate cancer.

Researchers followed 39,000 men who had not been diagnosed with cancer. During an average follow-up period of three years, more than 1,100 prostate cancer diagnoses were made and about half of those were aggressive cases among men with frontal hair loss and some crown balding.

The analysis revealed "a positive association between frontal plus moderate vertex baldness at age 45 years and aggressive prostate cancer risk. Although the effect is moderate, it supports the possibility of overlapping pathogeneses between male pattern baldness and prostate cancer," the researchers concluded.

Even though the studies confirm an association between male pattern baldness and an increased risk of certain diseases, both the study researchers and doctors say that further research is required to tease out more details about the role of testosterone or other causes.

"Men are more likely to have coronary heart disease, so it could be the testosterone that is at play here," Cotsarelis said. "Beyond that, we don't know much, so we need to gain a better understanding about these pro-

cesses."

PREVENTING HAIR LOSS

John Wolf, M.D., professor and chair of the Department of Dermatology at Baylor College of Medicine, treats male and female patients experiencing hair loss.

Generally, there are two approaches to treatment: stimulate new hair growth or replace the hair follicle with a viable one from another part of the head. These interventions often happen with additional medications or applications that promote hair growth, Wolf said.

Minoxidil, better known by its brand name, Rogaine, is one of the more popular treatments, as is finasteride, known as Propecia. In fact, finasteride also is prescribed to treat enlarged prostates. Hair loss is preserved because the drug also blocks dihydrotestosterone (DHT), which is what causes strands to fall out.

"Sometimes, preventing hair loss is better than growing hair," Wolf said. "I tell patients that certain treatments may not grow hair, but will

slow down or stop hair loss."

The Mortality Gap

Women still outlive men, but that divide may be shrinking

By Britni R. McAshan

A lthough people around the world are living longer overall, men are still dying before women—regardless of race, environment and socioeconomic status.

Women live an average of five years longer than men in the United States.

In 2016, life expectancy at birth was 78.6 years for the total U.S. population, according to the National Center for Health Statistics. For males, life expectancy shifted from 76.3 years in 2015 to 76.1 years in 2016—a slight decrease. For females, life expectancy remained the same at 81.1 years in 2016. Researchers and doctors from the Texas Medical Center (TMC) advise that there is no one reason for this gender divide, but rather multiple factors that give men a shorter life expectancy.

"The main thing I would focus on is testosterone vs. estrogen," said Carmel Dyer, M.D., executive director of The University of Texas Health Science Center at Houston Consortium on Aging. "Testosterone lowers your good cholesterol and raises your bad cholesterol, where estrogen does just the opposite."

Cardiovascular disease is the leading cause of death in both men and women, Dyer continued, and both cholesterol and cardiovascular disease can be mediated, in part, by sex hormones. But testosterone also unleashes other challenges.

"A very prominent cancer in men is prostate cancer—that is mediated by testosterone," Dyer said. "In fact, men who are hypogonadal, who have low levels of testosterone, when they take testosterone, it increases their risk for prostate cancer."

Testosterone has also been linked to an increased risk in stroke because it makes blood thicker. Dyer explained that men are more prone to infection than women because estrogen has an antioxidant effect that absorbs the toxic free

We encourage boys to be rough and tumble and adventurous and unafraid, probably disproportionately to females.

- BRIAN DUNCAN

Director of human performance at Memorial Hermann Ironman Sports Medicine Institute

radicals that can lead to cell damage.

"Testosterone puts you at risk for infections, cancer and accidents," Dyer said. "For instance, men are more adventurous. ... They have more drowning deaths, they take more chances, they have more hazardous jobs than women—climbing on skyscrapers and all of that."

(continued)



Men are, in fact, more likely than women to have dangerous occupations. In 2015, the U.S. Bureau of Labor Statistics reported 4,836 fatal work injuries, a total that does not include active members of the U.S. military. Among the top industries that saw the highest rate of deaths per 100,000 full-time workers—including logging, fishing and piloting aircraft—most of jobs were done by men.

Behavior also plays a major role in mortality

"Many of the factors are simply behavioral and, often, what make men, men," said Brian Duncan, director of human performance at Memorial Hermann Ironman Sports Medicine Institute. "We encourage boys to be rough and tumble and adventurous and unafraid, probably disproportionately to females."

