



# TMC | PULSE

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NEWS OF THE TEXAS MEDICAL CENTER — VOLUME 3 / NUMBER 10 — NOVEMBER 2016

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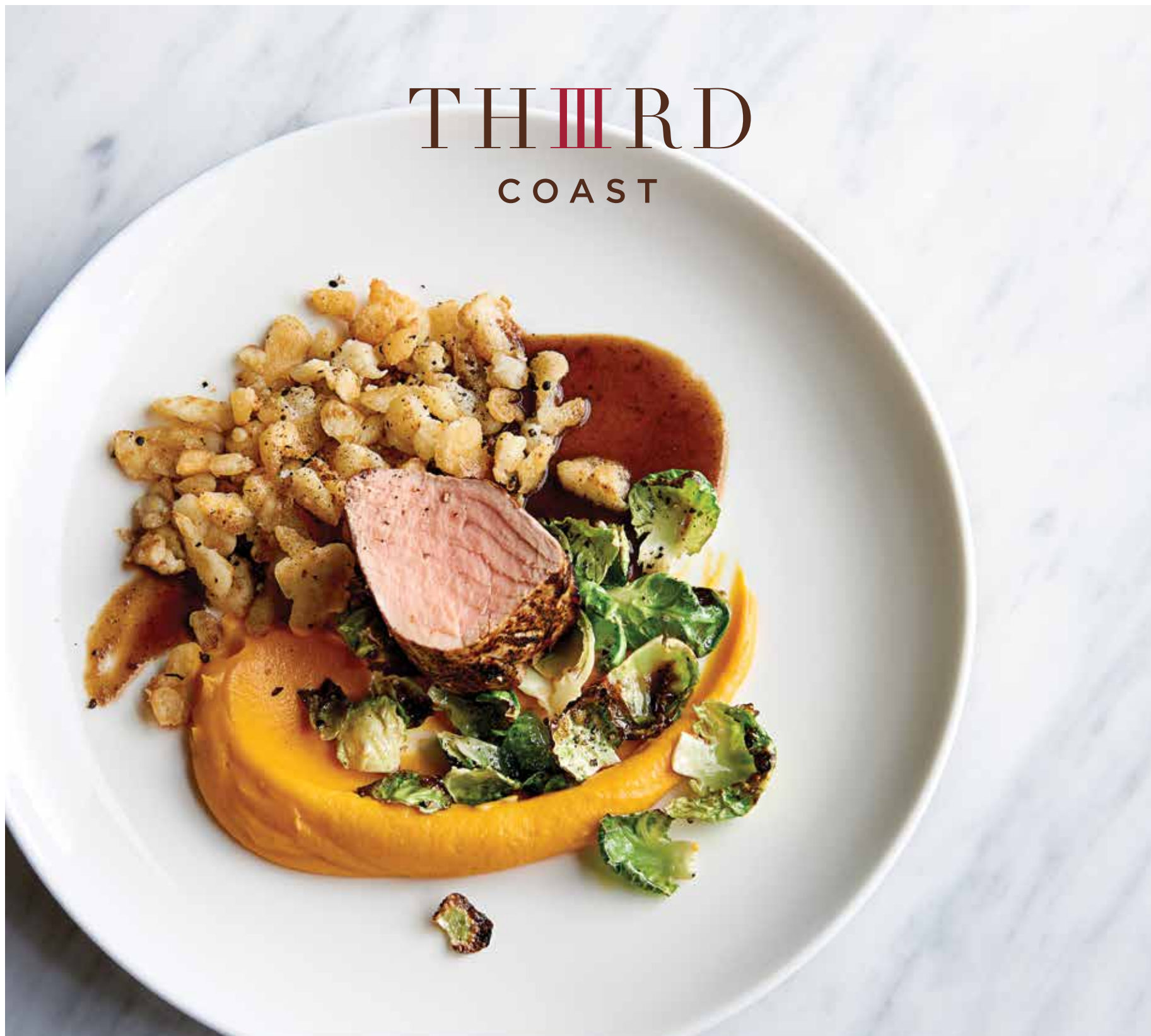
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# PRESIDENT'S PERSPECTIVE



**ROBERT C. ROBBINS, M.D.**  
*President and  
Chief Executive Officer,  
Texas Medical Center*

**H**ealth care has been a polarizing issue for voters throughout the election season. Here at the Texas Medical Center, though, health care is a central, unifying force in our lives. It's the reason we all come to work every day.

In this issue of Pulse, we asked a few members of the TMC community to weigh in on the biggest health challenges facing the country—from the large numbers of Americans without access to care, to our fragmented electronic medical records system.

If I had to recommend one big fix for the country, it would be to make the Affordable Care Act more affordable. Tim Garson, M.D., who directs the Health Policy Institute at the TMC, has written about this issue. As he points out, if we change the way we pay physicians, we might waste a lot less money in overtreatment. Instead of the “fee-for-service” system, in which physicians charge per procedure, why not pay physicians’ salaries? Already, physicians at the Mayo and Cleveland Clinics are salaried, delivering the highest quality care at a lower overall price.

I’d also like to see the future leaders of the country encourage people to take charge of their own bodies, to understand their own numbers. What do you weigh? What is your body mass index? How many steps do you take each day? Knowing these numbers and talking regularly with your doctor is empowering. And when the numbers are good, you’ve gone a long way toward fighting illness and fatigue.

Certainly, diet is a pathway to good health. The Pulse cover story this month explores plant-based medicine and a meat-free diet. Thirty years ago, you’d be hard-pressed to find a vegan or gluten-free plate on a menu. Today, you can find these healthy options at the TMC’s new Third Coast restaurant, at eateries across Houston, across Texas, and beyond. In an ideal world, health care would focus less on medication and intervention, and more on education and prevention.

*Robert C. Robbins*

## TMC | PULSE

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# Food Coma

*The truth about turkey and tryptophan*

BY SHANLEY CHIEN

Many Americans partake in the annual Thanksgiving tradition of stuffing their faces with turkey and trimmings and then parking on the sofa to sleep off the inevitable food coma.

Turkey is packed with tryptophan and is usually blamed for the drowsiness we experience after consuming a massive Thanksgiving meal. But contrary to popular knowledge, plenty of other food is loaded with tryptophan, too.

“Turkeys get a bad rap,” said Jeanne Piga-Plunkett, registered dietitian and co-coordinator of the Dietetic Internship Program at The University of Texas Health Science Center School of Public Health. “They have high levels of tryptophan, but so do nuts, soy beans, cheese, lamb, beef, pork and chicken.”

Tryptophan is an essential amino acid and the key ingredient in making serotonin, a neurotransmitter responsible for elevating and balancing people’s moods. When tryptophan synthesizes serotonin, the chemical reaction produces the hormone melatonin, which regulates people’s sleep patterns.

But consuming tryptophan alone doesn’t cause sleepiness. It’s the combination of tryptophan and carbohydrates in large amounts.

“During Thanksgiving, people eat 300 to 400 grams of protein without hesitation,” said Nicolaas Deutz, a nutrition expert and director of Texas A&M’s Center for Translational Research in Aging and Longevity. “That’s a huge amount of tryptophan and way higher than what people normally consume, so the body has to deal with that. On top of that, there’s a lot of carbs eaten on that day.”

When people gobble down their meals, the digestive system breaks down simple carbohydrates—like those found in mashed potatoes, cranberry sauce, and pumpkin pie—into sugar that enters the bloodstream. Elevated blood sugar stimulates the production of insulin, which helps clear the way for tryptophan to travel from the bloodstream to the brain.

Tryptophan is akin to the solitary passenger in the overcrowded TSA line at the airport the day before Thanksgiving. Large families, wrangling luggage and children, are the other more abundant amino acids, pushing and shoving to get through the same packed checkpoint. Insulin acts as the TSA pre-check that allows those large families of amino acids to breeze through security. By diverting the TSA pre-check passengers, airport congestion is alleviated and the tryptophan passenger can travel more easily to the designated gate.

Behavior also plays a role in the Thanksgiving food coma.

People often ignore the internal cues that tell them to eat earlier in the day because they’re anticipating a delicious Thanksgiving feast, Piga-Plunkett said.

“Thanksgiving tends to lead to overindulgence,” she added. “We give ourselves permission to eat and celebrate. This is a special time.”

By the time people sit down at the dinner table, they’re hungry and wolf down plates of food. The brain takes approximately 20 minutes to register that the stomach is full, but people often eat so quickly that the brain doesn’t have enough time to tell the body it’s satiated. So the body powers down into “rest and digest” mode.

To prevent Thanksgiving lethargy, Piga-Plunkett recommends eating slowly and consuming smaller portions. ■



## FOOD LOADED WITH TRYPTOPHAN

## MILLIGRAMS

Whole Milk (per quart)	732
2% Milk (per quart)	551
Canned Tuna (per ounce)	472
Turkey, Skinless, Boneless, Light Meat (per pound, raw)	410
Chicken, Skinless, Boneless, Light Meat (per pound, raw)	238
Oats for Oatmeal (per cup)	147

Source: *International Journal of Tryptophan Research*



# THE FUTURE OF HEALTH CARE

Everything gets politicized during campaign season. But health care has been in the hot seat since 2010, when President Obama signed into law the Patient Protection and Affordable Care Act, also known as ObamaCare.

At the Texas Medical Center, the triumphs and challenges of health care in America are present all day, every day, to patients, researchers and health professionals. In this election month, Pulse posed one question to several members of the TMC community:

**If you could direct the future leaders of the country to fix one major problem in health care, what would it be?**

**DAVID L. CALLENDER, M.D.**  
*President of The University of Texas  
Medical Branch at Galveston*

“From my perspective, the biggest problem is equitable access to health care. We know today that a patient’s environment and their socioeconomic status has a huge impact on health. We don’t exactly understand why, but there’s some great research to help us understand how the environment interacts with our genetic code and our behavior. I’d love to see our state think more about that, and work with the federal government, CMS [Centers for Medicare & Medicaid Services] in particular, to explore how we could more broadly engage those populations that don’t have great access to care. Perhaps we just approach it as a set of projects—something to improve access and test what we’re doing. Some patients are so economically and financially challenged they can’t even get to a treatment site. Maybe we need to think about how to get to them. Everybody has a cell phone. Can we use technology more effectively?”



**RONALD A. DEPINHO, M.D.**  
*President of The University of Texas  
MD Anderson Cancer Center*

“Cancer prevention should be one of the most important public health priorities of the federal government. Up to 50 percent of all cancers could be eliminated by implementing evidence-based initiatives in policy, public and professional education, and services at the community level.

The next president of the United States should consider establishing a significant national effort to address one of the great disease challenges of our time through wide-ranging prevention strategies. Effective programs

would address improving the rates of HPV vaccination for boys and girls, keeping tobacco and nicotine products out of the hands of minors, providing smoking cessation treatment for those who wish to quit, educating adults and children about sun safety to prevent skin cancer, and encouraging cancer screening for early detection.

With growing momentum and awareness of the national Cancer Moonshot program, our country has a real opportunity to effectively address

the needless suffering experienced by millions of Americans from cancer. The time to act is now to address great health challenges of the nation through disease prevention.”

**REBECCA ESPARZA**  
*Cancer survivor*

“I was diagnosed with ovarian cancer in 2001 at age 30. At the time, I had no health insurance because I was





self-employed, and when I had left my previous employer I opted not to take COBRA. So, as a freelance marketing consultant, I approached insurance companies about being covered for health insurance and they said, 'We'll cover you, but not anything gynecological-related because you've had three previous gynecological surgeries in the past three years.' I decided, why get insurance if the thing I'm going to need insurance for will not be covered? And then, three months later, I was diagnosed with ovarian cancer.

So, I cashed out my savings that I had accrued in the five years I was with my previous employer, and I had my surgery.

But I had no way to pay for treatment. So for about six weeks, I went without treatment while I tried to navigate the social services system. I finally figured out that in my hometown, I could get chemotherapy done through the Nueces County Hospital District. They basically saved my life, because there was nobody else who was willing to give me chemo with no health insurance. I had to declare myself

indigent. I had to stop working. I had to stop all my freelancing and move in with my parents. And that qualified me as indigent. By the time they started my treatment, the cancer had already spread to my liver and the lining of my stomach; it's a very aggressive cancer. It took about five cycles of chemotherapy, but by the fall of 2002, I was declared in remission.

Once I healed, I started to become very active in the cancer advocacy world. I'm an advocate for the American Cancer Society Cancer Action Network, called ACS CAN; Livestrong; the Ovarian Cancer National Alliance Research Fund; and various different cancer organizations. Since 2003, I've traveled to Capitol Hill at least 25 times to meet with our legislators to let them know that we want to make cancer a national priority. Every time we visit we have a different thing that's on our agenda, something different that we want to focus on. I'm just not giving up. And they know I'm not giving up. They know that I have cancer as a priority. Because if we don't speak up, it's like we don't even exist.

