

TMC | PULSE

A glowing human heart is the central focus, held gently by two hands wearing purple nitrile gloves. The heart has a warm, orange-yellow luminescence. To the left, a gloved hand holds a clear medical vial with a yellow cap. To the right, another gloved hand holds a clear plastic tube with a white connector. The background is a soft, out-of-focus grey.

THE OFFICIAL NEWS OF THE TEXAS MEDICAL CENTER — VOL. 2 / NO. 1 — JANUARY / FEBRUARY 2015

Pioneers of Regeneration

.....
*A look at the great minds breaking
new ground in stem cell research
and regenerative medicine*

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Pioneers of Regeneration

From bioengineered organs to tissue repair, researchers across the Texas Medical Center are utilizing stem cells and advancing regenerative science to cultivate a wide range of medical solutions.



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INSPIRED BY HIS OWN CHILDHOOD SWIMMING LESSONS AT HOUSTON'S JULIA C. HESTER HOUSE, HARRIS COUNTY PRECINCT ONE COMMISSIONER EL FRANCO LEE FOUNDED THE STREET OLYMPICS MORE THAN 28 YEARS AGO. TODAY, THE PROGRAMS CONTINUE TO INSPIRE FUTURE LEADERS THROUGH ORGANIZED SPORTS, RECREATIONAL ACTIVITIES, AND YOUTH SUPPORT SERVICES.

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ON THE COVER: A decellularized pig heart serves as the framework for efforts to engineer new organs.

PRESIDENT'S PERSPECTIVE



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

In this issue of Pulse, you will see some of the incredible work being done by physicians and scientists across the Texas Medical Center in the field of regenerative medicine and stem cell research. Their commitment, along with that of countless others across this campus, has inspired unprecedented collaboration, and the promise to continue to strengthen those relationships and efforts in the future.

We see the Texas Medical Center campus as the perfect clinical test ground for exciting research and innovative treatments, and the work being done in regenerative medicine holds great promise. From the work of UT's Charles Cox in pediatric brain injury, to the research that Texas Heart Institute's Doris Taylor is doing in how stem cells can be used to repair human hearts, the experts on this campus are exploring the full range of potential for stem cells.

This year we will be looking to the implementation of the Texas Medical Center's Strategic Plan. We have already taken the initial steps to build a promising relationship with Johnson & Johnson JLABS, we have welcomed the Health Policy Institute leadership, and we continue to look to new partnerships to help build upon the progress made in 2014.

We have so many bold, exciting plans for 2015, including several events that we hope will bring together health care professionals from across the state and the country.

We are looking forward to again hosting the Value-Based Health Care Delivery course, taught by renowned Harvard Business school professors Michael Porter and Robert Kaplan. They encourage participants to look critically at outcomes and cost measurement for patient care.

We are also proud to be co-hosting the Medical World Americas Conference from April 27-29. Last year's conference brought together some of the great minds of the health care industry to explore promising new products and engage in panel discussions to help foster health care collaboration within and beyond the Texas Medical Center.

Last year ended on a high note, and we look forward to maintaining that momentum through 2015. We have the commitment, the expertise and desire to truly improve human health, and together we can do just that.

Robert C. Robbins

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Robert C. Robbins, M.D.

President and Chief Executive Officer

Amanda D. Stein

Editor

astein@texasmedicalcenter.org

Shea Connelly

Associate Editor

sconnelly@texasmedicalcenter.org

Alex Orlando

Staff Writer

aorlando@texasmedicalcenter.org

L. Morgan Farrar

Business Strategist

Contributing Photographers

Scott Dalton

Nick de la Torre

Killy Photography

Michael Stravato

NEWSROOM

713-791-8812

news@texasmedicalcenter.org

ADVERTISING

713-791-8894

newsads@texasmedicalcenter.org

DISTRIBUTION

713-791-6130

distribution@texasmedicalcenter.org

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Left: Guillermo Gomez, MD, Director of the Center for Obesity and Metabolic Surgery

Center Left: Gurinder Luthra, DO, Gastroenterology

Center Right: Aakash Gajjar, MD, FACS, FASCRS, Colon and Rectal Surgery

Right: Taylor Riall, MD, PhD, Liver and Pancreatic Surgery

The four clinicians featured here are representative of the whole team of specialists spanning our gastrointestinal services.

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HEALTH POLICY INSTITUTE

BY ARTHUR GARSON JR., M.D., MPH
DIRECTOR OF THE TEXAS MEDICAL CENTER HEALTH POLICY INSTITUTE

THE HEALTH POLICY INSTITUTE (HPI) HAS THE IMPERATIVE TO BE A VALUABLE RESOURCE TO THE MEMBER INSTITUTIONS OF THE TEXAS MEDICAL CENTER, AS WELL AS TO THE CITY, THE STATE, AND THE NATION AND TO BECOME THE TRUSTED, UNBIASED SOURCE FOR HEALTH POLICY DATA AND ANALYTICS FOR TEXAS. This goal is similar to that of the U.S. Institute of Medicine: “...to improve health providing independent guidance and analysis; the Institute aims to provide unbiased, evidence-based, and authoritative information and advice concerning health and science policy to policymakers, professionals, leaders in every sector of society, and the public at large.”

TMC72 is the first program of the Health Policy Institute and is intended to meet this goal. Launched on January 12, at the beginning of the new legislative session, TMC72 is a decision support program that offers assistance to state legislators, state and local officials, and TMC-member government relations’ representatives and CEOs in evaluating and creating public health policy.

After a request is made by secure email, we will produce answers to inquiries within 72 hours (hence the name TMC72). In the first 24 hours, data are gathered by analysts and then passed along to one to three members of the HPI Executive Advisory Committee, a group of 11 senior individuals with deep expertise in policy analysis. The experts will then have 24 hours to provide a written analysis each in less than 100 words. In the final 24 hours, the director of the program and the director of the Institute will determine if additional clarification is needed. By the end of 72 hours, the brief will be returned by email.