Most male fatalities between ages 15 and 24 years are caused by reckless behavior or violence, including motor vehicle accidents and drowning, according to research reported by *Scientific American*.

"Those kind of adventurous behavioral things tend to trickle over into smoking or consumption of alcohol and then, in turn, accidents—whether it's a car accident, guns, a four-wheeler or ATV accident," Duncan said. "A lot of it has more to do with our psychology and not our genetics."

Stephen Klineberg, Ph.D., professor of sociology at Rice University and founding director of the Kinder Institute for Urban Research, identified one particular subset of the male population whose life expectancy is shrinking.

"There is this whole phenomenon of middle-aged, white men with high school educations or less who are dying prematurely from the diseases of despair—suicide, drug addiction, sclerosis of the liver, smoking, obesity," Klineberg explained. "It's the one demographic in America whose life expectancy has shrunk in the last 10 years and it is because of the tremendous stress of losing a job—not being able to find a new job because you only have a high school education in a world where education is the minimum for a decent job."

Yet one recent global study suggests that the divide between life expectancy for men and women may be shrinking.

Scientists from Imperial College London, collaborating with the World Health Organization, considered long-term mortality rates and behavior trends to predict how life expectancy will change in more than 30 countries by 2030.

Because men traditionally smoked and drank more than women and were involved in more traffic accidents and homicides, their life expectancy was shorter. But if male behavior continues to trend closer to female behavior, longevity rates for men are expected to improve, researchers found.

Men can increase their chances for living longer if they focus on a healthier lifestyle, TMC experts said.

"The good news in all of this is, if testosterone raises your cholesterol, you can watch your diet—and exercise improves just about everything,"

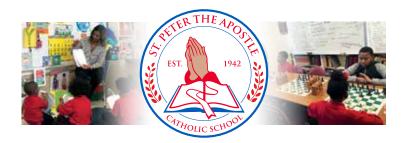
Dyer said.

Duncan echoed Dyer's sentiment by adding that very slight changes to daily routine can have a huge impact on overall life expectancy.

"Generally, the thing is if we just stop smoking and drinking so much, we could do a world of good. Walking has been shown to be the best medicine for anything, for anyone," Duncan said. "And if you can run, even better. You don't have to run a marathon or do an Ironman—you can do moderate to vigorous walking or running for 30 minutes a day. You will increase your life expectancy and reduce your risk of death. Your quality and quantity of life goes up."



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The Rise of HPV-Related Cancers in Men

An MD Anderson trial hopes to develop a screening test

By Alexandra Becker

Scott Courville admired his full beard and round belly in the mirror: he was ready for the upcoming holiday season. It was November 2015 and Courville, who plays Santa Claus in Lafayette, La., was too excited about his favorite time of year to worry much about the pain developing in his jaw.

By February, though, the ache had worsened and was accompanied by new symptoms: white spots on his right tonsil, difficulty swallowing and lumps in his throat. He finally made his way to a walk-in clinic where he was diagnosed with tonsillitis and prescribed antibiotics.

"They sent me home and said, 'In two weeks everything should clear up,'" Courville recalled.

But his symptoms only worsened. Courville made an appointment with a local ear, nose and throat specialist who also diagnosed Courville with tonsillitis. The doctor prescribed more antibiotics and steroids, but two weeks later there were no improvements. Courville was referred to a dentist—"In case they see something we don't"—but that, too, was a dead end.

Courville's dentist insisted he return to his ENT, where he ultimately had a CT scan that revealed a mass in his throat. That was June 6, 2016. Two days later, Courville underwent a biopsy. When he awoke from the surgery, his doctor was standing over him.

Courville always gets choked up retelling this part of his story.

"The hardest part for me is always remembering when the doctor said, 'I'm sorry, but you've got cancer."

Courville was referred to The University of Texas MD Anderson Cancer Center where doctors confirmed that he had squamous cell carcinoma of the right tonsil. But there was more: Courville learned





MD Anderson patient Scott Courville before and after treatment for HPV-related cancer.

If you can educate the public and educate the parents, they will vaccinate their kids. And if we can vaccinate this generation, we could eliminate these types of cancers.