In my ideal world, everybody would qualify for health care. I had marketplace insurance for about two years, and I was thrilled with it. Thrilled with it. Because I was no longer discriminated against because of my cancer history. There were no more pre-existing condition clauses in health insurance, and I thought it was utopia, basically. Fast forward to last November, and the new marketplace insurance plans come out, and all of a sudden my plan is no longer on the system.

It took a couple of weeks of digging and researching, but come to find out that the insurance companies say that they lost money on marketplace plans, so they were able to find a way to exclude pre-existing conditions.

They figured out a way to discriminate against cancer patients in Texas, after all. They took out any marketplace plan that covered MD Anderson. So can you imagine, my heart sank when I figured that out.

I felt betrayed. I felt like an outcast again, like they were discriminating against me again. MD Anderson said their hands were tied, but I hold them accountable, too, because it's a two-way street. I know it is. They were pointing their fingers at the insurance companies and the insurance companies were pointing their fingers at MD Anderson. Both of them have some culpability here. Long story short, Humana ended up coming up with one plan, off marketplace, that would cover MD Anderson.

“ But there are also blessings in this muddy mess that has been created because of my health. Multiple, multiple blessings. And my surgeons at MD Anderson are part of that blessing, for sure. I feel like I'm getting the best care in the world. ”

— REBECCA ESPARZA



Credit: AP Photo/Eric Gay



And it came down to the wire, but I ended up deciding to take that plan, because I never know what the future holds for me.

But there are also blessings in this muddy mess that has been created because of my health. Multiple, multiple blessings. And my surgeons at MD Anderson are part of that blessing, for sure. I feel like I'm getting the best care in the world. And right here in my backyard. It's a three-and-a-half hour drive from home. Can't beat that.

The big CEOs of these insurance corporations, I don't think they really care. The legislators, they care to a certain extent, but if it doesn't involve them or their family members, if it doesn't really affect them personally, they feel bad but, you know, I get the, 'Oh, poor thing, we sympathize with you and we're on your side and you keep fighting.' I get the same stuff every year, and I'm thankful that they're supportive

of me, but put your money where your mouth is. Support this legislation. Start being a co-sponsor of some of these bills. Be my champion on the House floor."

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**ARTHUR "TIM" GARSON, M.D.**  
*Director of the Health Policy Institute at the Texas Medical Center* ▲

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"A disturbingly large number of Americans do not have access to affordable health care. Since health care isn't affordable, how do you make it affordable?"

One way is you actually reduce the cost to the person with health insurance. You come up with some way to pay 100 percent or close to 100 percent to people who have no coverage—as in Medicaid expansion. There are a lot of political issues in Medicaid expansion, but figuring out how to use federal

dollars to support people who really can't afford to buy health care is important. One could figure out how to take those dollars and, instead of putting them into the Medicaid plan, put them into private plans that would cover people who have limited access to health insurance or don't have enough money."

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**STEPHEN H. LINDER, PH.D.**  
*Director of the Institute for Health Policy and Distinguished Teaching Professor in the Department of Management, Policy and Community Health at UTHealth School of Public Health; Associate Director of the Health Policy Institute at the Texas Medical Center*

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"There is a tendency to view the health sector as independent of other sectors. But what if we start considering health in relation to other things? For example,

transportation is essential to people's well-being, adequate housing is essential to people's well-being. Education also plays a key role in health—not just early childhood education, but education all the way up through adolescence into high school. There's clearly an adverse effect on people who have a limited education, as it is more difficult for them to get good jobs and function in the economy. So that's a health issue.

We're beginning to see that health issues cannot be solved by simply giving people more access to care. If a person doesn't have a job and the stress is exposing them to lots of chronic illnesses, then simply treating the chronic illness doesn't remove the cause.

The idea of going upstream and focusing on ways of preventing illness earlier leads us into considering other sectors and the contributions they make to health. It's a complex web."



**GEORGE V. MASI**  
*President and CEO for  
Harris Health System*

“This is going to be an extremely pivotal national election. The candidates have stated their positions as they relate to health care benefits and insurability. The Affordable Care Act is at the center of the discussion. Mrs. Clinton has indicated that her direction would be to further expand access to care through the Affordable Care Act. Mr. Trump has stated that, under his leadership, the Affordable Care Act would be repealed and he would take the country in a different direction in terms of health care. Locally and across Texas, the Affordable Care Act has expanded the health care safety net to a large number of people in this community. We have been able to expand access to primary care, dramatically expand access to outpatient mental health care, and decongest our emergency rooms. If the Affordable Care Act were to be repealed, it would be nothing short of catastrophic for Harris Health System.

Harris County taxpayers currently provide about 47 percent of the Harris Health System budget. If the Affordable Care act is repealed, we would be even more reliant on the Harris County taxpayers. Taxpayers are currently in a double-bind because in Texas, our taxpayers are already paying for Medicaid to be expanded with their federal income tax. As a state, we have opted not to expand Medicaid and, because of that, the \$6 billion that has been paid

by Texas taxpayers and earmarked by the federal government for Medicaid expansion is distributed to other states that have expanded their programs. The double-bind is that Harris County taxpayers are paying twice for health care through the federal government and the local government.”

**KIMBERLY MONDAY, M.D.**  
*President of Harris County Medical  
Society and member of the Harris  
Health System Board of Managers*

“The biggest issue is the lack of interoperability of electronic medical records. Our system is incredibly fragmented. There’s a federal mandate that encourages doctors to use electronic health records and most of us have complied. But there are different vendors that sell the medical records systems. So you have probably 100 medical records systems and they don’t talk to each other. And there’s no incentive for vendors to be compatible because it’s proprietary. I can be next door to another physician and I don’t have access to what they’ve done. They don’t have access to what I have done. There are ways around it, but the amount of time it takes to access other platforms is ridiculous.

It’s a matter of the hospital or physician and what platform he or she will be on. There are big systems hospitals use, but they are expensive to purchase, so many physicians are on smaller platforms. There’s no single place to get your medical record. As a result, it’s a tremendous amount of work to keep up with your own medical record.”

“Locally and across Texas, the Affordable Care Act has expanded the health care safety net to a large number of people in this community. ... If the Affordable Care Act were to be repealed, it would be nothing short of catastrophic for Harris Health System.”

— GEORGE V. MASI



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**LOIS M. RAMONDETTA, M.D.**

*Professor in the Department of Gynecologic Oncology and Reproductive Medicine at The University of Texas MD Anderson Cancer Center; Chief of the Division of Gynecologic Oncology at Lyndon B. Johnson General Hospital, Harris Health System*

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“I believe in universal health care. I believe that health care is a human right. I don’t believe people should have so much trouble getting it. People come to the table with different levels of health literacy and navigation ability. It’s a shame that some people have such a hard time getting basic health care.

I am still seeing a ridiculous number of cervical cancer patients in the county with advanced disease. It still blows my mind. I call it the ‘what the @\$\$%’ cancer because, what happened in our society to end up like this? Did we really fall so far behind in education in elementary school and middle school on how to take care of yourself and forget to mention how to take care of your reproductive organs?

There are a lot of places to get pap smears in the city, but somehow people don’t know that they even need them or don’t make time for them. I have a woman, young, in her 30s, with stage four cervical cancer. To see these patients not only have their quality of life destroyed, but their whole life in general destroyed by something that was preventable by

“I believe in universal health care. I believe that health care is a human right. I don’t believe people should have so much trouble getting it. People come to the table with different levels of health literacy and navigation ability. It’s a shame that some people have such a hard time getting basic health care.”

— LOIS M. RAMONDETTA, M.D.

getting a vaccine that’s safe and effective, is so frustrating.

How is it that we have so many difficulties with educating young people about protecting their reproductive organs and their lives? We have such low vaccination rates and such low pap smear rates and death and quality of life affected for no good reason.

I think we could get up to 80 percent vaccination rates for boys and girls.

It’s not going to be an immediate fix. It’s going to take 10, 20 years, but at least then we will have less death and destruction from HPV-related cancers.

The two biggest problems in my world are obesity, which is the main cause of endometrial cancer, and HPV, which is the main cause of cervical cancer. That means we start in elementary school with better foods and education about how to take care of yourself throughout school. That is key.

I feel like we have an opportunity to

lead the nation in how to solve problems if we could fix one big problem and that is the academic competition between Baylor, MD Anderson, UT and Harris Health. We have this massive population of under-insured patients that are seen in one big Harris Health System, but managed completely by different academic groups.”

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**PEGGY SMITH, PH.D.**

*Director of the Teen Health Clinic and Professor of Obstetrics and Gynecology at Baylor College of Medicine*

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“I really keep my eye on Austin as opposed to the national stage, because those are the laws that impact me and the work that I do. As a state that has no personal income tax, we are very dependent on two things: property tax to pay the way for certain issues—including



health care and education—and the sales tax that generates the revenue for a lot of the programs in the state. If you look at the state budget, there are two important things to remember: first of all, constitutionally and unlike the federal government, we must balance our budget and that can be very easy or it can be very hard, depending on our cash flow. If you look at our budget as a pie, anywhere from 70-80 percent of our revenues are either constitutionally or federally locked in. So we have very little wiggle room in terms of health care.

This year, our revenues from sales tax are down by about a billion dollars. When you factor that in, because of the balanced budget requirement, all programs are going to be affected. We have to see how that will play out.

Texas has opted not to expand Medicaid; that dog will not hunt again in this next election. Maybe the legislators can come up with a way to repack-age that sort of approach in a way that is palatable to a conservative House and Senate. It puts more of a burden on places like Ben Taub and some of the other hospitals and programs that serve individuals who require uncompensated care.” ■

— Staff Report







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# Mind Over Matter

*A young student at McGovern Medical School navigates a serious brain condition*

BY ALEXANDRA BECKER



*Claudia Martinez studying at home in her bedroom.*

At the time, Claudia Martinez considered the accident to be minor, miraculous even. Not only were the passengers in both cars unharmed, but the cyclist, whose bike lay crumpled under her car, had managed to throw himself off to the side of the road in the split-second before impact.

That was supposed to be the end of the story, but a short while later, Martinez began suffering from nearly constant headaches. Piercing and dull at the same time, the pain was soon accompanied by tremors in her hands and lower limbs similar to those observed in patients with Parkinson's disease. One day, her small frame

buckled to the floor after she'd tried to stand up and couldn't feel her legs.

It was 2011, and Martinez did not have time to be sick. A diligent student, she was engrossed in pre-med coursework at the University of Houston, her days consumed with organic chemistry, violin practice, research, volunteering and shadowing physicians. So when an MRI revealed a neurological condition called Chiari malformation, Martinez confronted the diagnosis with her characteristic tenacity.

"I remember when I first met with the neurosurgeon, I said, 'I'm not here to just be cured, I'm here to get well enough to live out my life doing what I love,'"



Martinez recalled on a recent morning at home. Parked next to her at the breakfast table was a wheelchair she was learning to live without. Using the handles to steady herself, Martinez, 25, was once again walking after undergoing her fifth

brain surgery in as many years.

Chiari malformation occurs when the cerebellum, which sits above the spine and coordinates and regulates muscular activity, extends lower than it should, spreading into the cervical spinal canal and compressing the brainstem. Some individuals with the condition are completely asymptomatic, while others experience mild to severe headaches and motor and sensory problems. And while nobody knows for certain whether the jolt from the crash triggered Martinez's condition, Chiari malformation, which is generally considered to be congenital, may also be acquired later in life.



Depending on the severity of symptoms, treatment often includes a surgical procedure called posterior fossa decompression. This involves removing part of the back of the skull and a small portion of the first cervical bone to give more space for the cerebellum, and then adding a patch to expand the dura (the covering of the brain). For most, multiple brain surgeries and the extensive rehabilitation and recovery process that goes along with them would be more than enough to fill the 1,800-plus days since Martinez's initial diagnosis. But this patient is different. Described by her mother as the strongest woman she knows, Martinez refused to let these setbacks steer her off course. Not only did she manage to complete her undergraduate degree—the first in her family to do so—but she is currently wrapping up her second year at McGovern Medical School at UTHealth. All this despite yet another health emergency this past July that left her hospitalized and barely able to move for weeks.

## Tethered

It was early summer and Martinez was finally enjoying some stability, waking up early to memorize tumor histology and staying late at the hospital to work on a research project with one of her mentors, Dr. David Sandberg.

"I didn't know much about her medical history and I didn't feel it was my business to ask," said Sandberg, chief of the division of pediatric neurosurgery at McGovern Medical School and a practicing neurosurgeon affiliated with Children's Memorial Hermann Hospital. "She was working with me on some research and she was extraordinary in that capacity—very bright and hardworking and determined."