The report will have four sections: the question, data requested in written and chart form, the sources for the data and the analyses. The request and the person submitting the question are kept strictly confidential, however the data that were used to provide the answer will be archived on the TMC72 website and available to the public. The program is available without charge.

The TMC Health Policy Institute is one of the few of its kind in the country. We are committed to

improving the efficiency and effectiveness of health policy throughout our state. Providing the best data is not enough, as the information must be accurate, useful, timely, and presented in an easy-to-digest form. This is where we intend to provide value with TMC72.

For more information about TMC72 and the Health Policy Institute, visit www.tmchealthpolicy.org. ■

“The TMC Health Policy Institute is one of the few of its kind in the country. We are committed to improving the efficiency and effectiveness of health policy throughout our state. Providing the best data is not enough, as the information must be accurate, useful, timely, and presented in an easy-to-digest form.”

A Run With Meaning

Runners in the annual Chevron Houston Marathon have raised millions for charitable causes, including some of the institutions within the medical center

BY SHEA CONNELLY



For many runners, a marathon is the ultimate test of endurance—a 26.2-mile show of mental and physical strength. For those running the annual Chevron Houston Marathon, the race also offers an opportunity to use that incredible feat to give to others in the Houston community and beyond.

Leading up to the Jan. 18 marathon, 62 organizations were officially part of the Run for a Reason charity program, including Texas Medical Center institutions Ronald McDonald House Houston and the Memorial Hermann Foundation. Run for a Reason benefits runners in addition to charitable organizations, by providing a way to enter the race even after it is sold out.

“Those participants have to raise a certain amount of money in order to receive their entry,” said Jennifer Tiedt, Ronald McDonald House Houston development coordinator. “We sold 60 of those this year. Then there’s also another option called a HERO Entry—they make a \$350 flat donation up front and that secures an entry for them as well.”

The marathon has been a successful fundraiser for RMH Houston, earning

the organization over \$400,000 in donations since they first participated in 2011. Those funds largely go toward basic upkeep of the House and the additional rooms RMH Houston runs throughout the medical center.

“In total, we operate 86 bedrooms in the medical center and five family rooms,” said Mikki Donnelly, chief advancement officer at RMH Houston. “It’s a large organization that touches many, many people, from not only Houston but all over the world. Those funds that we raise help us do that.”

Even beyond the generous donations, the marathon helps spread awareness of everything RMH Houston does for families in the medical center.

“We have a lot of people who are tapping into this who really don’t know much about the house,” said Tiedt. “Because of the events that we’ve had here for our team, it’s allowed them to come here and see firsthand our mission and what we do.” Those events include an appreciation dinner for RMH Houston’s marathon team members—over 90 this year—and a running clinic open to the public,

where they signed up a number of team members.

Then there are those for whom fundraising is personal. A number of RMH Houston’s participants have personally benefited from the house. Tiedt cited one woman whose parents stayed at a Ronald McDonald House in a different city when she was going through treatment for an eating disorder.

“It was very serious and her parents are still so appreciative to this day, because she would not have been able to ever receive the treatment if they hadn’t been able to stay at this Ronald McDonald House,” said Tiedt. “It’s come full circle for her because she actually personally used the house here in Houston when her daughter had to be treated at MD Anderson.” That runner has raised \$15,000 for RMH Houston.

Overall, Run for a Reason has generated over \$19 million for charity since its creation in 1995, but that represents only part of the money runners have raised. Many, like Robert Boudwin, run on behalf of charities not on the Run for a Reason list. Boudwin runs for LifeGift Organ Donation Center, and other related causes, thanks to a very personal experience with organ transplantation.

Boudwin’s name and face may not be familiar to many Houstonians, but his alter ego is. For two decades he has entertained the city as Clutch, the Houston Rockets’ mascot. During the 2014 and 2015 marathons, spectators and runners were treated to the sight of Boudwin running the half marathon in the Clutch costume. Though he loves to entertain and make people smile, the motivation to run is deeper.

At the beginning of 2012, Boudwin’s father, Paul, received a double lung transplant at Houston Methodist Hospital. He had been suffering from idiopathic pulmonary fibrosis for four years, and by the time he underwent

surgery in February of 2012, his lungs had all but given out. He was on oxygen 24 hours a day and would get light-headed walking even very short distances.

Prior to their own experience, Boudwin said his family did not know much about organ donation. In fact, when the idea was first introduced, his father had doubts.

“He was against it beforehand, thinking it would be too expensive and unaffordable and the chances of actually getting one were not that great, all of which were not true,” he said. Boudwin himself was shocked to realize, as he looked at his driver’s license while in the hospital, that he was not an organ donor.

“It’s not just about awareness, it’s about taking a step, taking 60 seconds out of your day and going online to register,” he said. “Not just thinking about it and knowing about it, but actually doing something about it.”

Now Boudwin works to call people to action as organ donors and to raise awareness about the process. He raises funds and makes appearances for LifeGift and Nora’s Home, which offers transplant patients and their families an affordable place to stay as they await transplantation. Boudwin first dedicated the half marathon to LifeGift in 2013, but ran in normal running clothes that year.

“That’s when I really got the idea. I said, ‘Next year I’m going to do this, I’m going to run the half marathon in costume because that’ll turn some heads,’” he said. “Every head that we turn, they’re going to see the message on the shirt. They’ll see the message on the headband. We’re going to try to get some people to sign up in Texas.”

Currently, there are over seven million registered donors in Texas, which represents about 38 percent of adults in the state. Increasing that number boils down to increasing awareness,



Robert Boudwin begins the 2015 Chevron Houston Half Marathon, the second he's run in his Houston Rockets Clutch costume.

which Boudwin's eye-catching, Clutch-costumed run accomplishes.