- SCOTT COURVILLE MD Anderson patient

that his cancer had been caused by the human papillomavirus—HPV.

11 million men

Courville's story is becoming increasingly common, with the annual U.S. incidence of HPVrelated cancers of the throat, tonsils and the base of the tongue in men now outnumbering cases of cervical cancer in women, according to the U.S. Centers for Disease Control and Prevention. And a 2017 research paper authored by scientists at Baylor College of Medicine and The University of Texas Health Science Center at Houston School of Public Health, among others, found the overall prevalence of oral HPV in men in the United States to be upwards of 11 million-much higher than previously believed.

"This has implications, because pretty much everyone is exposed to HPV," said Andrew Sikora, M.D., Ph.D., one of the authors of the paper and vice chair for research and co-director of the Head and Neck Cancer Program at Baylor College of Medicine. "When we're talking about the prevalence of oral HPV infection, we're talking about that infection persisting inside the tonsils or on the base of the tongue of these men, and I think that's what sets you up for cancer later in life—it may happen decades after you were exposed to HPV."

That lag time, coupled with an absence of symptoms, is part of the reason HPV-related oropharyngeal cancers, also referred to as head and neck cancers, are increasing.

"What makes this cancer interesting is that it's one of the only cancers in the body that we're actually seeing more cases of year over year," explained Ron J. Karni, M.D., who serves as chief of the division of Head and Neck Surgical Oncology

at McGovern Medical School at UTHealth and Memorial Hermann-Texas Medical Center. "In the U.S., we can expect a certain number of breast cancer cases and lung cancer cases every year, but this is actually starting to look a bit like an epidemic in that we are seeing more every year. It's alarming."

Holy grail

HPV is the most common sexually transmitted disease in the U.S., with an estimated 79 million individuals infected. According the CDC, HPV is so common that most people who are sexually active will get the virus at some point in their lives if they do not get the HPV vaccine.

The virus is spread through vaginal, anal and oral sexual activity, and often exhibits no signs or symptoms.

(continued)



Ron J. Karni, M.D., is Chief of the Division of Head and Neck Surgical Oncology at McGovern Medical School at UTHealth and Memorial Hermann-Texas Medical Center.

In many cases, HPV is cleared by the immune system and does not cause health problems, but it can also persist and show up decades later alongside conditions such as genital warts and cancer—including cervical cancer, anal cancer and oropharyngeal cancers. For reasons not well understood, oropharyngeal cancers predominately affect men.

Currently, there is no annual screening test for men to determine whether they have the virus. Women, on the other hand, have pap smears.

The Papanicolaou test, commonly known as the pap smear, involves collecting cells from inside a woman's cervix to detect precancerous changes. It is performed during a woman's annual exam and has been widely credited for detecting early signs of HPV-related cervical cancer and saving countless lives. No such screening test has been successfully developed for oropharyngeal cancer—another reason cited for its steady rise.

"We're at a huge disadvantage," said Sikora, who, in addition to his research, treats patients at the Michael E. DeBakey VA Medical Center in Houston. "The pap smear, in terms of global health impact, is probably one of the best, most cost-effective things ever invented in terms of just the sheer number of women who have not had advanced

Erich M. Sturgis, M.D., MPH, is the Christopher & Susan Damico Chair in Viral Associated Malignancies at MD Anderson. cancers because of it. We have nothing like that for men."

Sikora explained that anatomy is, in part, to blame. Whereas the cervix is easily sampled, the tonsils are full of "nooks and crannies," he said, and scientists have yet to develop a reliable technique for obtaining a representative sample of cells inside the throat, tonsils, and back of the tongue.

"It's sort of a holy grail for researchers in the field," Sikora said. "It would be a game-changer in terms of prevention and early detection of cancer."

Scientists at MD Anderson, where Courville was treated, may be closing in on the search. Researchers including Erich M. Sturgis, M.D., MPH, the Christopher & Susan Damico Chair in Viral Associated Malignancies, are currently conducting a clinical trial for an antibody test that could be used to screen for HPV-related throat cancer.

The HOUSTON study, an acronym for "HPV-related Oropharyngeal and Uncommon Cancers Screening Trial of Men," is looking to recruit 5,000 men ages 50 to 64 years to provide blood and saliva samples for serologic HPV testing and oral HPV testing, respectively. If a subject is found to have a positive antibody test, he will be asked to participate in a second phase of the study, which includes an intensive screening program run through MD Anderson's oral pre-cancer clinic.