But then, very much out of character, Martinez was suddenly absent without explanation.

"I remember emailing her to check in, just to see if everything was OK, and she told me she had been admitted to the hospital," Sandberg recalled. "I was shocked."

It turns out that over the course of the previous months, Martinez had lost nearly all muscle control in her pharynx and esophagus, making it extremely difficult to swallow. After choking on her food several times, she drastically reduced the quantity and consistency of food she allowed herself to consume.

Determined not to be derailed in her studies yet again, she focused on school and kept mum about the issue. Eventually, the lack of nutrients in her body landed her in the emergency room.

An extensive GI workup revealed nothing, so her physicians, aware of her surgical history, turned to brain imaging. The tests were inconclusive, but results from her MRI did show something unusual: her brainstem had become tethered to the dura, pulling it sharply to the right when it should have been floating freely in cerebrospinal fluid. Because the brainstem plays an intricate role in the act of swallowing, the question loomed: was this the cause of her choking?

"My opinion was that I wasn't sure," Sandberg said. "It was compelling enough with the brainstem being pulled so much that if no other cause could be found, I recommended surgery to untether the brainstem, which is an unusual operation."

## Just beginning

In a serendipitous chain of events born out of timing, expertise and old-fashioned goodwill, Sandberg, who typically only operates on children, agreed to perform the surgery. After freeing the brainstem from the dura, his team performed a duraplasty using Martinez's own pericranium as a tissue graft to increase space for the brainstem to float inside the skull.

It worked.

After months of recovery and rigorous rehabilitation at TIRR Memorial Hermann, Martinez has once again developed sensation in the back of her



Martinez, in her white coat, takes in her reflection in a full-length mirror.

“I remember when I first met with the neurosurgeon, I said, ‘I’m not here to just be cured, I’m here to get well enough to live out my life doing what I love.’”

— CLAUDIA MARTINEZ

*McGovern Medical School Student Diagnosed with Chiari Malformation*

throat and is slowly regaining a normal gag reflex. She has relearned how to walk and, thanks to an accommodating group of administrators and professors at McGovern Medical School, is catching up on her coursework at home. She even managed to find time to organize her annual Chiari malformation awareness walk. Working with the national

organization Conquer Chiari, Martinez raised more than \$30,000 this year and has singlehandedly created a local support network for individuals in the Houston area diagnosed with the condition.

"She just keeps working; you can't get her to stop," Sandberg said. "She's just so determined to not let her condition impede her goals."

Martinez and her physicians hope this will be her last surgery, which means a clear road ahead for her to become a pediatric neurosurgeon herself.

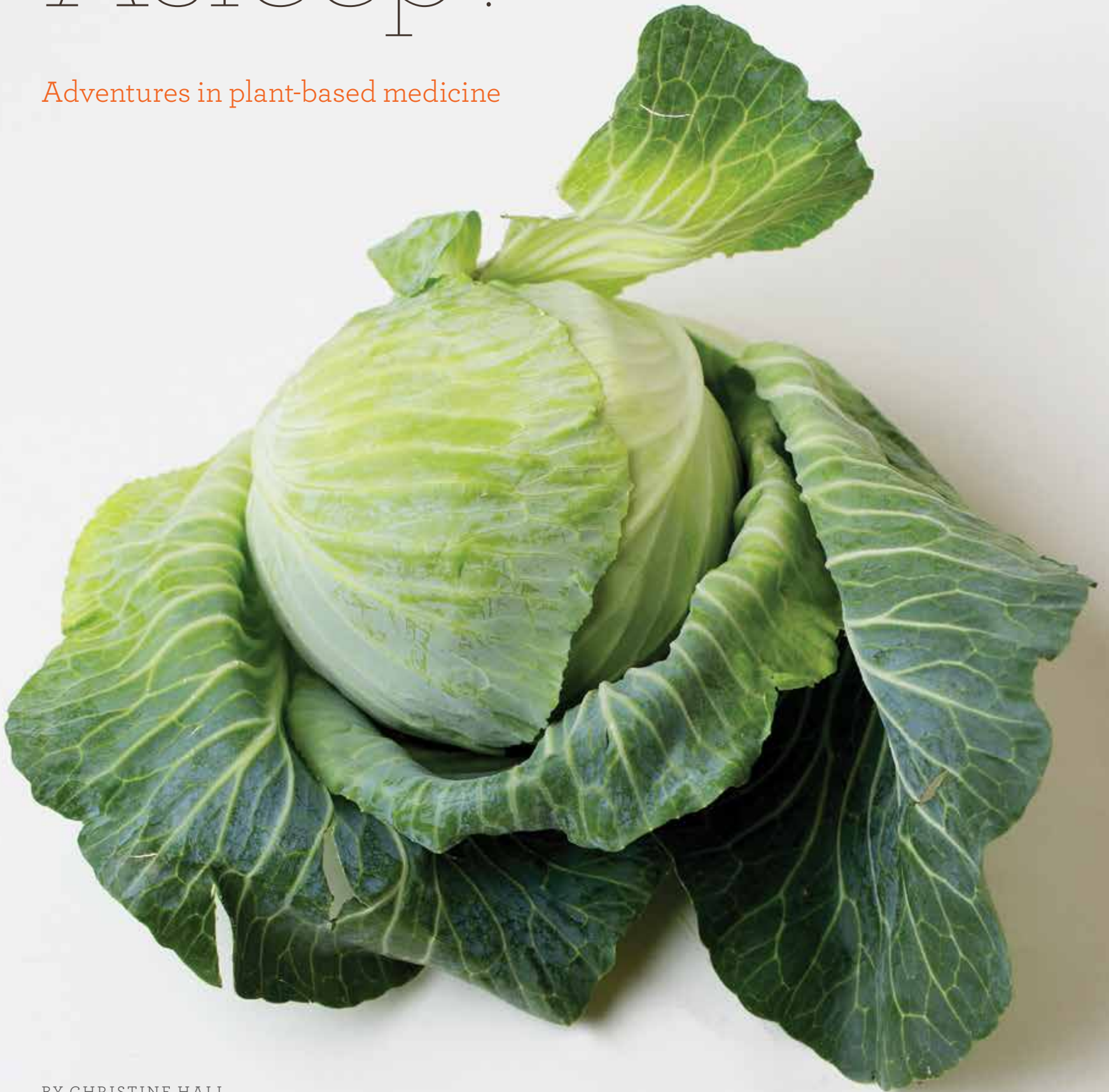
"I've wanted to become a doctor since I was little, but I obviously didn't expect to become a doctor by being a patient this entire time," Martinez said. "Going through this made me even more certain that this is what I want to do. A lot of people are diagnosed with illnesses and they think it means their life is over, but I believe sometimes in those diagnoses your life is just beginning." ■



Left: David Sandberg, M.D., holds a printout of Martinez's MRI taken prior to her surgery this summer.

# Is Your Cabbage Asleep?

Adventures in plant-based medicine



BY CHRISTINE HALL



When bariatric surgeon Garth Davis was 35 years old, he took a health screening for a life insurance policy. The results were anything but positive.

"I didn't think I was unhealthy, but my cholesterol was through the roof, I was hypertensive and I had a fatty liver," Davis said. "Shocked, I went to see an internal medicine friend of mine, and he told me I could take all of these medicines for my problems, but I knew that would just lead to more and more medicine throughout my life."

Davis, the medical director of the Bariatric Surgery Program at Memorial Hermann Memorial City Medical Center, didn't want to be medicated for the rest of his life. So he went looking for some answers.

He discovered that the United States is one of the least healthy countries in the world and that Americans have some of the lowest life expectancies on the planet. So which countries were healthy, Davis wondered, and how did they get that way?

His research led him to author Dan Buettner's Blue Zones study on the world's happiest and longest-living cultures. One of the things these cultures had in common was diets based mainly on plants and carbohydrates.

"I was kind of surprised because I had been telling all of my patients not to eat carbs, and I had purposefully avoided them myself," said Davis, also an assistant professor of surgery with McGovern Medical School at UTHealth and a member of UT Physicians.

Particularly inspiring to Davis were the Okinawans of Japan, who live an average of 10 to 15 years longer than Americans. Staples

of their diet include low-calorie seaweed and yams. Davis was also fascinated by the Seventh-Day Adventists of Loma Linda, Calif., a religious group that mixes spirituality with healthy living. They consume a lot of beans, soy milk and tomatoes, shown to help reduce the risk of certain cancers and heart disease.

Davis also considered the European Prospective Investigation into Cancer and Nutrition (EPIC) study, jointly coordinated by Imperial College London and the International Agency for Research on Cancer in Lyon, France. The study followed some 370,000 men and women in 10 European countries for five years and found that meat consumption was linked to weight gain—even chicken, one of the lean proteins Davis often recommended to his patients.

"It got me thinking that maybe everything I was told before was completely wrong," Davis said.

The ultimate irony for Davis: As a bariatric surgeon, he performs surgery on the stomach and intestines of patients to induce weight loss. His work addresses the effects of a poor diet. But what about the causes?

What if he could catch patients before bariatric surgery was necessary? Or at least teach his patients how to eat healthier after their surgeries?

“It got me thinking that maybe everything I was told before was completely wrong.”

— GARTH DAVIS, M.D.

*Medical Director of the Bariatric Surgery Program at Memorial Hermann Memorial City Medical Center; Assistant Professor of Surgery with McGovern Medical School at UTHealth; a member of UT Physicians*



## No simple magic bullet

Humans have always used plants to treat illness and disease. Many of our most common medicines come from plant extracts or synthetic plant compounds. Aspirin is derived from willow bark. Quinine, which is used to treat malaria, comes from the bark of the cinchona tree. Muscle creams, cold medicines and lozenges often contain mint.

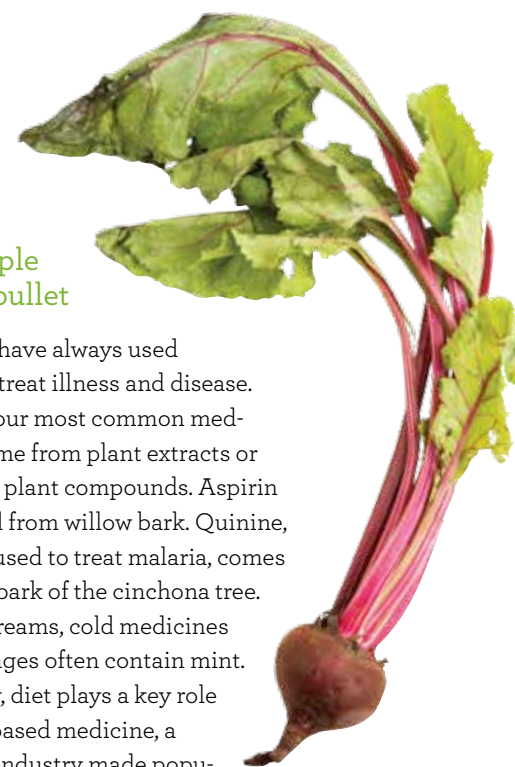
Today, diet plays a key role in plant-based medicine, a growing industry made popular by people craving healthier lifestyles. The dietary supplements business earns \$37 billion a year, according to the National Institutes of Health, and \$5.7 billion of that is spent on multivitamins.

But there is a lot of misinformation out there about what eating certain plants can and cannot do, said Roderick Dashwood, Ph.D., director of the Center for Epigenetics & Disease Prevention in the Institute of Biosciences and Technology at Texas A&M University. Some people expect a "simple magic bullet," and are disappointed when they don't get the results they anticipated.

Dashwood is researching how phytochemicals—chemical compounds that occur naturally in fruits, vegetables, grains and other plant foods—have been linked to reduction in the risk of major chronic diseases. Some researchers have even created genetically engineered plants with increased levels of a certain phytochemical.

Organizations including the National Institutes of Health and the American Cancer Society generally recommend that people consume five to nine servings of fruits and vegetables per day, Dashwood said. But he was intrigued by an American Institute of Cancer Research study that asked: "What if people actually followed that recommendation? Would it really show a benefit?"

"They found out that yes, indeed it does," Dashwood said. "If you switched from a bad diet to one of these improved diets, there was reduction in certain cancers. However, people improving their diets also did other things like quit smoking, limit their alcohol intake and get on the treadmill for the first time at the gym. So it is hard to say it was just the plant-based diet."





Janet Braam, Ph.D., shopping for vegetables from Atkinson Farms at the Rice University Farmers Market.

Meanwhile, Davis found similar studies that showed eating plants helped lower blood pressure, cure diabetes and prevent heart disease and hypertension.

His search for randomized controlled trials, one of the least biased methods of experimentation, also proved fruitful.

“It blew my mind,” Davis said. “Putting heart disease patients on a plant-based diet showed a regression of plaque in the vessels—not just a stabilization, but regression. Trials showed unbelievable weight loss, showed people with prostate cancer reversal or regression. There was a study that found total lengths of chromosomes grew longer with a plant-based diet.”