"I think it's a great opportunity for us and a big platform to create awareness about organ donation," said Claudia Sanchez, public relations and multicultural outreach coordinator at LifeGift. "I mean, what better way than to see a giant bear running the marathon?"

Running in the Clutch costume is quite a feat. The costume alone weighs about 20 pounds—a burden that only increases as it gets drenched in sweat. Even the simple act of breathing becomes much more difficult while wearing a giant bear head, a bit of irony given that a double lung transplant inspired Boudwin's runs.

"You want fresh air, and the exchange of oxygen is not the same as if you weren't wearing the head," said Boudwin. "The mixture is a little bit more your own carbon dioxide."

Still, all the physical and mental exertion is worth it to Boudwin if he can help other families going through what he and his family did. The more people who see his message, the larger the

donor registry grows. Each person who registers could potentially save multiple lives somewhere down the road.

"I remember very distinctly thinking my boys are only three years old. They're not going to remember my dad if he passes now, and I didn't want that to happen," he said. "That's been very special to me, that they get the time with him and they'll always remember him now. A near-death experience and coming out on the other end alive, and alive through the selflessness of somebody else is pretty inspiring." ■

“ It's not just about awareness, it's about taking a step, taking 60 seconds out of your day and going online to register. Not just thinking about it and knowing about it, but actually doing something about it. ”

— ROBERT BOUDWIN
Houston Rockets' Clutch



Ronald McDonald House Houston staff and volunteers cheer on runners in the Chevron Houston Marathon.



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The Other Guy's Toolkit

Looking beyond the boundaries of their respective fields, professionals from Houston's medicine, energy and aerospace industries gather to take a multi-disciplinary approach to industry challenges

BY ALEX ORLANDO



“The other guy’s toolkit is something that we emphasize over and over because that’s where the solution often resides—we just need that opportunity to network and bring people together to explore that.”

—STEPHEN R. IGO

Director of the Entrepreneurial
Institute at Houston Methodist
DeBakey Heart & Vascular Center

Defly maneuvering gloved hands that monitor the position of his fingers, and adorned with a mechanical visor that allows him to view the two stereo screens inside, NASA engineer Mike Goza delicately closes his fingertips together. On the stage to his right, a 300-pound humanoid robot known as Robonaut—complete with a gilded helmet and white fabric torso that echoes the spacesuits worn by its human counterparts—tightens its grip on a handrail and tether hook used on the outside of space stations.

“That tether hook is not a device designed for robots to work with,” admitted Ron Diftler, Ph.D., Robonaut project manager at Johnson Space

Center. “Mike’s tele-presencing himself into the robot’s body, so that he becomes, essentially, like the robot. It makes for a natural way to use all of the skills that you have as a human being and transfer them to the robot.”

While Robonaut was designed to assist astronauts on tasks in which another pair of hands would be beneficial, as well as perform jobs either too risky or mundane for humans, the breadth of its potential applications are not limited to the upper echelons of outer space. A humanoid robot that can utilize tools designed for human beings might also be implemented in dangerous areas on an oil and gas site. It may even find its way into an operating room.

“The nice thing about Robonaut is that it allows us to pick up instruments that were designed for surgeons and put them in this type of humanoid platform with dexterous fingers—it opens up really interesting possibilities,” said Brian Dunkin, M.D., chief of endoscopic surgery and medical director of the Houston Methodist Institute for Technology, Innovation, and Education (MITIE). “When you look at the medical robots that are out there for use in minimally invasive surgery and orthopedic surgery, their armamentarium is limited. Wouldn’t it be nice to be able to just pick up the instruments that we use in their normal environments?”



“The idea is to stop thinking within the constraints of your protected field and start communicating. It’s about the transfer of knowledge between the energy world and the cardiovascular world, and more recently the aerospace world—there are some very concrete examples of that.”

— ALAN B. LUMSDEN, M.D.
Medical Director of the Houston Methodist
DeBakey Heart & Vascular Center



TOP: Attendees were able to watch a live transcatheter pulmonary valve replacement unfold right before their eyes. LOWER LEFT: Bruce Banerdt, Ph.D., senior scientist and principal investigator for the InSight Lander Mission to Mars at the Jet Propulsion Laboratory, explores the geology of earth-like planets and the future of InSight Lander missions.

Robonaut’s capabilities were unveiled during Pumps and Pipes, an annual conference that serves as a platform for cross-fertilization of ideas among three quintessentially Houston industries—medicine, energy and aerospace. As the presentation unfolded, detailing how an advanced piece of aerospace technology might also prove useful to oil companies and medical practitioners, the thought behind the day-long event was clear.

“The idea is to stop thinking within the constraints of your protected field and start communicating,” said Alan B. Lumsden, M.D., medical director of Houston Methodist DeBakey Heart & Vascular Center. “It’s about the transfer of knowledge between the energy world and the cardiovascular world, and more recently the aerospace world—there are some very concrete examples of that.”

Chronicling the history of Pumps and Pipes, affirmed Lumsden, ultimately begins with a vascular surgery device known as the Greenfield filter, which keeps a blood clot in the legs from traveling through the inferior vena cava and into the lungs.

“Lazar Greenfield, a trauma surgeon from Michigan, was having dinner with his next-door neighbor, an oil industry engineer named Garman Kimmel,” explained Lumsden, also co-founder and co-director of Pumps and Pipes. “Lazar was bemoaning the fact that a patient of his—a young trauma victim—had come in, was operated on, survived this major surgery, and then dropped dead three days later of a blood clot. Kimmel said that he needed to implant a filter in order to trap blood clots before they could reach the lungs.”

This casual conversation was a catalyst for developing the Greenfield filter, which is still in use to this day. “In the vascular surgery world, we were well aware of that example,” added Lumsden. “When I ended up coming down to Houston years ago, that was certainly on my mind.” On one of his flights out of Houston, Lumsden

stumbled upon a similar chance encounter when he struck up a conversation with Zeljko Runje, a drilling engineer with ExxonMobil, about their respective professions. As the conversation continued, the heart surgeon and the engineer realized that both of their industries were, essentially, all about pumps and pipes.