"A researcher at Arizona State University, Dr. Karen Anderson, developed a serologic test that predicts extremely well the risk for HPV-related oropharyngeal cancer," Sturgis explained. "We have been



Andrew Sikora, M.D., Ph.D., is Vice Charand Neck Cancer Program at Baylor Coable to show that serum antibodies to HPV early proteins, which are rare in the general population, are markers for oropharyngeal cancer. Specifically, we found that those who had antibodies to certain HPV antigens have a greater than 450-fold higher risk of oropharyngeal cancer compared with those who do not have the antibodies."

The hope is that this study will reveal that serological HPV antibody testing is an effective screening tool for HPV-related cancer in men: the equivalent to a pap smear.

A lump in the neck

If and when HPV-related cancer does develop, men often notice a pain in their jaw or throat, trouble swallowing, change or loss of voice that lasts more than a week or two, a sore spot on the tongue and, most

often, a lump in the neck.

"There's often a very small, primary tumor, which is the tumor that is in the tongue or in the tonsil, and it travels early to the lymph nodes," Sikora explained. "Depending on what your neck looks like, lymph nodes can get pretty big before they become noticeable. But a lump in the neck is by far the most common symptom, and unfortunately it's often detected much later than we would like."

Even more troubling, many individuals who have these symptoms are commonly misdiagnosed and handed antibiotics, as in Courville's case.

"The most important message I can convey is that if you have a lump in your neck, go see an ear, nose and throat doctor," Karni said, emphasizing the importance of an informed



Andrew Sikora, M.D., Ph.D., is Vice Chair for Research and Co-Director of the Head and Neck Cancer Program at Baylor College of Medicine.

diagnosis and specialized care.

Treatment for oropharyngeal cancers varies depending on the case and often involves a multidisciplinary team of clinicians as well as some form of combined modality therapy such as radiation and chemotherapy. In the future, Sturgis sees novel therapies, including immunotherapy options, changing the landscape of treatment protocols.

Karni hopes UTHealth's dedicated HPV-related throat cancer program will carry patients through the entire arc of treatment by offering minimally invasive robotic surgery for qualifying cases as well as annual community-wide screening clinics, rehabilitation therapists, and numerous other specialists.

"We want to think about cancer the way Target thinks about shopping or the way the best airlines think about flying," Karni said. "We designed a program that is patient-centered. We asked, 'What does the patient need on their fourth week of radiation? What do they need on their third month post-radiation? How can we get that into one clinic space?' It's a large team and it's all centered around this one disease."

47th in the nation

In 2006, an HPV vaccine named Gardasil hit the market. It was originally intended to prevent HPV in females and, ultimately, HPV-related cervical cancer. But as scientists learned more about HPVfirst that males could be carriers and later that it causes cancer in men, as well—public health professionals and clinicians unanimously recommended the vaccine to everyone. According to the CDC, all young women through the age of 26 and all young men through age 21 should receive at least two doses for the vaccine to be effective.

And it is. A recent report published in May by Cochrane, a global independent network of clinical researchers and health care professionals, concluded that the HPV vaccine protects against cervical

cancer in young women, especially when they are vaccinated between the ages of 15 and 26.

Which begs the question: Will the vaccine protect young men against the development of oropharyngeal cancers?

"There is a lot more data on cervical cancer in women and the vaccine than there is on head and neck cancer in men and the vaccine, but what data exists suggests that it is going to be a very effective intervention," Sikora said.

Yet despite scientific evidence that prophylactic HPV vaccination of children and young adults will drastically reduce HPV-related cancers, vaccination rates in the U.S. remain alarmingly low—and Texas ranks 47th. Even more, several generations did not have the vaccine available to them and are currently at risk for HPV-related cancer.