“Our research showed it could make sense to eat the cabbage in the middle of the day when we found that the phytochemicals implicated in anti-cancer efforts were the most abundant.”

— JANET BRAAM, PH.D.

Weiss Professor and Chair of Rice University’s Department of BioSciences

### Wake up your vegetables

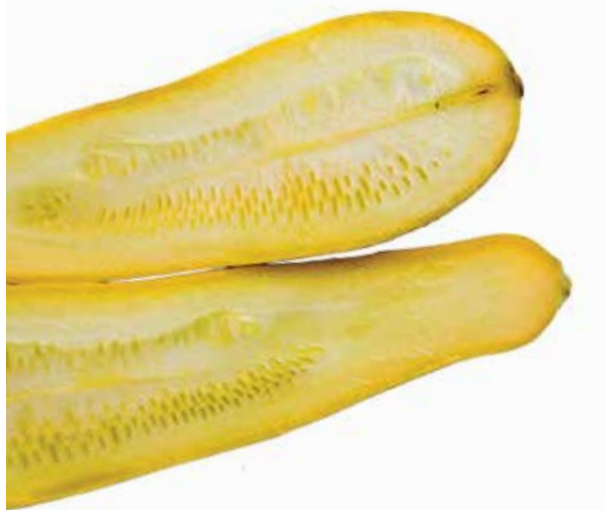
Plants, like people, have a circadian clock, a day-and-night cycle. To protect themselves during the day—when they’re most prone to insects, bacteria and viruses—plants release phytochemicals to defend themselves from these pests. In some edible plants, these same health-active compounds have potent anti-cancer properties for people.

Scientists at Rice University are exploring the health value of vegetables at different times of the day. Janet Braam, Ph.D., Weiss Professor and chair of the department of BioSciences, wondered what would happen if a plant’s day-and-night cycle was reversed. Using *Arabidopsis* plants, Braam and her

graduate student Danielle Goodspeed found that if a plant thought it was night, it would not produce enough phytochemicals to ward off insects that attack during the day.

“Eventually, we realized that the plants’ clocks were controlling the level of defense chemicals, so at the time of day the insects eat, the plants accumulated these phytochemicals just in case the insects attacked,” Braam explained.

The *Arabidopsis* plant is related to cruciferous vegetables like cabbage, broccoli and cauliflower, so Braam’s team headed off to the market to buy cabbage heads. They brought cabbages back to the lab, reset their clocks and confirmed their theory that even cabbages





that had already been picked could be retrained to produce insect-repelling phytochemicals. They found that the circadian clock of the vegetables, which is affected by light and temperature, could cause the vegetables to produce more or less of the phytochemical depending on the time of day.

“Our research showed it could make sense to eat the cabbage in the middle of the day when we found that the phytochemicals implicated in anti-cancer efforts were the most abundant,” Braam said.

After working with cabbage, the team decided to try their technique on other fruits and vegetables, including spinach, lettuce, zucchini, sweet potatoes, blueberries and carrots. All of them were able to show time-dependent changes similar to the cabbage, Braam said.

Her team is still working to determine the optimal time to eat fruits and vegetables. But Braam thinks this type of research could help food producers target the peak time to freeze or preserve certain plants—to capture them when their health-active compounds are most potent.

“Plants have the potential for providing health-active compounds that could affect certain diseases, but whether the plant circadian clock is enough to have a big health or nutritional impact, we don’t know yet,” she said.

### Beautiful bowls of lentils

Cruciferous vegetables also played a key role in a 2015 study by Dashwood and his colleagues, including Praveen Rajendran, Ph.D., an assistant professor in the Institute of Biosciences and Technology at Texas A&M. Published in *Clinical Epigenetics*, the study asked whether sulforaphane—a type of phytochemical—helped to reduce indicators of cancer risk. Sulforaphane occurs naturally in broccoli and other cruciferous vegetables such as Brussels sprouts, kale, cauliflower and cabbage.

To conduct their research, Dashwood and Rajendran asked patients scheduled for routine colonoscopies to complete a detailed food questionnaire. Those that ate more servings of cruciferous vegetables were shown to have higher expression levels of a tumor suppressor gene called p16 than those



who ate few or no servings.

Dashwood and Rajendran also found that the p16 enhancement benefits continued even after the vegetables were not consumed every day.

“Our research hints at the possibility that epigenetic mechanisms (how genes are read by cells) are initially triggered by sulforaphane and could be sustained, at least in the short-term, even after compounds are eliminated from the body,” Rajendran said.

Though further research is needed, Rajendran said an effective broccoli pill or supplement may help prevent tumor growth.

In the meantime, individuals who follow nutrient-rich plant-based diets enjoy prolonged health benefits.

Dr. Garth Davis has maintained his plant-based diet for a decade. He didn’t just drop meat cold turkey, but reduced consumption gradually over time. Today, both his cholesterol and blood pressure are normal, and he no longer has a fatty liver.

Davis also stopped using the word “protein” when discussing food plans with patients. Instead he pitches beans, grains, fruits and vegetables, something that has revolutionized his medical practice, he said. Through social media, support meetings, tips for success, nutrition education and tasty recipes, Davis helps patients and the community with healthier choices.

People tell Davis he must have great willpower to avoid meat, but he says willpower has nothing to do with it. He just likes the way he feels.

He craves fruits and vegetables, and the thought of eating cheeseburgers—his former favorite food—actually repulses him.

“I’m not out to create new vegetarians or vegans, just better plates for my patients,” Davis said. “We have grown up where animal protein is the center of the meal, but now I eat beautiful bowls of lentils and yams and vegetables, and it tastes great.” ■

## GOOD BACTERIA

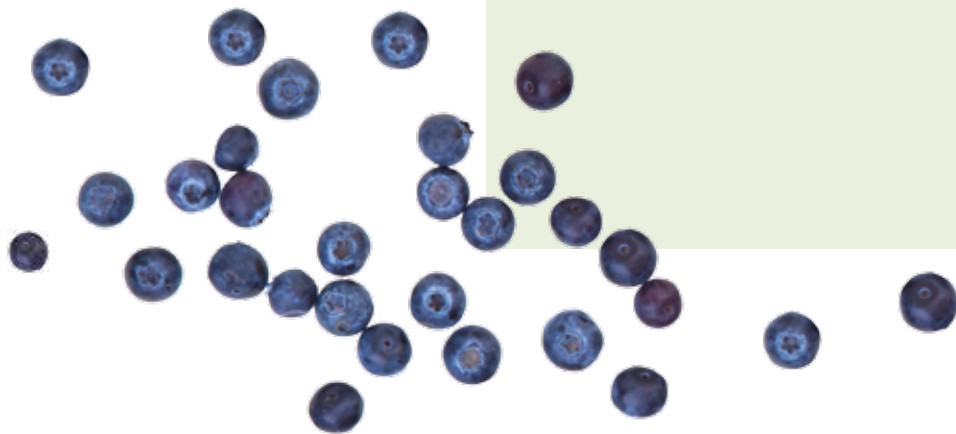
Eating well doesn’t just help fight disease. It helps the body perform.

Healthy people have close to 500 species of bacteria living in harmony in their stomachs. Problems occur when that harmony is disrupted, either by genetics or the wrong food, says Jeff Tabor, Ph.D., assistant professor of bioengineering at Rice University. Disruption can cause inflammation, which could lead to intestinal issues such as Crohn’s disease or diverticulitis.

Eating probiotics—live microorganisms commonly found in yogurt and other dairy products—has been widely shown to help remedy the disruption in gut bacteria and stimulate the growth of good bacteria.

“Certain foods encourage the growth of good bacteria,” Tabor said. “For example, plants have fiber, like those long, stringy parts of celery. We can’t break that fiber down, but the good gut bacteria can, and can then make beneficial molecules that are important to us.”

Tabor wants to engineer diagnostic gut bacteria. That way, if a doctor suspects a problem, a patient could take a drink home that would produce a visible blue pigment in his or her stool. In just one day, the doctor would know if additional tests were needed. ■



# Picture of Health

Dr. Garth Davis offers tips on health and diet:

**Animal protein** is strongly associated with obesity, diabetes, hypertension, heart disease and cancer.

**Plant-based protein** is much better for you than animal protein. Plants contain more than enough protein to support your health needs.

**Carbs are not the enemy.** In their natural state they are the source of human health, vitality and vigor.

**A lower-protein and low-fat diet** is the most effective way to lose weight, improve your health and prevent future disease.







Fruits, vegetables, and beans are high in fiber, which is not absorbed into our bloodstream, so some of the weight of these plant foods does not translate into calories absorbed. Likewise, the fiber holds water and water won't cause fat gain.

Calorie Count

FOOD	AMOUNT	CALORIES
Watermelon	280 grams	85
Chicken	280 grams	480
Olive Oil	280 grams	2,380

Is Animal Protein Making You Sick?

1. Are you overweight?

2. Do you have high cholesterol?

3. Do you have irritable bowel syndrome?

4. Do you have hypertension?

5. Are you constipated?

6. Do you suffer from diarrhea?
7. Is your skin marked with acne?

8. Are you often tired or lacking energy?

9. Do you have brain fog—problems with memory, focus, concentration?

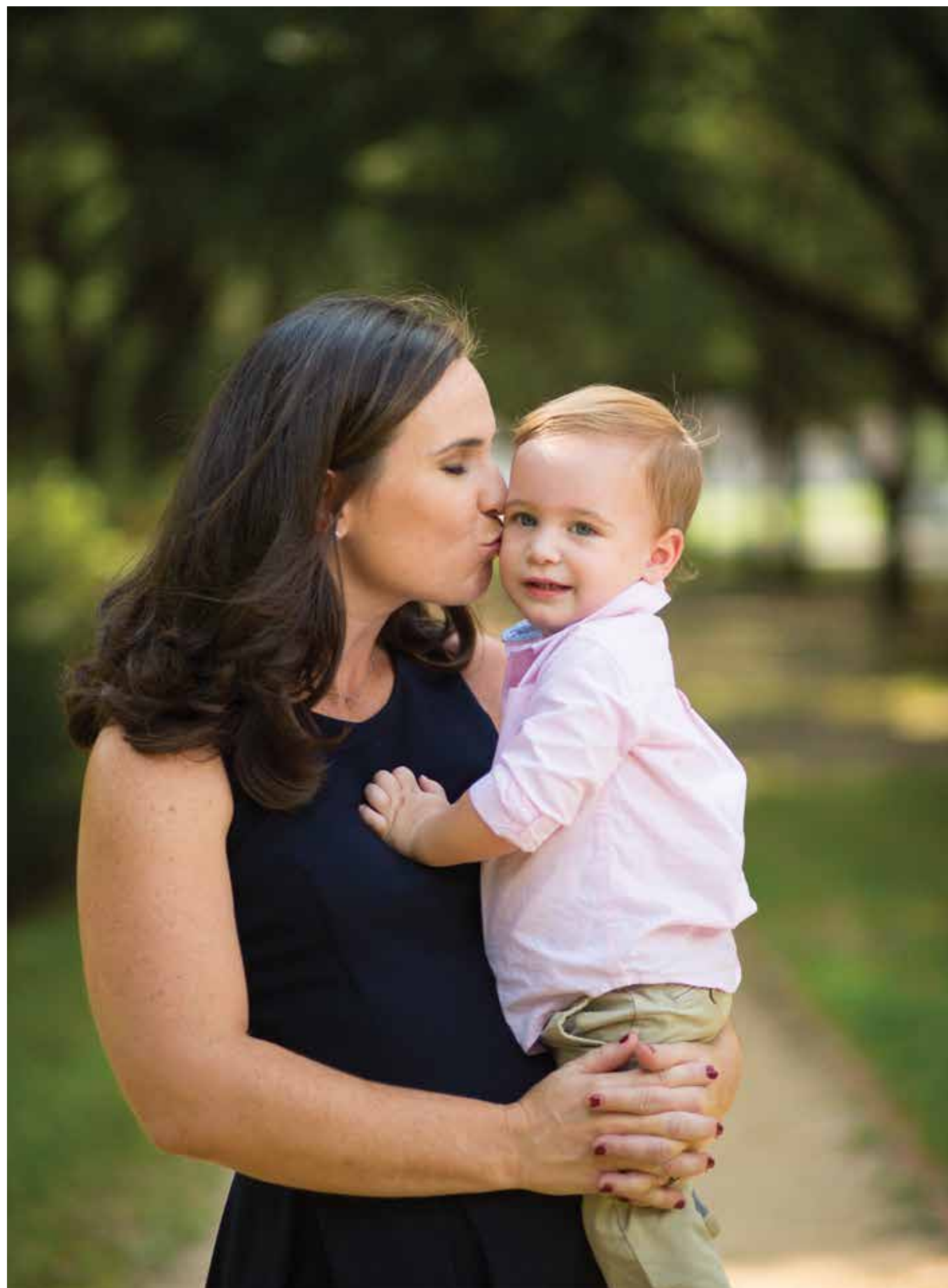
10. Do you get sick often?