Lumsden believes that beneath the sheen of specialized verbiage, there are a lot of commonalities. “The oil and gas industry is involved in the flow assurance business—delivering a large volume of flow from point A to point B—which is exactly what we do on a daily basis,” he said. “If you look at what NASA does, they’re in the flow assurance business, too. While we’re dealing with blood circulation, the energy industry is navigating oil and gas production and the aerospace sector is maintaining fuel levels. We all image, navigate hollow tubes, and are interested in many similar emerging technologies, including robotics.”

After a mutual agreement between Houston Methodist DeBakey Heart & Vascular Center and ExxonMobil to continue the conversation, William E. Kline, Ph.D., manager of drilling and subsurface research for ExxonMobil Upstream Research Company, came on board. His involvement would lead to the founding of Pumps and Pipes.

“I was really invested in getting involved,” said Kline, a Pumps and Pipes co-founder. “Our research can always benefit from a bit of discovery of new things, and we also face some very similar problems to the medical industry. They might have some tools available that we can utilize.”

“What Pumps and Pipes gives us the opportunity to do is to look down into someone else’s toolkit and go, ‘What’s that?’ or ‘Have you ever thought about one of these?’” added Stephen R. Igo, co-director of Pumps and Pipes and director of the Entrepreneurial Institute at Houston Methodist DeBakey Heart & Vascular Center.

“The other guy’s toolkit is something that we emphasize over and over because that’s where the solution often resides—we just need that opportunity to network and bring people together to explore that.”

Far from a series of abstract discussions, these meetings have led to the emergence of new research ideas and concrete technological breakthroughs for all three industries. “ExxonMobil’s shareholder magazine published an article talking about using an MRI scan to understand flow characteristics at the bottom of a wellbore completion,” said Lumsden. “That same ability to create a controlled pumping system lets us print out an individual patient’s aortic valve—it isn’t just any aortic valve, this could be your aortic valve. Only after ExxonMobil saw how we look at cardiac function did they realize that they could use us to optimize a completed wellbore. Beyond that, those velocity maps could just as easily be a reading of what’s coming out of a space shuttle engine.”

“While there’s a portion of what we do that focuses on the title aspect of pumps and pipes—which we deal with in aerospace, as well—it’s gone much beyond that,” added Ellen Ochoa, Ph.D., director of Johnson Space Center as well as a former NASA astronaut. “We started a project to look at using microwave energy to perform no-drill dentistry to remove bacteria. That’s grown into a project with Methodist to look at how you might remove biofilm from in-site catheters without removing them.”

Since 2007, the Houston Methodist DeBakey Heart & Vascular Center and ExxonMobil, in conjunction with the University of Houston, and more recently, Johnson Space Center, have spearheaded the Pumps and Pipes symposium.

In the intervening seven years, the event has increased in scope exponentially, from a subdued conversation between participants in a conference

room at the University of Houston, to a dynamic showcase of technological achievement and industry progress. This year, over 250 participants piled into the auditorium at the Houston Methodist Research Institute, bolstered by the more than 2,500 people tuning into the webcast from around the globe.

Before even entering the auditorium itself, attendees at the event—entitled Pumps and Pipes 8: Ideas to Insight—walked past a spacesuit standing sentinel at the building’s entrance, a da Vinci Surgical System flanking the doors to the auditorium itself, and caught a glimpse of various exhibit booths where guests would later mingle to discuss crossover technologies, business cards at the ready.

“This is really a platform about meeting people,” noted Lumsden. “It’s not just about sitting here and listening to us—it’s about taking some of these ideas from our presentations, talking to someone who’s outside of your usual comfort zone, and figuring out how to take their concepts and apply them to your industry.”

As for the presentations interspersed throughout the day, attendees had a wide range of material to absorb: a live transcatheter pulmonary valve replacement, a prospective outline of the InSight Lander Mission to Mars—which would place a lander on Mars, designed to drill beneath the surface and investigate the planet’s deep interior—and even a harrowing account of how Luca Parmitano, an Italian astronaut, nearly drowned during a 2013 spacewalk on the International Space Station when debris clogged a pump mechanism inside his spacesuit.

As the conference builds momentum with each passing year, approaching the limit of attendees who can be accommodated, organizers think there may be value in creating a not-for-profit with the ability to raise money to fund specific projects. In addition to acting as a catalyst for new technologies, the not-for-profit will emphasize



Luca Parmitano, an Italian astronaut who nearly drowned during a 2013 spacewalk on the International Space Station when debris clogged a pump mechanism inside his spacesuit, describes his harrowing experience.

influencing young people to pursue paths in science, technology, engineering and math.

“A couple of years ago, we realized how important this platform could be at inciting students to enter these fields, which are potentially dry subjects,” reflected Lumsden. “But when you look here and see what these engineers and researchers can do, it’s like magic. The magic show is not being done by sleight of hand, but due to a basic grounding and understanding of science and technology.”

“These three areas, in Houston, are world class—they’re the best in

the world,” concluded Kline. “We’re the energy capital of the world, we’re certainly the cardiovascular capital of the world, and the home of manned space flight. Every one of us spends our days maintaining that excellence, and while it’s clear that staying in our world will keep us on the development track, true discovery absolutely needs to be cross disciplinary and broad. Getting together and discussing what we’ve learned is a very fruitful endeavor, and I think it’s the way that all technology has to proceed in the 21st century and beyond.” ■



DAVID J. SUGARBAKER, M.D., PROFESSOR AND CHIEF OF THE DIVISION OF THORACIC SURGERY IN THE MICHAEL E. DeBAKEY DEPARTMENT OF SURGERY, AND DIRECTOR OF THE LUNG INSTITUTE OF BAYLOR COLLEGE OF MEDICINE, SAT DOWN WITH TEXAS MEDICAL CENTER EXECUTIVE VICE PRESIDENT AND CHIEF STRATEGY AND OPERATING OFFICER WILLIAM F. McKEON TO DISCUSS THE UPBRINGING THAT INSPIRED HIS EXCEPTIONAL CAREER, AND HOW A “TEAM SPORT” APPROACH TO MEDICINE CAN IMPROVE THE QUALITY OF PATIENT CARE.