As Karni said, it is alarming. "Because the median age of oropharynx cancer related to HPV is about 55 and, in some studies, 60, and because the vaccine does not seem to work in individuals who have already been exposed, the benefits of vaccination on HPVrelated cancer will not be realized for several decades," Sturgis said. "Even if we vaccinate 100 percent of our boys and girls tomorrow, we have a whole generation or two who are at risk for this cancer and cannot

Courville endured six rounds of chemotherapy and 33 daily rounds of radiation to treat his cancer. He lost a year of his life, 100 pounds, his taste buds and salivary glands, and can no longer grow his full beardbut his therapy was successful. He has now made it his life's mission to inform the public about the importance of the vaccine as well as ongoing advocacy and research surrounding HPV-related cancers.

do anything about it."

"If you can educate the public and educate the parents, they will vaccinate their kids," Courville said. "And if we can vaccinate this generation, we could eliminate these types of cancers."

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Regaining a Sense of Smell

By Christine Hall

or the first time in several years, Carrie Owen can smell and

Now, even the aroma of a skunk is lovely to her.

"I can't tell you the last time I could smell and taste," Owen said.
"I've been testing it out on different things like peppermint essential oil, and even a skunk!"

Previously, the teacher from College Station suffered from constant headaches, a stuffy nose, runny eyes and frequent sinus infections.

She also had polyps inside of her nose that made breathing difficult.

Nasal polyps are inflammatory growths along the lining of nose passages or sinuses that can cause congestion.

Owen had surgery more than a year ago to remove the polyps in hopes of opening up her nasal passages. That worked until the growths returned.

Her physician presented her with two options: Have the surgery again, or see Martin Citardi, M.D., at The University of Texas Health Science Center at Houston for a second opinion.

Citardi, chair of the Department of

Otorhinolaryngology-Head and Neck Surgery at McGovern Medical School at UTHealth and an attending physician at Memorial Hermann-Texas Medical Center, told her she was a candidate for the SINUVA Sinus Implant, a new approach to treating nasal polyp disease in adult patients who have had previous sinus surgery.

Statistics vary on the number of sinus surgeries performed in the U.S.—somewhere between 300,000 and 600,000 each year—but those numbers don't account for repeat surgeries.

The SINUVA implant was approved by the U.S. Food and Drug Administration in 2017. In March, Owen had an implant placed into each nostril at Citardi's UT Physicians Otorhinolaryngology clinic.

He said the implant delivers an anti-inflammatory steroid for 90 days and also helps reduce the size of polyps in the nose, which helps Owen's nasal passages open up more.

When her smell and taste returned, she sought to eat her favorite foods: crawfish and King Cake

"It was wonderful," Owen said.

The SINUVA implants—inserted without surgery—have proved to be a more effective option for Owen,



The SINUVA sinus implant

and have resulted in an improvement in her everyday life.

In addition to being taken off some of her daily steroid and antibiotic prescriptions, her treatment routine is now as simple as flushing out her nose with a rinse. And, she no longer has the headaches.

"I was able to walk in and walk out with a better quality of life," she added. "It was like having a bandage put on or a shot."



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Cultivating Good Eating Habits

A Methodist dietitian created Nutrition Bootcamp to steer patients toward a healthier life

By Alexandra Becker

e've heard it all before: You are what you eat. Food is medicine. Don't consume anything your great-grandmother wouldn't recognize as food. Yet many of us are finding it increasingly difficult to abide by these simple rules in a complex world. We're in a hurry and we're stressed, and often it's just plain easier to grab something out of a bag or a box—something extra salty or sweet.

But that processed food is detrimental to our health in a big way.

A recent study published in the journal *BMJ* Open determined that nearly 60 percent of the American diet consists of highly processed food products and one-third of the population suffers from obesity, which leads to heart disease, stroke, type 2 diabetes and even some types of cancer. We can reduce our risk of developing these conditions if we eat healthier, but what exactly does that mean? More fruits and vegetables? Get rid of gluten? Avoid red meat?

Nutrition Bootcamp provides answers. Created by Kristen Kizer, a clinical dietitian specialist at Houston Methodist Hospital, the six-week course "provides a glimpse into what it looks and feels like to eat how we are told to eat by national groups like the USDA and the American Heart Association," Kizer said. Participants must follow a set of ground rules, including logging all food and beverage intake, drinking at least 64 ounces of water a day and eating only two junk items a week—which Kizer defines as high fat meats and cheeses, anything fried, desserts, alcohol, and high-calorie or high-sugar foods and beverages. In addition, participants are asked to submit a pantry clean-out photo highlighting all the bad habits they're throwing out, spend at least one week measuring their food and portion sizes, consume four servings of fruit and five servings of vegetables each day, and remove all white flour or refined grains from their diet.