These symptoms might be common, but they do not have to be a “normal” part of life. They indicate imbalances and disorders that animal protein is either causing or making worse. In most cases, these issues will start to resolve within two weeks and be gone in a month or two—once you start eating a plant-based diet.

Source: Garth Davis, M.D., *Proteinaholic: How Our Obsession with Meat Is Killing Us and What We Can Do About It.*

# SPOTLIGHT

**MOLLY HACKETT LAFAUCI** always dreamed of being a mother. But her journey has been more painful and complicated than she could have imagined. Miscarriages and postpartum depression have driven LaFauci, now a mother of three, to speak out about her own struggles with mental illness. She hopes her story will help other women facing similar challenges.



*Molly Hackett LaFauci plants a kiss on her youngest child, J.J.*

**Q | When did you decide to start a family?**

**A |** My husband and I were married when we were 25. We got pregnant with our first child, our daughter, Caroline, very easily and quickly. I was sick during the pregnancy, but other than that it was a very normal, run-of-the-mill pregnancy. I ended up having a C-section, but she was perfect and had no issues. The childbearing process has been horrendous for me after that.

**Q | What made childbearing so difficult?**

**A |** When Caroline was three months old, I got pregnant and miscarried early on in the pregnancy. That was my first miscarriage. I had four more miscarriages between our first and second children. The final miscarriage was a twin. I had no idea that there were two babies, but we were told the baby inside me was still thriving. We were blessed with a healthy second child, daughter Isabella, in April 2013.

**Q | Did you want to have more children?**

**A |** I did. I felt like I wasn't done and that our family wasn't quite complete after I had Isabella and I wanted to bring another baby into our loving home. But after everything we had been through, my husband thought that we had had enough and should take a break to enjoy our two healthy, happy daughters. I agreed with him that a break was probably best both mentally and physically. I had an IUD put in as soon as I could after giving birth, but 15 months later, I was unexpectedly pregnant. I think there is a .04 percent chance you can get pregnant with an IUD, so my husband and I were both very confused as to how I had managed to be one of the very few. We were obviously grateful for another baby, we just weren't prepared. There are a lot of complications that can arise when you get pregnant with an IUD. If you leave it in, there can be problems, and if you take it out, there can be problems. After a lot of prayer and discussion with our doctors, we decided to remove it. The baby made it through the first 36 hours so we felt confident we would be welcoming our third child months later. And this time, it would be a boy.

**Q | What was this pregnancy like?**

**A |** We had just moved from Houston



to Granbury, Texas, for my husband's job. It is a small town, hours from family, friends and the life to which we had grown accustomed with our first two children. We didn't know a soul. During my pregnancy with Isabella, I started seeing a reproductive therapist because of my lack of connection to my pregnancy. When I found out I was pregnant again, that psychiatrist was the first person I emailed. We were very aware of the risk I had of developing a more severe depression than the one I managed day-to-day due to the hormonal, mental and physiological changes brought on by pregnancy, so we were on high alert. As expected, during this third pregnancy, I did not connect to the baby at all. I did not get excited. I didn't buy him anything. I didn't finish his nursery before he was born. My husband understood my lack of interest probably stemmed from the miscarriages and the fact that we had not planned on having this baby. He was excited and often felt he needed to temper his excitement so as not to make me feel more guilty for my feelings.

**Q | And then the baby came early.**

**A |** When I was 33 weeks pregnant, we came back to Houston to celebrate Easter with our extended family. I was in my psychiatrist's office and she was asking how I was doing. I told her that I hadn't felt the baby move in a while, so she sent me upstairs for an evaluation by a number of specialists. They told me I was having contractions, gave me a shot and told me to stay close to the hospital if the contractions grew more frequent and painful. Eventually, I went back to the hospital and doctors discovered I was at a high risk for a uterine rupture. After getting a number of opinions from various doctors, specialists and my psychiatrist, my husband and I decided it was best to have an emergency C-section. The surgery went well and our son, J.J., was born.

**Q | How did you feel about the baby after giving birth?**

**A |** Since J.J. was born early, they took him, assessed his lungs, brought him over and showed him to me, and then immediately took him to the NICU. Looking back, I think being able to hold him could have helped. I felt like the postpartum kicked in the second he came out of me. My psychiatrist came to recovery to see how I was feeling, and I said 'I don't want to see the baby. I don't love him. I'm not excited he's here.'

**Q | Did you eventually feel better about being around J.J.?**

**A |** It was weird when I saw him. I didn't feel like he was mine. I was very eager to hand him off to any and all nurses or family. I only saw him one other time before they discharged me. I never nursed him; instead, I pumped. That took a lot of pressure off of me because I didn't want to nurse. I didn't want him close to me. When he was finally released from the hospital, he joined us at my mom's house in Houston, where we were fortunate to have a night nurse to help. I let her focus on J.J. and care for him while I tended to his sisters. When it was time to return to Granbury, three weeks after J.J. was born, my family was nervous I would need more help than I realized. I hadn't spent much time with him and would suddenly be responsible for all of his day-to-day needs. My mom suggested we take our night nurse along, so she came back with us, full-time. I think having her there was kind of a buffer for me to further avoid my son.

**Q | How did your postpartum depression manifest itself once you got home?**

**A |** I was incredibly irritable and snapped at my husband and daughters. Kids are tough and you snap every once in a while, but this was constant.

*continued*

## SIGNS OF POSTPARTUM DEPRESSION

- Depressed mood or severe mood swings
- Feelings of guilt, worthlessness, inadequacy or shame
- Recurrent thoughts of harming yourself or your baby
- Withdrawing from family and friends

Source: The Menninger Clinic

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I definitely wasn't sleeping. My baby nurse had gone back to Houston and she was going to return on Monday. It was Saturday and I went to put the baby down and he was so fussy. I had this moment where I was like, "Can you just fall asleep?!" And I thought something like: I want to put a pillow over his head to make him stop. All of a sudden I understood why people shake their babies. I stepped away from the crib and called my psychiatrist.

**Q | Were you on medication at this time?**

**A |** Against doctors' orders and unbeknownst to my family, I had stopped taking my medication. And for a year I had been having passive thoughts of suicide. My psychiatrist said that I needed to go to the hospital. She was very calm and non-judgmental.

**Q | How was your treatment at The Menninger Clinic?**

**A |** I found out that I had been on the wrong medications, that I couldn't metabolize my anti-depressant properly. I went to group therapy. There was a wonderful suicide resilience group and I remember the first time I sat in on it, I had to hold my hands on the chair to keep myself in the room. I could feel my heart beating out of my chest because I knew what I was thinking and I felt so badly that I wanted to take myself away from my children. Like many things, it wasn't easy to acknowledge that I might belong to a group that needed a special focus. I learned about postpartum OCD, something I thought explained my thoughts and actions. I realized that although I had thoughts about

hurting my son, I was never in a place where I could hurt him because I knew there was something wrong with those thoughts—that's why I called my doctor.

**Q | Did you continue therapy after returning to Granbury?**

**A |** I started a support group when I was in Granbury. I had been driving an hour and a half to see my therapist, who also specialized in reproductive psychiatry, because that was all that was available. Which is horrible. She and I started a support group for moms with postpartum depression and that was probably the biggest turning point for me in my recovery. It was so incredible for me to realize that I wasn't the only person who thinks this way and who has experienced this and who feels like a bad mom for this crisis in my life.

**Q | How is your relationship with J.J.?**

**A |** Once we moved back to Houston, I started going to the support group that the Texas Children's Hospital Pavilion for Women offers for mothers going through postpartum depression. Being with women that were in the same place as me and had the same thing going on

was very powerful. I realized that my recovery had gotten to a certain point, when my son was around nine months, that we really started to connect. My husband was out of town for two weeks recently and I did fine. I enjoyed my children. All I ever wanted was to be a mom, so it was very difficult for me to hate being a mom to this little man. I haven't totally forgiven myself, but I'm working on that.

**Q | What do you want other women to know about postpartum depression?**

**A |** Most people think that a woman with postpartum depression wants to kill her children and that is not the case—less than one percent of women who experience postpartum depression have those feelings. It is the number one complication of childbirth and we don't talk about it because there is a stigma attached. I am not ashamed of it anymore. That comes with a lot of familial support, a wonderful husband who encourages me every day and a fabulous team of clinicians who never once judged me. ■

**Molly Hackett LaFauci was interviewed by Pulse writer Britni N. Riley.**

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## HOW TMC EMPLOYEES SPEND THEIR SPARE TIME

NAME: **Karen Stepan**

OCCUPATION: **Program Manager, Psychosocial  
Oncology at The University of Texas  
MD Anderson Cancer Center**

INTEREST: **Ballroom Dancing**

Every weekday, Karen Stepan hops on the Metro Star Park & Ride in Cypress for a 45-minute commute to The University of Texas MD Anderson Cancer Center, where she has worked for the past 20 years. It's a long ride, so she often closes her eyes to catch a few moments of rest before starting her day as the program manager of psychosocial oncology.

The Duluth, Minnesota, native oversees initiatives that give patients information and emotional support on their cancer journey, including advance care planning and distress and suicide risk screening. But in between the meetings and emails, Stepan might close her office door on the sixth floor of the T. Boone Pickens Academic Tower to steal a few minutes for her private passion: Dance.

For more than eight years, Stepan, 59, has devoted her personal time to ballroom dancing. Her repertoire spans a wide range of genres—including waltz, tango, foxtrot, Viennese waltz, cha-cha, rumba, swing, mambo and bolero—and she often competes in national and international dance competitions. In 2013, she and her instructor and dance partner Christopher Muller won the National Dance Council of America's World Pro-Am Bronze American Rhythm Championship and tied for first place in the American Smooth Championship.

"I have always loved to dance," Stepan says. "I grew up watching

all of the Roger and Hammerstein musicals and would mimic the dancers' movements every chance I had. *South Pacific* and *The King and I* were two of my favorites."

Although Stepan took dance classes when she was very young and then again in her early twenties, she didn't immerse herself in the craft until 2008, when her only daughter graduated from Texas A&M University.

Today, in addition to her practice time, she takes dance lessons and Pilates twice a week to stay in shape.

"When you watch *Dancing with the Stars* or *So You Think You Can Dance*, they make it look so effortless, but there's a great deal of time and commitment that goes into honing the craft," Stepan says.

Muller, her partner, adds: "There's more sport to it than most people think."

During performances, Stepan will twinkle, pivot and promenade across the floor, following Muller's lead. While dancing certainly has cardiovascular benefits, Stepan has found cognitive benefits, as well. Self-awareness and teamwork are integral parts of her success at work.

"Dancing allows you to experience a divine connection between mind and body," she says. "It begins with a single movement ... and from this understanding of how everything is connected, mastery happens and the movement becomes second nature." ■

“When you watch *Dancing with the Stars* or *So You Think You Can Dance*, they make it look so effortless, but there's a great deal of time and commitment that goes into honing the craft.”



ON THE SIDE

By SHANLEY CHIEN

# A Bigger Workshop

*Another collaboration between Johnson & Johnson and the TMC targets medical devices*

BY CHRISTINE HALL



*William E. Cohn, M.D., at work in his home garage, will lead the Center for Device Innovation at the Texas Medical Center.*

If he wanted to, medical device entrepreneur William E. “Billy” Cohn, M.D. could move his cluttered workshop out of his garage and into a dream workspace.

The famous cardiac surgeon has been selected to lead the new Center for Device Innovation at the Texas Medical Center (CDI @ TMC), a collaboration between Johnson & Johnson Innovation and the Texas Medical Center to accelerate the development of medical devices.

Cohn recently joined the medical devices division of Johnson & Johnson.

“My resources at home are very limited, so having more equipment and more space will be wonderful,” Cohn said. “However, the real value will be more people—the brilliant scientists, engineers and entrepreneurs who will conspire with me to move projects along.”

As director of the new center, Cohn will focus on internal research and development projects. He’ll also have an opportunity to work with external entrepreneurs and innovators who will use the CDI @ TMC space.

The new center is an outgrowth of the Texas Medical Center’s relationship with Johnson & Johnson Innovation, which opened JLABS @ TMC earlier this year in the TMC Innovation Institute to promote

collaboration between health care businesses and entrepreneurs.

“We are proud to have Johnson & Johnson Innovation expand their presence in the Texas Medical Center,” said Robert C. Robbins, M.D., president and CEO of the Texas Medical Center. “We are also glad that they were able to tap Billy Cohn to lead the center. He has been instrumental in so many cutting-edge and innovative projects that it is a natural fit for him to be here.”