Q | *Can you tell us about your formative years?*

A | I grew up in Jefferson City, Missouri, located on the Missouri River, midway between St. Louis and Kansas City. My father was a busy cancer surgeon who trained out east at The Memorial Hospital in New York City. I grew up as the eighth of ten children. Along with six sisters and one younger brother, I had two older brothers—they were numbers one and two in the family. They both became surgeons; both went to Cornell Medical School and then went on to Boston to train

in surgery. So I had a pretty well worn pathway in front of me. My father and two brothers were excellent role models for me. Medicine had a very strong influence on my early life. I spent a lot of my early years in high school and college helping my father in his operating room, at the hospital, often driving with him to see patients outside of our hometown as well. Everybody in our family was very much involved in his surgical practice. So from this exposure, I knew from a very early age I wanted to be a surgeon.

Q | *What, in your mind, makes a truly exceptional surgeon?*

A | There are two attributes or two components that are the essence of excellence that I have seen in surgeons such as Joe Murray, who was one of my surgical mentors. Dr. Murray won the 1990 Nobel Prize for performing the first successful human organ transplant, a kidney transplant, at the Peter Bent Brigham Hospital in 1954. The first of these two components is that, like Dr. Murray, they have certain clarity of purpose. They know exactly why they are in a certain position or place.

“Our approach here at Baylor is going to play our strengths—our strengths are the genomic evaluation of tumors, basic and translational research, and excellence in patient care. We look forward to collaborating with our Texas Medical Center partners, because the problem is bigger than all of us.”

They treat their patients with a clear sense of purpose in mind. They know why they are there and they know what their purpose is there at that moment.

Secondly, they are able to focus and sustain their attention on that purpose and on each step along the way required for its completion. So they have the understanding of their purpose and they have the ability to focus their efforts on the task at hand. Those two attributes, when put together, in my experience, define the essence of excellence in a surgeon.

Q | What, surgically, is available to a patient today that may not have been available to them at the time you started your career?

A | So, let's take a well-known but somewhat rare tumor known as mesothelioma, caused by asbestos, as our example. We've all seen the ads, 'Do you have mesothelioma?' So starting out at the Brigham, right out of my training, and seeing a patient with mesothelioma, I found that there was no accepted operative approach. There was really no accepted concept of cyto-reduction followed by a secondary treatment of micro-metastatic disease. Essentially, everyone died three to seven months after diagnosis. Nothing seemed to work. Let's fast-forward 25 years. After working with colleges from all over, we have defined a series of surgical procedures that will reduce the number of cancer cells in the patient and achieve what we call a macroscopic complete resection, so that no visible cells are left in the patient at the end of the surgical procedure. The initial operation is called an extra-pleural pneumonectomy. In 1988 it carried a prohibitive mortality rate in most centers and had been discarded as an operative procedure by many surgeons. So we redesigned it and at the present time, we can perform that

operation with an acceptable mortality, in the range of other similar major thoracic procedures.

Depending upon the stage of the patient, we can achieve up to a 36-52 month median survival in certain subgroups of patients. So there has been a substantial improvement in survival in mesothelioma for many patients. I think that arises from a strong surgical presence within the disease treatment community, which is able to do one very important thing: to completely cyto-reduce the patient's tumor to the point where there are no visible cells left in the patient. This may make the task of the additional treatments somewhat more achievable, as they have less tumor cells to deal with. After 20 years of understanding how the tumor would come back after the surgery, we learned it does not come back through the bloodstream as in other solid tumors, but it recurs just where it was taken out. We couldn't figure that out until we could extend survival. So the first step was to perform the operation consistently across a larger group of patients, such that they could enjoy extended survival. We then learned where it came back, and we've now devised different local and regional treatment strategies to attempt to try and prevent it from coming back. One of the strategies we are working on here at Baylor is what we call HITEC, or a hyperthermic, intraoperative, intrathoracic chemotherapy. During the surgery, we remove the tumor and then have a type of pump that delivers heated high-flow lavage of chemotherapy agents directly to the at-risk area. We do it for one hour in the middle of the operation.

Q | Now that you are at Baylor, what would you like to accomplish?

A | I think you could sum up all the primary goals in saying we want to

establish a platform within the Baylor College of Medicine and Texas Medical Center that provides the best possible, most effective patient care. So the idea would be to work with our team of translational, basic, and clinical researchers as well as physicians and surgeons so that they work together, such that there is a seamless interface—as seamless as humanly possible across those disciplines—to treat patients with thoracic cancers. We will work together to set a team up with that kind of seamless communication and centralization of the therapeutic goal for each individual patient.

People talk about getting a cure, and we will all work toward that goal. However, today it is about getting patients to survive longer with the treatments we have available now. We hope to develop the communication systems between team members in such a way that information flow is effortless. I believe that this is paramount to getting optimum results for our patients. If we can get this type of communication and collaboration, we will make tremendous progress.

Q | How do you help nurture that kind of collaboration?

A | Well, the patient becomes the real focal point of a team effort. If you want to liken it to football, you assemble a team and based on how the defense is lined up, you call a play. But that play has been communicated to the entire team before the snap. So when a patient comes through the door of the clinic, the ball gets snapped. But one has to have assembled the team that has the same overall game plan and knows the specific play so that when the patient comes in, we know exactly what the sequence of events will be in order to complete the right diagnosis, evaluate for stage, and treat the patient using each element of the offense available.

The offense here is our growing number of novel treatment strategies.