Put simply, bootcamp is not for the weak. I tried it for 30 days and failed plenty. Cheese crept into more meals than I would have predicted, my typical portions were larger than the recommended checkbook size for protein and tennis ball-size for cereal, and trading in food delivery for home-cooked meals wreaked havoc on my already busy schedule. But I learned the importance of eating real food—with a heavy emphasis on fruits and vegetables coupled with a new awareness regarding fats and sugar—and I felt genuinely healthier.

"We understand that it's about what you're ready to change, what you're willing to change, and what you can do right now," Kizer explained. "We take a pretty realistic approach and we generally ask, 'What are the top three things you want to change right now, and how can we make some goals to make that happen? My hope is that someone comes out of the program with two or three habits they carry with them."

Kizer said her overarching mission with bootcamp is to get her clients back to eating real food, not the "food-like-products" that saturate our diets.

"They look and taste like real food, but they lack vitamins and minerals and health benefits. Our bodies were designed to eat things that came from nature." Kizer said. "Real food has physical benefits to our body: it helps our cholesterol, our blood glucose, our blood pressure—everything. There is also this psychological well-being that can come from eating real food. We don't binge on apples, we don't lose control with carrots. There's no mental lashing or negative self-talk there."

Kizer said that a surprising number of her patients suffer from some type of eating disorder or a negative relationship with food.

Part of the issue, she believes, is how addictive processed foods can be.

"I truly believe processed food is designed to be habit-forming," she said. "The manufacturer's No. 1 goal is for you to buy that product again, so it's not about your waist-line or your health, it's about, 'How can I make people eat as much of

this as possible?' I think patients find freedom from their food addictions or their unhealthy relationship with food when they're eating foods that have a normal level of sugar, fat and salt."

Nutrition Bootcamp is offered to Houston Methodist employees as one of the wellness incentives for lower insurance premiums; the idea is to keep employees healthy while simultaneously keeping health care costs down. But the program is also open to the general public.

Most Americans CONSUME 2 tsp of added sugars each day.



That's **TRIPLE** the recommended daily limit for women and **DOUBLE** for men.

 $Source: American\ Heart\ Association's\ healthy for good. heart. or g$

"It's a lifestyle change, not a diet," Kizer stressed. "I talk a lot about how it becomes a value system. People have moral values, so why not food values? If everyone is eating donuts in the break room, but donuts aren't part of your food value system, why do we compromise on it all the time?"

So does this mean you can't ever have birthday cake or Friday night pizza if you want to live a healthy life? No, Kizer says, but it does mean you have to put a food value system in place that emphasizes health and real food.

"I myself love chocolate chip cookies, but I rarely let myself eat the store-bought kind—they're just never worth it," she said. "I wait until they're homemade and then I have one and enjoy it, and I don't feel guilty about it."

NUTRITION BOOTCAMP: Interested in learning more? Call 713-363-7395

1 HOUSTON COMMUNITY COLLEGE'S COLEMAN COLLEGE HEALTH SCIENCE

TOWER received a 2018 Landmark Award from the *Houston Business Journal*, an annual competition that recognizes commercial real estate projects.