In January, Johnson & Johnson announced that it was restructuring its medical devices division to increase the pace of innovation and streamline operations. The restructuring, which is ongoing through the end of 2017, will eliminate some 3,000 jobs and deliver an estimated savings of as much as \$1 billion to allow for new growth opportunities.

CDI @ TMC will be built out in the current National Center for Human Performance in the TMC Innovation Institute. This state-of-the-art space will house the research and development staff of the Johnson & Johnson medical devices division.

At 25,000 square feet, the CDI will include a new medical device engineering studio filled with fun gadgets and technology, including 3-D printers and an electrical shop, said Bruce Rosengard, M.D., chief

technology and medical science officer of Johnson & Johnson’s global surgery group.

Rosengard expects initial design plans to be drawn up by the end of the year, with an estimated move-in date of late 2017.

“By putting the resources and capabilities of Johnson & Johnson, the world’s largest medical device company, together with the Texas Medical Center, the world’s largest medical center, we can make something very special,” he said.

The facility will allow for rapid prototyping and “fast failure” for early and mid-stage development, Rosengard said. While the time period to commercialization won’t necessarily be faster at this facility, he acknowledged that being located in the Texas Medical Center—which boasts 9,000 hospital beds and numerous experts within a two-mile radius—provides CDI @ TMC with an advantage.

“We are betting on the Texas Medical Center and Houston,” he said. “We believe in the overall vision of the TMC and, in the mid to long term, it is well-positioned to achieve becoming the ‘third coast’ of innovation.”

Under Cohn’s leadership, research and development staff will work together to vet ideas with clinicians to make sure they are addressing all the right needs. Then they will build and test prototypes, eventually putting them in the hands of physicians who will try them out in a clinical environment.

“We hired Billy Cohn because we believe he is really one-of-a-kind,” Rosengard said.

Cohn brings with him more than 30 years of knowledge and experience from Baylor College of Medicine and the Texas Heart Institute (THI), where he was the director of THI’s Center for Technology and Innovation and the Cullen Cardiovascular Research Laboratory.

And Cohn doesn’t have to leave those institutions behind. Johnson & Johnson Innovation will expand its partnerships to include Baylor College of Medicine and the Texas Heart Institute, as well as Houston Methodist Hospital, the TMC Clinical Trials Institute and TMC Biodesign, a one-year innovation fellowship program. All these institutions and programs will help take medical devices from prototype to clinical trial to commercialization.

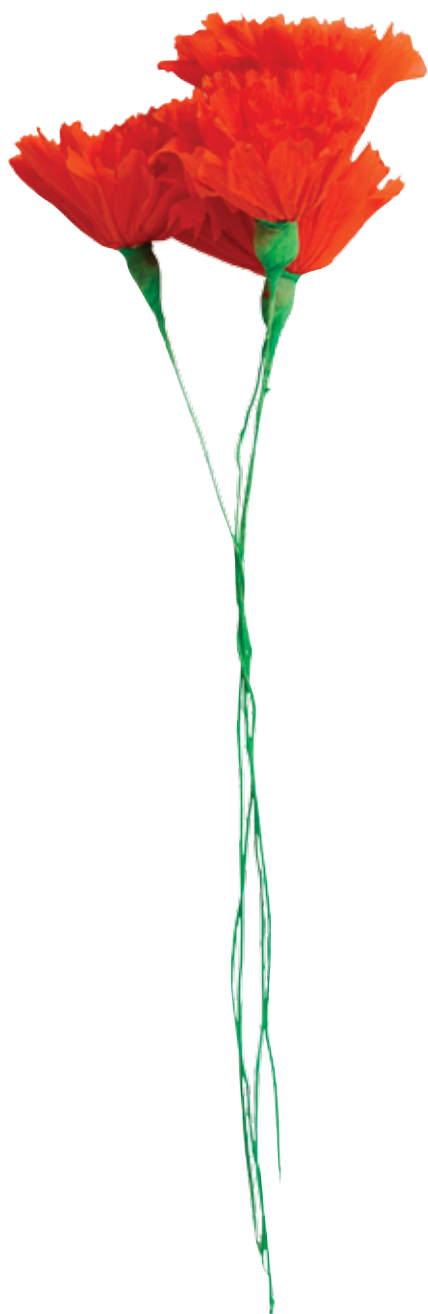
“The Texas Medical Center is uniquely qualified to have this kind of collaboration because we have all of this within walking distance,” Cohn said. “Being able to have anyone come over on their lunch break to provide rich input is an incredibly valuable resource.” ■



# A Celebration of Life

*Day of the Dead turns grief on its head*

BY BRITNI N. RILEY



**D**ía de los Muertos, or Day of the Dead, is a Mexican holiday with indigenous Aztec roots that dates back thousands of years. Widely celebrated in Mexico and among Hispanic Americans, it's a festive event that honors family members or loved ones who have died.

Day of the Dead recognizes death as part of the continuum of human experience.

"It is also a way of facing the fact that we are all going to die—that there is another realm that should not be ignored, but should be acknowledged and honored and respected," said Gabriela Maya, Ph.D., a writer and assistant professor at the University of Houston Honors College.

Day of the Dead was once a month-long festival, but when the Aztecs were conquered by Spain in the early 1500s, their traditions merged with Catholic traditions. Day of the Dead now coincides with two minor Catholic holidays: All Saints Day on Nov. 1, and All Souls' Day on Nov. 2. Those who celebrate believe that the gates of heaven open at midnight on Oct. 31. The spirits of deceased children reunite with their families on Nov. 1 and, on Nov. 2, the spirits of adults return to earth to join the celebration.

Colorfully dressed skeletons are popular Day of the Dead symbols, along with marigolds, sugar or paper skulls and ofrendas—altar offerings that tell visual stories about the deceased to entice them back from the grave.

“Having a ritual that connects people to the idea and the emotions around the deceased is really important.”

— GABRIELA MAYA, PH.D.  
Assistant Professor at the University of Houston

"In American culture, we tend to think of ghosts as scary—and they are in horror movies. But Day of the Dead makes them into something non-scary, almost like you are bringing the dead into your daily life," said Maya, who teaches classes for the Medicine & Society minor at UH and organizes interdisciplinary projects, including medical storytelling. "Having a ritual that connects people to the idea and the emotions around the deceased is really important."

The Medicine & Society minor at UH introduces students to the economic, historic and cultural factors that are vital to the practice of medicine. Maya teaches her students to be introspective about their own lives and they share their personal stories in essays and workshops.

"When I started teaching for Medicine & Society, I started thinking about what I could bring to the class, what I could bring to these students who are going to go into medical school or health professions," she said. "Having experience sharing their own stories with strangers means that, as a writer, I help them put into words experiences they've had with mortality and the vulnerability of the human body."

Death and loss are always part of the conversation.

"For extra credit, I have had the students create ofrendas in honor of characters in the Great Books course I teach and they really enjoyed it," Maya said. "These rituals are all about dealing with the realities of human nature, and it is important that we remember what these days are all about." ■

## OFRENDA

Creating an altar of objects for a loved one who has died is part of the Day of the Dead celebration. An ofrenda often incorporates fire, wind, water and earth, and may include:

- photos of the deceased
- religion items, including crosses or bibles
- flowers
- a skull made of sugar, paper or clay
- paper banners that flutter in the wind
- candles
- bread
- something to drink

Source: Casa Ramirez, a folk art gallery at 241 W. 19th St.



# Dr. Winston's Playbook

*Leland Winston chose medicine over football, but he never really gave up the game*

BY SHANLEY CHIEN



*Leland Winston, M.D., on the field with the Rice University football team.*

“He’s not just our team doctor, he’s part of the family here. He’s looking at these kids with these eyes like he’s their dad, and you feel that spirit with him that he just cares so much for these players and coaches and this team.”

— DAVID BAILIFF

*Head Football Coach at Rice University*

On Sunday afternoon, Jan. 11, 1970, more than 80,000 sports fans gathered at Tulane Stadium in New Orleans to watch the Kansas City Chiefs face off against the Minnesota Vikings for Super Bowl IV.

It had rained that morning and heavy clouds hung in the sky. The area was under a tornado watch and temperatures dipped into the low 60s. But devoted spectators—bundled up in sweaters and coats—still filled the stadium. The excitement was palpable.

The game began. Play after play, tackle after tackle,



players from both teams pushed through the mud, struggling for a win. Ultimately, a combination of short passes and trick plays devised by Chiefs head coach and offensive coordinator Hank Stram led the Chiefs to victory over the Vikings, 23-7.

“That’s it, boys! Yaaaa-ha! Haa-haa! Waahh!” Stram cheered fanatically after Chiefs wide receiver Otis Taylor scored the game-clinching touchdown.

Stram and the rest of the players swarmed towards Taylor in celebration. But one football player—a young man who had an offer to play for the Chiefs—wasn’t among them. Leland Winston was watching the game 380 miles away, drinking beer and eating hot dogs in Galveston, Texas.

## Dreams of his grandfather

Leland Winston, M.D., grew up in Lake Jackson, Texas, a small community 57 miles south of Houston where there was “nothing but tiny little towns and woods all around.” His grandfather often visited from North Carolina and took every opportunity to encourage young Winston to go into medicine.

“He would come by and tell me at the age of five that I was going to be a doctor,” said Winston, now 70. “I never had any other thought than ‘I’m going to be a doctor. That’s what I’m going to do.’ It was nice growing up knowing what I was going to do.”

Secretly, his grandfather had always aspired to be a doctor, as well, but was denied the opportunity by a wealthy aunt who urged him to become a Presbyterian minister. He eventually became a cowboy instead, but looked to Winston to fulfill his medical dream.

Winston attended Rice University, where he met his wife Pam, and graduated in 1969 with a major in biology. While he excelled in academics, Winston was also a stellar athlete. He had played every sport imaginable as a child, and in college, he was a track and field athlete and a two-time All-Southwest Conference lineman who caught the eye of the pros.

Before he graduated, Winston was drafted by the Kansas City Chiefs to play professional football. The team offered him \$11,000 for the first year, an amount equivalent to nearly \$80,000 today, but Winston was set on pursuing the dream he shared with his grandfather. He received his acceptance letter to medical school at The University of Texas Medical Branch in Galveston in time to decline the opportunity to play for the Chiefs.

Winston still remembers his conversation with Coach Stram: “He said, ‘Well, we’re going to win the Super Bowl this year.’ I said, ‘Great. You do that.’ And they did!”

Still, Winston felt no pangs of regret. He was ready to close one chapter of his life and move onto the next.

“When you play football in college, you’re pretty much playing for your school—at least it was back then,” Winston said. “Once you get to the professional level, it’s different. It’s a business, and I wasn’t interested in going into it. I just wanted to get on with what I wanted to do, which was to be a physician.”

Inspired by his own proclivity for breaking bones



Winston treating a Rice University football player.

from all the sports he played, Winston pursued a career as an orthopedic surgeon. It was a specialty that didn’t teeter on the edge of life and death, and married his two great loves: sports and medicine.

“I like the fact that I can meet a patient, take care of their problems, use my hands to fix it, and they can come back to see me after they’re well,” he said. “I get a charge out of that.”

## Part of the family

Once Winston graduated from UTMB with his medical degree, he moved back to Houston to complete his residency at The University of Texas Health Science Center and start his practice at Houston Methodist Hospital, both just half a mile down the road from Rice.

Although he turned down his chance to join the NFL family, Winston found a different football family and a different Super Bowl stadium.

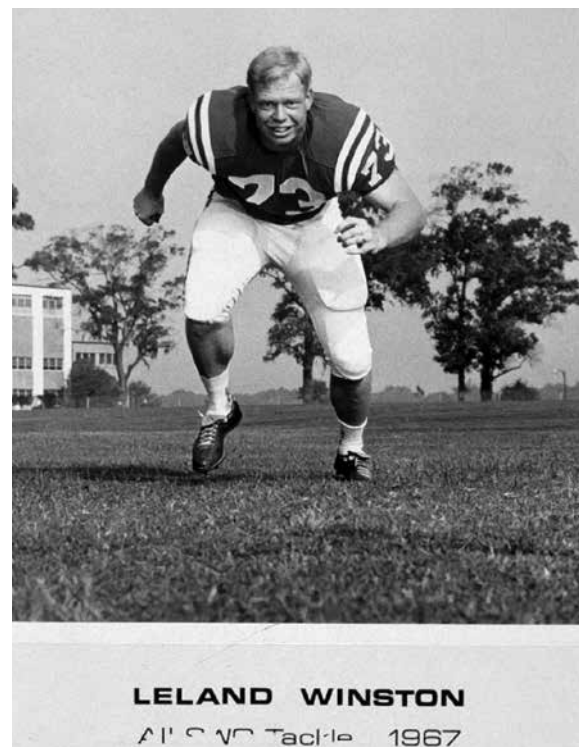
In 1974, while he was a resident, Winston became a consulting physician for the athletics department at Rice under the supervision of Rice team physician, James Butler, M.D. That same year, the NFL hosted Super Bowl VIII at Rice Stadium, where the Minnesota Vikings lost—again—to the Miami Dolphins.