Each player of this team knows where and how they come into play for the treatment of that particular patient. People have to know what the game plan is. That means the constant improvement and constant communication of the plan for that patient. It requires the focus of each member of that team on the overall goal of the therapy in an individual patient. In addition, the patient and patient's family and caregivers also know and understand their role in the treatment. Mesothelioma will have a team. Lung cancer will have a team. Esophageal cancer will have a team. Our approach here at Baylor is going to play our strengths—our strengths are the genomic evaluation of tumors, basic and translational research, and excellence in patient care. We look forward to collaborating with our Texas Medical Center partners, because the problem is bigger than all of us. It seems clear that all of us working together give our patients the best chance at a good outcome from treatment, and the approach will foster progress in the treatment of thoracic malignancies in the years to come.

Q | We often talk about the work being done by Richard Gibbs and his team, and it is truly an inspiring vision that they have for clinical genomics and a future Genomics Institute. It sounds like much of his work aligns with what you are talking about.

A | Several years ago I had the opportunity communicate with Dr. Gibbs, long before I would have ever conceived coming to Houston. We were working with a company in New Haven, 454 Technologies, to sequence mesothelioma tumors.



David Sugarbaker, M.D., left, pictured in the operating room as his father, also a surgeon, looks on.

“I spent a lot of my early years in high school and college helping my father in his operating room, at the hospital, often driving with him to see patients outside of our hometown as well. Everybody in our family was very much involved in his surgical practice. So from this exposure I knew from a very early age I wanted to be a surgeon.”

We did the a high-throughput sequencing of the mesothelioma transcriptome and we found that every tumor that we looked at had a separate and distinct mutational profile, meaning that there were different genetic mutations involved in different tumors. We found that it wasn't one specific genetic mutation causing the mesothelioma. I had been in the high-throughput sequencing field for only a short time and it was brand new technology. Dr. Gibbs gave our team very valuable advice.

Today we take a tissue sample for biopsy in the OR during surgery and we take it to the pathology frozen section room where a piece of tissue is processed and placed under the microscope. The pathologist then tells us what it is and that tells us what we should do next in the surgery. One day, we are going to take a piece of tissue in the operating room and the pathologist will do a quick genomic analysis of it and that will tell us the genetic mutational profile, which will tell us more specifically what to do for our patient.

Q | What was your greatest motivation to pick up your life and move from arguably one of the top institutions in the world to come here?

A | I am very glad to have worked in one of the best hospitals in the world. My colleagues there were committed and dedicated to their patients as well as their academic mission. They inspired me everyday. When visiting the TMC, I saw the same type of commitment. In addition, it was the atmosphere of a 'can-do' attitude that

inspired me. I made a couple of visits here, and I have to tell you, I was very intrigued and inspired by the big vision that I heard from a variety of different individuals at the Baylor College of Medicine and others in the TMC. There was a can-do approach that was infectious, and I've always ascribed it to visionaries who accomplish great things. So I thought, if I am going to do something here in Texas, in this atmosphere, it is going to be a lot of fun. The opportunity to build a program here at Baylor College of Medicine and the Texas Medical Center was very

attractive to me. The winter weather in Houston was another definite plus!

Q | Any closing thoughts?

A | I would say that the Baylor College of Medicine and the Texas Medical Center do, I think, radiate a certain optimism that is infectious. There are so many focused, dedicated individuals here in this medical center and I'm very optimistic that in the future, as in the past, many great things are going to come out of the TMC. It is a real privilege for me to have the opportunity to be a part of it. ■



(Credit: Baylor College of Medicine)



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Pioneers of Regeneration

BY ALEX ORLANDO

Across the Texas Medical Center, scientists and physicians are leveraging stem cell and regenerative medicine research to usher in a new era of treatment

In the world of regenerative medicine, the realm of science fiction is infiltrating the domain of real science. At Texas Heart Institute (THI), cadaverous pig hearts, stripped of their cellular makeup, exude stark, ethereal beauty while cardiac tissue stem cells pulse rhythmically in a dish. Across the street at the Houston Methodist DeBakey Heart & Vascular Center, a metamorphosis is underway as researchers work to transform human scar cells into blood vessel cells. A few blocks away at Baylor College of Medicine, scientists strive to harness the natural capabilities of our immune system to treat cancer. At The University of Texas Health Science Center at Houston (UTHealth) Medical School, stem cells are being utilized to repair traumatic brain injury in children. As science delves further into uncharted territory, Rice University's Baker Institute for Public Policy examines ethical and policy issues stemming from these new developments. It's a brave new world.

"Regenerative medicine and stem cells are a very large part of the future of medicine—all kinds of medicine, not just the heart," noted James T. Willerson, M.D., president of Texas Heart Institute. "The brain, the kidneys, the eyes, the ears...everything. We're all a product of stem cells."

Possessing the remarkable ability to differentiate into a multitude of specialized cell types, as well as self-perpetuate through mitosis, stem cells represent a goldmine of biomedical possibilities. Willerson began probing those possibilities as early as the 1990s, when he was conducting stem cell work in experimental animal models. It wasn't until 2000 that things really gained momentum. Alongside Emerson C. Perin, M.D., Ph.D., medical director of Texas Heart Institute's Stem Cell Center, Willerson was part of an effort to perform the first ever injection of stem cells into the heart for patients with heart failure in Rio de Janeiro, Brazil.

"That's how it all got started," reflected Perin, a native Brazilian, who realized that navigating regulatory barriers might be easier in his home country. "At the time, we used adult bone marrow cells, which weren't too specialized. Since then, we've really progressed along in trying to improve our process, every step of the way. We published that first experience in 2003, which led to us bringing the process here to Houston—we became very well known as pioneers in treating heart failure with stem cells.

"Since we had done that successfully, we decided not to limit ourselves to bone marrow cells," he added. "We led several different trials, the first in humans, where we've put different types of stem cells into the heart. There's also a population of cells called mesenchymal stem cells, which have an enormous therapeutic capacity for tissue repair. All of these other therapies were autologous, using the patient's own cells, and for the first time these were allogeneic cells that came from one young donor. These different trials are all focused on treating heart failure, which is really our passion to do something about."