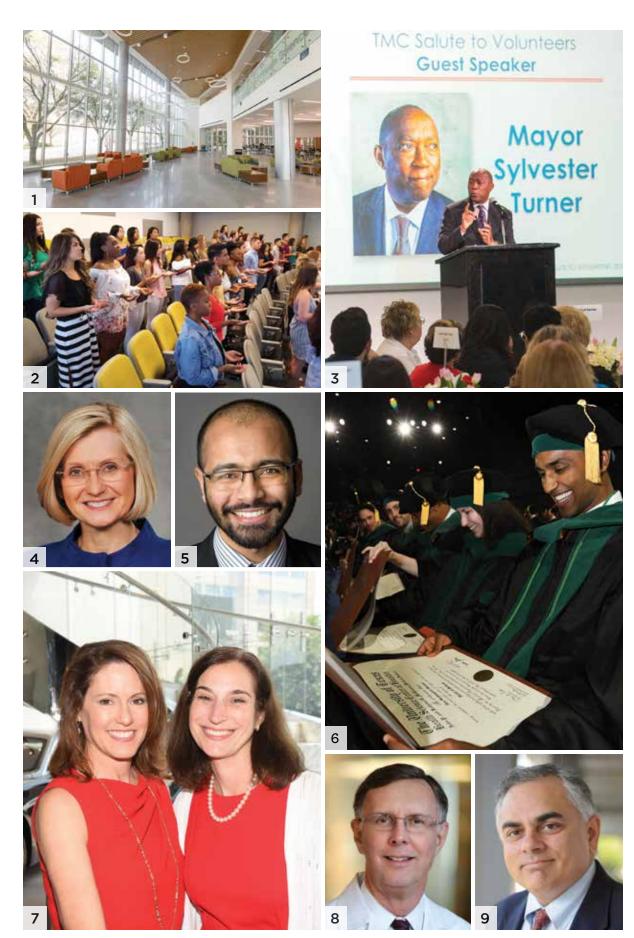
2 | During National Nurses Week **TEXAS WOMAN'S UNIVERSITY** faculty held a
Blessing of the Hands ceremony, a nondenominational act that recognizes health workers and helps refresh and renew the spirit.

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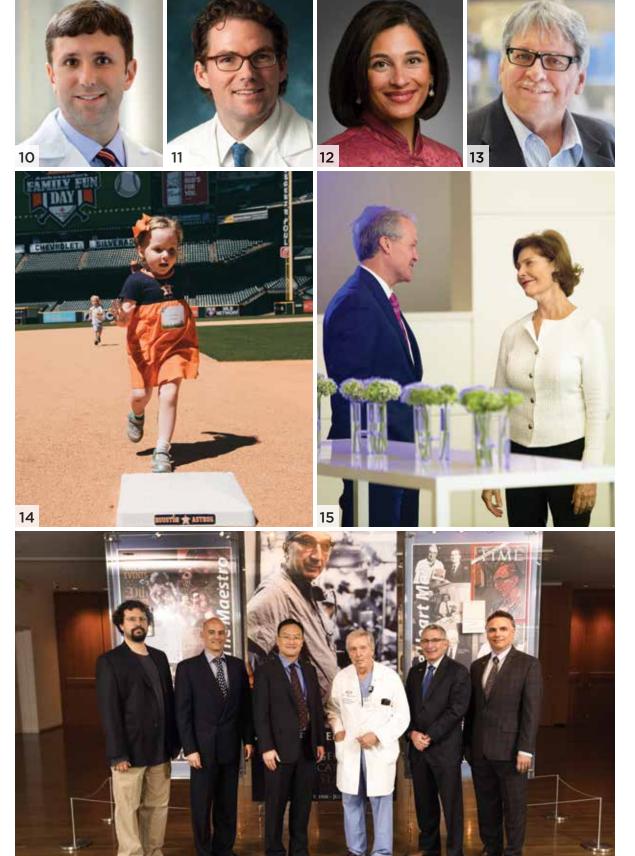
3 | HOUSTON MAYOR SYLVESTER

TURNER was guest speaker at the annual Salute to Volunteers Award Luncheon, which recognizes volunteers across the Texas Medical Center.

- 4 | LISA M. HOLLIER, M.D., MPH, professor in the department of obstetrics and gynecology at Baylor College of Medicine and chief medical officer for Texas Children's Health Plan, has been appointed 69th president of The American College of Obstetricians and Gynecologists.
- **5 | MUHAMMAD SAAD SHAMIN**, a Baylor M.D. student and a Rice University Ph.D. student, was awarded \$90,000 for graduate studies by the Paul and Daisy Soros Fellowships for New Americans Program.
- **6** | ALEN MICHAEL, M.D., admires his new degree from McGovern Medical School at UTHealth at the school's May 18 commencement.
- 7 | Campaign Houston Go Red For Women co-chairs RACHEL CLINGMAN, American Heart Association board member, and ROBERTA SCHWARTZ, executive vice president of Houston Methodist Hospital, led the "Let's Unite" effort that raised \$1.8 million.
- 8 | C. KENT OSBORNE, M.D., director of the Dan L Duncan Comprehensive Cancer Center at Baylor, received the 2018 American Association for Cancer Research Distinguished Award for Extraordinary Scientific Achievement and Leadership in Breast Cancer Research.
- **9** ASIM SHAH, M.D., professor and executive vice chair in the Menninger Department of Psychiatry and Behavioral Sciences at Baylor, has been honored with the Children's Mental Health Champion Award presented by the Center for School Behavioral Health at Mental Health America of Greater Houston.