“He’s not just our team doctor, he’s part of the family here,” said David Bailiff, the current head football coach at Rice. “He’s looking at these kids with these eyes like he’s their dad, and you feel that spirit with him that he just cares so much for these players and coaches and this team.”

In 1990, Winston assumed the role of co-head team physician alongside his friend Tom Clanton, M.D., treating student athletes who are balancing school and sports. It’s a juggling act he knows all too well from his

days racing back and forth between the biology lab and the football field.

“He knows what these players are going through academically and athletically, and he really relates well to them,” Bailiff said. “He has an incredible manner about him where he can put them at ease and talk them through what’s happening and what they have to do to get well. There’s this trust and love that we all have in him.”



Rice University football player Leland Winston, All-Southwest Conference Tackle, 1967. Credit: Rice Athletics





Winston receives the Rice University football game ball in September in honor of 50 years of service to Rice Athletics.

To this day, Winston can be found on the sidelines at practices and home games, watching over the athletes, ready to treat any injury or ailment. Knee injuries and shoulder dislocations are the most common injuries he sees. Thanks to advancements in modern medicine, they are no longer career-ending injuries, but they still take a toll on the body.

Men's football claims the largest average annual estimated number of injuries in college sports, according to a 2015 study conducted by the Centers for Disease Control and Prevention. The dangerous high-impact nature of the sport and the possibility for subsequent injuries mean physicians must focus on treating the entire athlete, rather than just taking care of the specific injury when it happens.

"Sports medicine is about two things: Getting an athlete back into a sport safely, and recognizing what they're going to be like for the rest of their life so you can counsel them on whether it's going to be

dangerous to keep doing it or not," Winston said.

Most of the student athletes he treats are not going to make a living playing professional sports, he added, so there's a moral and medical imperative to consider the long-term mental and physical effects of their injuries.

"They're going to go out and live a normal life, so we have to look at the long-range plan," Winston said. "Instead of asking how they're going to be next season, more importantly, how are they going to be in 20 years? Are they going to be crippled or not?"

Perhaps not surprisingly, Winston has inspired some athletes to pursue careers in medicine.

David Berken, M.D. a former Rice offensive lineman, is one of the many athletes Winston has treated. Berken sustained multiple injuries throughout his four-year college football career, but thanks to Winston, he continued to play the sport he loves while discovering a newfound passion for medicine.

"He was taking somebody that wasn't able to continue playing and make them better to the point where they were able to get back out and perform at their original capabilities and potential," said Berken, now an orthopedic surgeon in Shreveport, Louisiana. "I thought that was the coolest thing he was able to do ... for an athlete or anyone in general."

Because of his injuries, Berken spent a lot of time rehabilitating with Winston, working part time at Winston's office and talking with him after practices. Berken became inspired by witnessing first-hand the kindness and the care Winston brought to his patients, whom he treated and viewed like family.

"That type of experience isn't something you always get in health care, but that was always the thing you heard about Dr. Winston," Berken said. "That's something Dr. Winston does extremely well, something I've taken to try and use in what I do in my patient care."

### Balancing act

Winston has spent long hours and late nights building his own practice and taking care of his Rice athletes. His arduous work paid off, but it wasn't without some sacrifices along the way, like missing his son's golf tournaments and games as a kid.

"The hardest thing is balancing everything," Winston said. "Keeping everything—your job, your interest in the sport, time for your family and your spiritual life—balanced. It's a tough ... act for anyone."

These days, Winston is constantly surrounded by family: his wife of nearly 50 years, four grown children, 10 grandchildren, Rice athletes and patients. While things could have turned out very differently for Winston had he accepted the offer to go pro, there's no version of this story in which he'd trade his white coat for an NFL jersey.

"I wouldn't change a thing, not a thing," Winston said. "I'm having a great time." ■

“When you play football in college, you're pretty much playing for your school—at least it was back then. Once you get to the professional level, it's different. It's a business, and I wasn't interested in going into it. I just wanted to get on with what I wanted to do, which was to be a physician.”

—LELAND WINSTON, M.D.

Orthopedic Surgeon at Houston Methodist Hospital and Football Team Physician at Rice University



Winston greets his daughter, Carol Olivero, and granddaughter, Katie, in the stands.



# Advertise in a special sports edition of *Pulse*

In anticipation of Super Bowl LI, which Houston will host, the Jan.-Feb. 2017 issue of *Pulse* will be devoted to sports. The magazine will feature:



Interviews with coaches and athletes



Articles on sports medicine and athletic injuries



Guidelines and fun facts related to nutrition

This special issue of *Pulse*, available in racks around the Texas Medical Center starting Feb. 1, will have bonus distribution leading up to the Super Bowl.

If you would like to advertise in *Pulse*'s sports issue, please call 713.791.8894 or email [newsads@tmc.edu](mailto:newsads@tmc.edu). The deadline for space reservations is Jan. 2, 2017.

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## STS 53<sup>RD</sup> ANNUAL MEETING

George R. Brown Convention Center  
Houston, Texas  
January 21-25, 2017

[sts.org/annualmeeting](http://sts.org/annualmeeting)



**ALAN LUMSDEN, M.D.**, is medical director of the Methodist DeBakey Heart & Vascular Center at Houston Methodist Hospital. He spoke with Pulse—in his Scottish burr—about the Baylor-Methodist schism, the spirit of Dr. DeBakey, and the natural kinship between surgeons and engineers.



**Q | Tell us a bit about your childhood.**

**A |** I was raised in a very small Scottish town of 10,000 people. I went to elementary school and high school in this town where my father was the town pharmacist. It was the only pharmacy in town—we called it the chemist's shop, of course. Then I made the big trip, 20 miles away, direct from high school to medical school in Edinburgh. I was 17; no need to go to college in the U.K. I took a year off halfway through my medical training to complete a degree in pathology, which was incredibly valuable. I was exposed to surgical specimens, to the pathology of disease. I was always interested in anatomy, physiology and pathology and when you combine all those things together, what you get is surgery.

**Q | At what point did you leave Scotland for the United States?**

**A |** I was never really planning to emigrate. I happened to be performing an autopsy one day, and there was an American medical student there, doing an elective in our foreign land. Well, that changed the direction of my entire life—romance in the autopsy room! And that led me to emigrate. It was not an easy transition. Ultimately, I received an offer to join the general surgery residency at Emory University in Atlanta.

**Q | What was the focus of your training at Emory?**

**A |** I did my general surgery residency and then a vascular fellowship. After training I joined the faculty and subsequently went on to become the chief of the division of vascular surgery.

**Q | What was it about vascular surgery that intrigued you?**

**A |** I remember being on the rotation at the VA as a junior-level resident. One of the fellows said, 'You should think about doing vascular surgery.' At that time I couldn't have imagined anything worse. But once you start getting into the procedures, they're very interesting and technically challenging and immediately gratifying. At that time I also loved trauma. The challenges faced by trauma surgeons were the big vascular injuries; those are the injuries patients died from. So, I actually did the vascular fellowship with a plan to be a trauma surgeon. Halfway through my fellowship, I was offered the opportunity to join the Emory vascular faculty, and jumped at the chance.

**Q | At that time, what were we doing for patients with abdominal aortic aneurysms [AAA]?**

**A |** It was all open aortic surgery or nothing. A big operation. A bloody operation. The patient was in ICU for a night or more, in hospital for a week to 10 days. It'd take two months to get over it.



**Q** *If I was a patient today presenting with the same symptoms, what would you do for me?*

**A** | About 70-80 percent of patients today are treated with stent grafts. We don't even make a groin incision anymore. These devices are delivered percutaneously and re-line the inside of the aorta. That didn't exist when I trained. Anyone in my specialty of vascular surgery had to completely retrain in imaging, catheters and wires.

**Q** *It's similar to fixing a blown tire from the inside.*

**A** | Re-lining the pipe is basically what it is.

**Q** *What enticed you to come to Baylor College of Medicine?*

**A** | A friend of mine, Dr. Larry Hollier, now chancellor at Louisiana State University, was a visiting professor at Emory. (His son, Larry, Jr., is a plastic surgeon at Baylor). Larry, Sr. subsequently came down to Baylor, and the chairman at Baylor said he needed a chief of vascular surgery. Larry happened to give him my name. I always blame Larry for how I ended up in Houston.

**Q** *What did you think of the Texas Medical Center once you arrived?*

**A** | Well, I knew Dr. DeBakey, Dr. Stanley Crawford and Dr. Cooley were all here. These were the men who built the well we now all drink from: contemporary surgical treatment of cardiovascular disease. But I had no idea of the scale of the medical center. So I was completely blown away with what was happening here. But while we at Emory had embraced the endovascular revolution, Houston was behind the times in terms of vascular evolution. The vascular community recognized early on that we needed to change our practice, to retool our workforce and transform how, for example, aneurysm repair—which had been developed in Houston—was now being done. Most vascular surgery was being performed by cardiac surgeons. There were no vascular surgeons here. I was one of the first trained vascular surgeons to move into the medical center, and Dr. Charles McCollum, a cardiovascular surgeon at Baylor, had the vision to encourage this. You're now starting to see the same kind of change take place in cardiac surgery because of percutaneous valves. I think percutaneous valves are to cardiac surgery what aneurysm repair was to vascular surgery.

**Q** *What do you see on the medical horizon?*

**A** | The transformation that has taken place is around imaging. It is the integration of imaging into hybrid

labs and operating rooms that will absolutely transform how we work. Many procedures that had to be conducted in radiology departments, because of the availability of imaging, will move to cath labs and hybrid rooms. It will be one-stop shopping.

**Q** *At Houston Methodist, what excites you most about coming to work every day?*

**A** | Let me tell you a story. I don't want to get into the politics of the Baylor-Methodist split, but when I moved down here I was employed by Baylor. Dr. DeBakey was my boss; life was pretty good. It was a tremendous partnership and, without Baylor and Methodist together, I probably wouldn't have moved. When the split occurred, for those of us in the middle of it, it wasn't exactly obvious what to do. I opted to stay at Methodist, where we had a large practice and had already built the first advanced imaging operating rooms in the medical center. It was a very odd time. I'd been in academic surgery my entire life. But now, overnight, at Methodist: no medical students, no residents, no fellows, no research labs. Indeed, there were no departments, no department chairs, no faculty, no institutional review board, no graduate medical education office. Under the leadership of John Bookout and Ron Giroto, Houston Methodist decided to build a brand new academic organization, which, other than the clinical care component, had to be completely retooled from scratch. For me, this was both terrifying and exciting. Really, as an academic organization, Houston Methodist is a startup. Ten years old. I am extremely proud of what has been achieved, the speed at which this has been accomplished and the trajectory of our academic programs.

**Q** *Tell us about the new North Tower that's under construction.*

**A** | It'll open in just over a year and will house the new cardiovascular operating rooms, catheterization labs, cardiovascular intensive care unit and patient care floors. That's the missing piece for the heart and vascular center. Dr. DeBakey's spirit is part of the Fondren Brown operating room, which we currently occupy—probably the most famous cardiovascular operating room in the world. We're still working in the same operating rooms and using the same intensive care unit that Drs. DeBakey and Crawford used. They're functional but not very attractive, and they're not where we should be at this point in the evolution of the Houston Methodist DeBakey Heart & Vascular Center.

## PUMPS & PIPES 10

**WHEN** Monday, Dec. 5, 8 a.m.

**WHERE** ExxonMobil Houston Campus  
22777 Springwoods Village Pkwy.  
Spring, Texas

**INFO & SIGN-UP** [pumpsandpipes.com](http://pumpsandpipes.com)

**Q** *This December marks the 10th anniversary of Pumps & Pipes, an annual event you co-founded. The story goes that you struck up a conversation with a drilling engineer on a flight to Houston and the two of you realized the similarities between drilling for oil and performing heart surgery. Now, there's an annual symposium that brings together people in medicine, energy, academia and aerospace to exchange and explore ideas.*

**A** | Bill Klein, an Exxon Mobil engineer, and I started P&P, as we call it. It involves the Houston Methodist DeBakey Heart & Vascular Center, ExxonMobil, the University of Houston and NASA. We now have teachers coming in, rotating through labs to take the message back to students. We're at the point where we're trying to figure out what more to do. It's stretching our capabilities. We webcast to more than 2,500 individual sites around the world. Our next meeting is Dec. 5 at the new Exxon facility in Spring. Come and join us!