In addition to treating 45 people with the mesenchymal cells from a single donor, Robert J. Schwartz, Ph.D., director of Stem Cell Engineering at Texas Heart Institute, and his team at Texas Heart Institute have also successfully generated cardiac stem cells by taking a biopsy from a human hand and converting them into heart muscle cells using genetic factors—a variation on the concept of induced pluripotent stem cells (iPSCs).

In 2006, Shinya Yamanaka, M.D., Ph.D., a Japanese Nobel Prize-winning stem cell researcher, was able to generate iPSCs through the activation of just four genes, resulting in a cell that possesses the same characteristics as an embryonic stem cell. "Those iPSCs are what you were when you were just a twinkle in your mother's eye," explained John P. Cooke, M.D., Ph.D., director of the Center for Cardiovascular Regeneration at Houston Methodist DeBakey Heart & Vascular Center. "They're basically like an embryonic stem cell, but they're your embryonic stem cell—they can be differentiated into any tissue of the body, from the brain to the pancreas. It's difficult to study the brain cells of an individual with brain disease, for example, but you can take their skin, make iPSCs and then differentiate them into brain cells. Then you can study the disease in a dish."

"When you begin to understand that genetic signaling to create a heart muscle cell, then you can take a biopsy from another place and turn them into contracting heart cells," added Willerson. "Our goal is the regeneration of the whole heart, or at least enough of it so that a very weak heart would be made anew."

In the lab of Doris A. Taylor, Ph.D., director of Regenerative Medicine Research at Texas Heart Institute, where decellularized organs suspended in jars and submerged in Pyrex dishes line the shelves and adorn countertops, concrete steps are being taken along a similar trajectory. Her goal? Building a human heart.

"I take a very simplistic view of the world," admitted Taylor. "Don't imagine what you can't do—just assume you can do it and give it a try and see what happens. A number of years ago, when we said we wanted to build complex, solid organs and tissue, we admitted that we weren't tissue engineers, but still challenged ourselves to determine what the process entails."

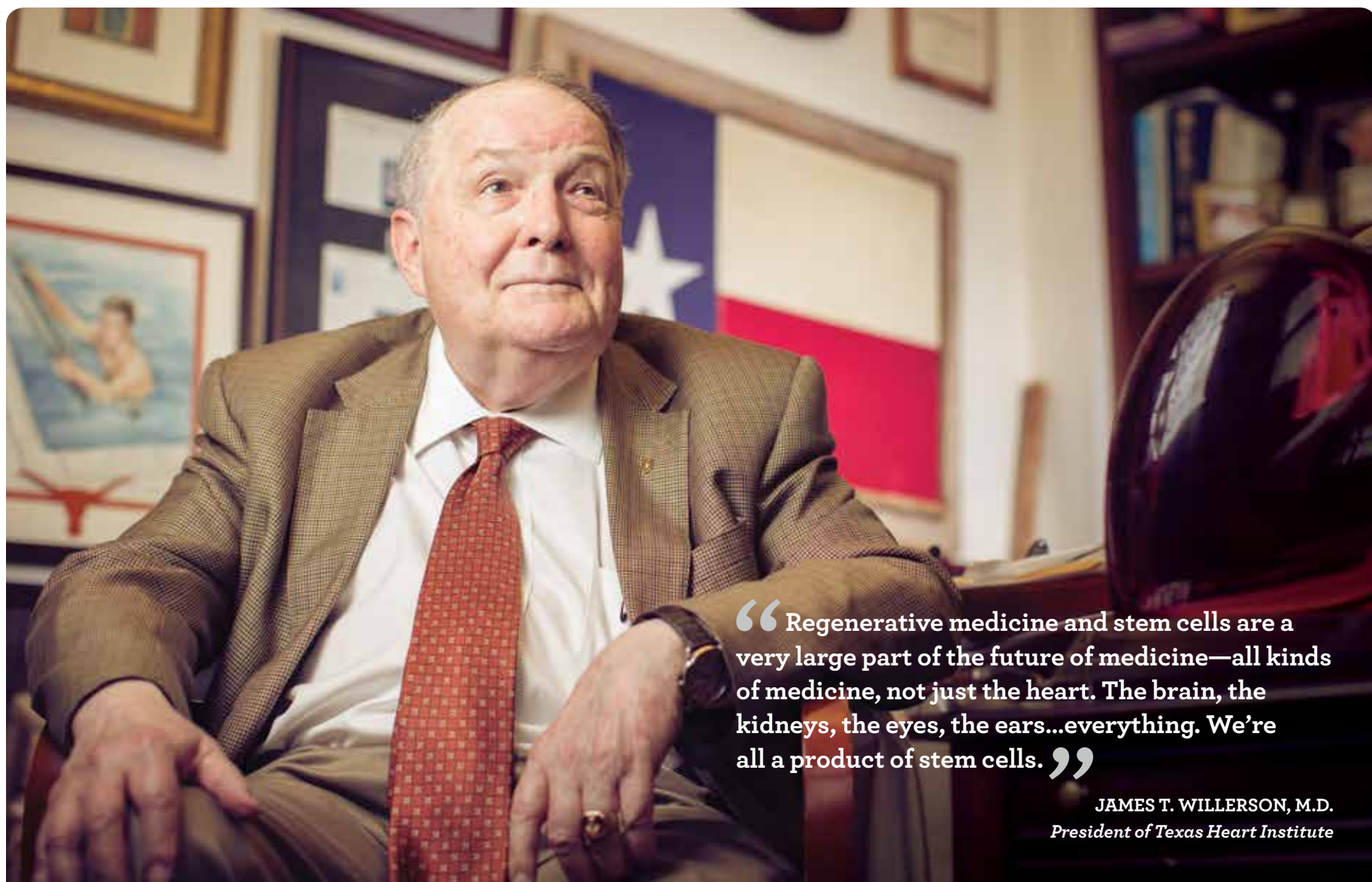
"We had been doing cell therapy for years and knew that it obviously requires cells," she said. "There are a number of sources for cells, from bone marrow to tissue and even generating iPSCs. It takes more than a few cells, though—if you're going to build an organ, it's going to take hundreds of billions of cells. More than that, we need a place to put those cells."