Credit: Nos. 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 16 courtesy photos; No. 5, Christopher Smith; No. 6, Dwight Andrews, UTHealth;
No. 7, Alexander's Fine Portrait Design; No. 14, Chinh Phan



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16

10 | PHILIP LUPO, PH.D., associate professor of pediatrics - oncology at Baylor is the 2018 recipient of the F. Clarke Fraser New Investigator Award from the Teratology Society.

11 | EDWARD BUCHANAN, M.D., has been named chief of plastic surgery at Texas Children's Hospital.

12 | SUMMER DAJANI, vice president of global health care services at Houston Methodist Hospital, received the 2018 International Services Leadership Award, given by the U.S. Cooperative for International Patient Programs.

13 JAMES LUPSKI, M.D., PH.D., the Cullen Endowed Chair in Molecular Genetics at Baylor's department of molecular and human genetics, received the March of Dimes Colonel Harland Sanders Award for Lifetime Achievement in the field of birth defects.

14 | Texas Children's Ambassadors and the Astros Foundation hosted a Family Fun Day at Minute Maid Park to benefit the Child Life Program at TEXAS CHILDREN'S HOSPITAL.

15 | MARC BOOM, M.D., president and CEO of Houston Methodist Hospital, speaks with former FIRST LADY LAURA BUSH during a celebration to launch the new Center for Health & Nature at the hospital.

16 | Baylor honored five faculty member

with the 2018 Michael E. DeBakey, M.D., Excellence in Research Award: KARL-DIMITER BISSIG, M.D., PH.D., associate professor of molecular and cellular biology in the Center for Cell and Gene Therapy; ATUL CHOPRA, M.D., PH.D., assistant professor of molecular and human genetics, molecular and cellular biology and a Caroline Wiess Law Scholar; EREZ LIEBERMAN AIDEN, PH.D., assistant professor of molecular and human genetics and a McNair Scholar; MENG WANG, PH.D., associate professor of molecular and human genetics in the Huffington Center on Aging and Robert C. Fyfe Endowed Chair in Aging; and SHAWN ZHANG, PH.D., associate professor in the Lester and Sue Smith Breast Center and a McNair Scholar. Pictured left to right are Aiden; Bissig; Zhang; GEORGE NOON, M.D., professor of surgery, the Meyer-DeBakey Chair in Investigative Surgery and president of the DeBakey Medical Foundation; PAUL KLOTMAN, M.D., Baylor President, CEO and executive dean; and ADAM KUSPA, PH.D., senior vice president and dean for research at Baylor.



6/7

TMCx Demo Day

Thursday, noon – 8 p.m.
TMC Innovation Institute
2450 Holcombe Blvd., Suite X
Register: eventbrite.com

Register: eventbrite.com tmcxevents@tmc.edu 713-791-8855 6/8

Can Public Policy Control Rising Drug Prices? A Discussion Hosted by Rice University's Baker Institute for Public Policy

Friday, noon – 1:30 p.m. Rice University James A. Baker Hall 6100 Main St.

Tickets: \$50; lunch included Register: bakerinstitute.org/events BakerCHB@rice.edu 713-348-4336 6/12

Rice University Farmer's Market

Tuesdays, 3:30 – 6:30 p.m. Rice University Parking Lot Entrance 13B 5600 Greenbriar Dr.

ricefm@rice.edu 713-348-5445

6/15

Antimicrobial Resistance and Gut Health Symposium

Friday, 8:30 a.m. – 5:30 p.m. Rice University BioScience Research Collaborative 6500 Main St.

Information and registration: gulfcoastconsortia.org st48@rice.edu 713-348-4772 6/22

Congress of Neurological Surgeons Acute Stroke Care Symposium

Friday, 7 a.m. – 4 p.m. Houston Marriott Medical Center 6580 Fannin St.

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