**Q** *There's such a great kinship between surgeons and engineers.*

**A** | Yes, but physicians take for granted—which we shouldn't—the privilege of caring for patients. It's very gratifying. Engineers by and large don't get that privilege. So when I stand up in front of an audience full of engineers and start explaining that I've got a problem with a heart valve or a burst aneurysm, and explain this as a pump or a pipe problem, well you can see the light bulbs going off. The engineers are highly motivated by the fact that knowledge they have can be used to help their fellow man. That, in essence, is what pumps and pipes is about. We call it "exploring the other guy's toolkit."

**Alan Lumsden, M.D., was interviewed by William F. McKeon, executive vice president and chief strategy and operating officer of the Texas Medical Center.**

## PUMPS & PIPES AT A GLANCE

WEBCAST PARTICIPANTS

2,725

ATTENDEES SINCE THE LAUNCH

1,970

COUNTRIES PARTICIPATING

33

STATES PARTICIPATING

29

# CURATED

The intersection of ARTS and MEDICINE

By Britni N. Riley



Walking through George Bush Intercontinental Airport at 2 a.m. a few weeks ago, fatigued by the hassles of travel, I looked up to see a gallery of colorful paintings on the wall. Unaware of who made the paintings or where they came from, I simply stood and admired the beautiful images of birds, flowers and trees. Before long, I forgot about how tired I was, and I almost forgot about the 12 hours it had taken me to get home.

The paintings were part of a larger exhibition of art and creative writing called *Making A Mark*, presented by The Periwinkle Foundation. All of the artwork is done by patients receiving care for cancer and blood disorders at Texas Children's Cancer and Hematology Centers. Some of the works are done by siblings of the patients. Making art helps patients and their siblings feel empowered.

"Giving kids an opportunity to create art and to express themselves gives them a sense of control," said Carol Herron, Arts In Medicine Coordinator at Texas Children's Cancer and Hematology Centers. "When they are in the hospital, there are so many constraints on what they can do. This gives them back their control. They get to decide what they want to create."

This year, local artist Anat Ronen worked with patients at the hospital. A large-scale muralist, Ronen started her art career eight years ago. She helped patients create four different 4 ft. by 4 ft. mixed-media pieces of animals, each made of 16 different 1 ft. by 1 ft. squares.

"The pieces are just beautiful," Herron said. "We have an owl, a raccoon, a rooster and an eagle. Little, bitty kids were gluing pom-pom balls and sequins and torn paper."

*Making A Mark* is a traveling exhibit on

display in Houston and around Texas. Viewers who see it are encouraged to send "postcards from the road" with inspirational messages and well-wishes. Postcards and a drop-box are provided at most exhibition sites. To date, 25,000 postcards have been sent back to Texas Children's artists. ■

## *Making A Mark* Traveling Schedule

Oct.-Nov. 2016:	The Woodlands Children's Museum, The Woodlands
Through Jan. 2017:	City Hall, Houston
Jan.-Feb. 2017:	H-E-B San Felipe, Houston
March-April 2017:	Three Allen Center, Houston
May-June 2017:	McAllen Airport, McAllen
June-Aug. 2017:	William P. Hobby Airport, Houston
June-Aug. 2017:	George Bush Intercontinental Airport, Houston





# Solutions

## TMC innovations

BY CHRISTINE HALL

Richard Harveston, 58, was diagnosed with esophageal cancer in October 2013. He had chemotherapy and radiation for the tumor on the top of his stomach, but the tumor came back. This time, his doctor suggested surgery.

After the surgery, Harveston's doctor informed him that he also had aneurysms—balloon-like bulges in his arteries—which they would monitor for a few months. Harveston had a relative who had died from a ruptured aneurysm, so he was anxious.

"I didn't know I had the aneurysms," said Harveston, a maintenance worker at a synthetic rubber plant. "I actually tell people that cancer saved my life."

Ultimately, Harveston underwent surgery to fix the aortic aneurysm that



George Pisimisis, M.D. Credit: Courtesy photo

extended into branches of his right iliac artery, which supplies blood to the pelvic region and resembles an upside-down tree with branches. That procedure presented vascular surgeons and interventional radiologists at The University of Texas MD Anderson Cancer Center with the ability to perform a surgical first in Houston.

Cancer patients develop aortic aneurysms the same way as other patients, but their anatomy may be particularly hostile to a hardening of the

arteries due to internal scarring related to prior surgeries or radiation. The risk of rupture during chemotherapy could also be higher according to some studies, said George Pisimisis, M.D., associate professor of thoracic and cardiovascular surgery at MD Anderson.

Due to the extent of Harveston's aortoiliac aneurysms, and because of his previous surgeries and radiation, he was too high-risk for open abdominal surgery, the traditional fix for complex aortic aneurysms, Pisimisis said.

Advanced plaque inside Harveston's arteries left him with poor circulation that utilized only a few branches of his right iliac artery. To decrease the risk of inadequate blood supply to the pelvis and bowel areas, Pisimisis and his team needed to preserve Harveston's left iliac artery and treat the extensive aneurysm at the same time.

Pisimisis led the three-hour surgery in May, along with Kamran Ahrar, M.D., professor of interventional radiology at MD Anderson, and Tam Huynh, M.D., professor of thoracic and cardiovascular surgery at MD Anderson.

They implanted a device called

the Gore Excluder Iliac Branch Endoprosthesis, approved recently by the Food and Drug Administration. The new device, which fits inside the artery and preserves blood flow, is implanted with minimally invasive surgery through tiny groin incisions. Harveston was in the hospital for just one day, and back to work within a week, Pisimisis said.

"Before, we could treat about 60 percent of patients with abdominal aortic aneurysms," he said. "Now we can treat up to 90 percent with better outcomes."

Harveston's surgery was helped by the addition of a new state-of-art hybrid surgical suite and a team with advanced endovascular skills.

"It is important that we be able to treat complex aortic disease within the same institution," Pisimisis said. "We were able to do this because we had multiple teams working together through coordinated care."

MD Anderson was "just wonderful," Harveston said. "I was able to go back to work, but not lift heavy things. The guys that I worked with helped me out." ■



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FIELD NOTES

[1] One of the guests at **THIRD COAST** restaurant's VIP preview party was Robert J. Cruikshank, a Texas Medical Center board member.

[2] **HOWARD MONSOUR, M.D.**, speaks at the inaugural TMC Hispanic Transplant Symposium on Oct. 6.

[3] NICU nurses at Texas Children's Hospital pose for **BAD PANTS DAY**, an event that precedes the Bad Pants Open, an annual golf fundraiser.\*

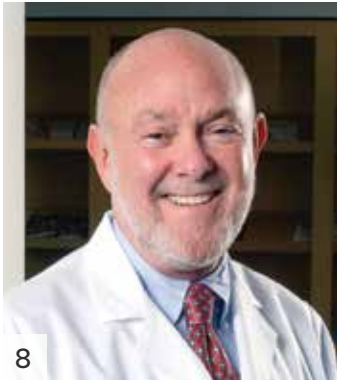
[4] Chefs Jon Buchanan and Robert Del Grande; President and CEO of the TMC Robert C. Robbins, M.D.; Taste of the NFL founder Wayne Kostroski; University of Houston president Renu Khator, Ph.D.; and UH Executive Chef Mark A. Riley at the announcement of **TASTE OF THE NFL'S "PARTY WITH A PURPOSE,"** which will be held at UH on the eve of Super Bowl LI.

[5] **STEPHANIE CUNNINGHAM, MBA**, has been promoted to vice president of business development for The Menninger Clinic.

[6] **JOHN P. DORMANS, M.D.**, chief of pediatric orthopedic surgery at Texas Children's Hospital and professor at Baylor College of Medicine in the Division of Orthopedic Surgery, was recently elected to the presidency of Société Internationale de Chirurgie Orthopédique et de Traumatologie.

[7] **SHARON PLON, M.D., PH.D.**, professor of pediatrics and of molecular and human genetics at Baylor College of Medicine and director of the Cancer Genetics and Genomics Program at Texas Children's Cancer Center, was elected to the American Society of Genetics Board of Directors for 2017.

[8] **DAVID POPLACK, M.D.**, director of Texas Children's Cancer and Hematology Centers, recently received the first-ever Hyundai Hope on Wheels Hero of Hope Lifetime Achievement Award in recognition of his dedication to pediatric cancer research.



\*Credit: Courtesy Photo





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[9] **REBECCA RICHARDS-KORTUM, PH.D.**, Rice University's Malcolm Gillis University Professor, was named a 2016 MacArthur Fellow by the John D. and Catherine T. MacArthur Foundation for her pioneering work in global health. (Photo licensed under CC-BY. Credit: John D. & Catherine T. MacArthur Foundation.)

[10] **JONATHAN STEVENS, M.D., MPH**, has been promoted to vice president and medical director of outpatient services at The Menninger Clinic, joining the psychiatric hospital's executive leadership team.

[11] **IGNATIA BARBARA VAN DEN VEYVER, M.D.**, professor of obstetrics and gynecology at Baylor College of Medicine and director of clinical prenatal genetics for the Department of Molecular and Human Genetics, was appointed president of the International Society for Prenatal Diagnosis.

[12] Physicians and administrators celebrate the opening of the **PELVIC FLOOR HEALTH CENTER** at Memorial Hermann Memorial City Medical Center.\*

[13] **RUN WANG, M.D.**, professor and Cecil M. Crigler, M.D. Chair in Urology at McGovern Medical School at The University of Texas Health Science Center at Houston, has been elected to a two-year term as president of the Sexual Medicine Society of North America.

[14] Ava Gallen was one of the patients at MD Anderson Children's Cancer Hospital who enjoyed games, face painting and giveaways at **PARTY PALOOZA IN THE PARK**. The Stripes Convenience Stores annual Stripes Stores Celebrates Tomorrows campaign aims to shed light on pediatric cancer and research treatment.\*

[15] **KENDRA SCOTT NATIONAL GIVEBACK DAY** donated 20% of jewelry sales to MD Anderson Cancer Center Children's Cancer Hospital. MD Anderson employees gathered in support of the donation.\*

DO YOU HAVE TMC EVENT PHOTOS YOU WOULD LIKE TO SHARE WITH PULSE?  
SUBMIT HIGH-RESOLUTION IMAGES TO: [NEWS@TMC.EDU](mailto:NEWS@TMC.EDU)



# November 2016

5 **American Heart Association’s 2016 Houston Heart Walk**  
Saturday, 8:30 a.m.  
Texas Medical Center  
1522 William C. Harvin Blvd.  
Free; registration requested and donations appreciated. Register at:  
houstonheartwalk.org  
suzie.flores@heart.org  
832-918-4030

8 **Ernst Knobil Distinguished Lecture: “Rethinking Depression and its Treatment: Perspectives from Studies of Deep Brain Stimulation,” by Helen Mayberg, M.D.**  
Tuesday, 4 – 5 p.m.  
McGovern Medical School  
6431 Fannin St., Suite MMS 3.001  
msresearchcommittee@uth.tmc.edu  
713-500-5605

12 **MD Anderson’s Boot Walk to End Cancer**  
Saturday, noon – 2 p.m.  
Texas Medical Center  
1220 Holcombe Blvd.  
Free; register at give.mdanderson.com  
bootwalk@mdanderson.org  
844-363-2262

17 **TMCx Demo Day: Medical Devices**  
Thursday, 3 – 8 p.m.  
TMC Accelerator (TMCx)  
2450 Holcombe Blvd., Suite X  
Free; email to request an invitation  
TMCxevents@tmc.edu  
713-791-8855



American Heart Association’s 2015 Houston Heart Walk. Credit: Michael McKenney

18 **MD Anderson School of Health Professions, Open House**  
Friday, 1 – 4 p.m.  
MD Anderson Cancer Center  
Main Building  
1515 Holcombe Blvd.  
askshp@mdanderson.org  
713-745-1205

19 **TMC Serves: One Day, One Event, One Purpose**  
Saturday, 11 a.m. – 4 p.m.  
TMC Innovation Institute and The Houston Food Bank  
2450 Holcombe Blvd., Suite X  
Registration required  
tboatwright@tmc.edu  
713-791-8835



**NOVEMBER: ALZHEIMER’S AWARENESS MONTH**

November is recognized nationally as Alzheimer’s Awareness Month. Alzheimer’s disease is the most common cause of dementia among older adults and the sixth leading cause of death in the United States, according to the Centers for Disease Control and Prevention. More than five million people are living with Alzheimer’s disease in the U.S. Although there is no cure, treatment options are available that can delay some symptoms. Through clinical trials and research, health professionals throughout the Texas Medical Center are working to find a cure for Alzheimer’s disease.

FOR MORE EVENTS, VISIT [TMC.edu/news/](http://TMC.edu/news/)



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