Rather than pursuing labor-intensive methods to create a bio printed or mechanical scaffold, Taylor chose to piggyback on preexisting structures in nature. Along with her colleagues, she was able to take a human-sized pig organ—a heart, initially—and remove all the cells, leaving a completely acellular construct. The technique has also been applied to a liver, kidney, gallbladder and pancreas. Working with colleagues around the world, Taylor has just begun to recellularize those constructs.

“One of the critical unmet needs in pediatric care is the lack of a reparative therapy for traumatic brain injury—that’s really where I first became engaged in the use of stem cell based therapies.”

CHARLES COX, JR., M.D.

Professor of Pediatric Surgery and Director of the Pediatric Surgical Translational Laboratories and Pediatric Program in Regenerative Medicine at UTHealth Medical School



“Regenerative medicine and stem cells are a very large part of the future of medicine—all kinds of medicine, not just the heart. The brain, the kidneys, the eyes, the ears...everything. We’re all a product of stem cells.”

JAMES T. WILLERSON, M.D.
President of Texas Heart Institute



DORIS A. TAYLOR, PH.D.
Director of Regenerative Medicine Research at Texas Heart Institute



JOHN P. COOKE, M.D., PH.D.
Director of the Center for Cardiovascular Regeneration at Houston Methodist DeBakey Heart & Vascular Center



WILLIAM K. DECKER, PH.D.
Assistant Professor of Immunology at Baylor College of Medicine

“My research focuses on ethical and policy issues related to biomedical research and development. Initially, when all of these decisions were being made, it seemed like they were occasionally being politically manipulated—often due to a lack of understanding of the science behind them.”

KIRSTIN R.W. MATTHEWS, PH.D.
*Fellow in Science and Technology Policy at
Rice University's Baker Institute for Public Policy*



"Decellularization is very simple," she explained. "It's essentially just washing out the cells. You have something that goes from a red, muscularized organ to an acellularized construct over a relatively short period of time, while leaving the extracellular matrix composition intact—it literally looks like you took a tube of toothpaste and squeezed. What's left is the structural composition."

"We have the ability to recapitulate a whole heart," she added. "We determined that we could take one of these decellularized hearts and simply put cells back into the vascular tree to recellularize the whole network." Taylor is driven to ultimately reseed hearts using cells from a given individual to manufacture an available, tailor-made organ for transplantation.

Researchers at Texas Heart Institute aren't the only ones vying for new ways to regenerate damaged tissue. At the Houston Methodist DeBakey Heart & Vascular Center, cardiovascular scientists are exploring a medical approach for transforming human heart cells into blood vessel cells.

"This approach, known as transdifferentiation, actually avoids cell-based therapy entirely," said Cooke. "In a situation where you have an injury, a small molecule cocktail could potentially transdifferentiate some of those cardiac fibroblasts—a cell type that causes scarring and is plentiful throughout the body—into endothelium, an entirely different type of adult cell that forms the lining of new blood vessels."

Chronicled in a recent issue of *Circulation*, this method provides proof-of-concept for a small molecule therapy that could one day be used to improve healing of cardiovascular damage or other injuries.

"What we've discovered is something that lower vertebrates use to regenerate tissues, where their cells become more plastic in their phenotypes," said Cooke. "It's a very primordial response—once a cell is confronted by damage or a pathogen, it has to react and change its phenotype to become more fluid. Now that we understand this phenomenon, we're looking at the potential in manipulating that, therapeutically."

Leveraging the plasticity of certain types of cells is also within the purview of immunologists at Baylor College of Medicine, who are invested in harnessing the immune system to treat cancer.

"The crux of our work has less to do with regenerative medicine and more to do with the plasticity of blood stem cells and how they can be harvested in treating disease," explained William K. Decker, Ph.D., assistant professor of immunology at Baylor. "Immune cells are even more plastic than people realize. When they're stimulated in different ways, they really have this tremendous differentiative potential and can turn into highly specialized subtypes for addressing various kinds of immunological conditions."

"We're really interested in generating these highly specific, cancer-fighting immune cells from regular immune cells," he continued. "We study the signals required to turn ordinary cells into these super, cancer-fighting immune cells, and we're interested in a broad variety of cancers."

A process that uses the body's own immune system to treat cancer instead of relying on external treatments like chemotherapy, cancer immunotherapy may have the ability to stave off metastasis, while also

“Our goal is the regeneration of the whole heart, or at least enough of it so that a very weak heart would be made anew.”

JAMES T. WILLERSON, M.D.
President of Texas Heart Institute

offering a reduced side effect profile. Decker and his colleagues hope to train the immune system to recognize cancer, preventing it from returning after it has been eradicated.

"People will still need chemotherapy and radiotherapy, but hopefully the doses can be smaller and the side effects more manageable," he said. "We envision this working in a way that prevents subsequent metastasis, so that it might have a real impact on both relative and absolute longevity."

At UTHealth Medical School, stem cell research is being used as an innovative approach to treat traumatic brain injury in children.

"One of the critical unmet needs in pediatric care is the lack of a reparative therapy for traumatic brain injury—that's really where I first became engaged in the use of stem cell based therapies," reflected Charles Cox, Jr., M.D., professor of pediatric surgery and director of the Pediatric Surgical Translational Laboratories and Pediatric Program in Regenerative Medicine at UTHealth Medical School. "The development of the Pediatric Program in Regenerative Medicine came out of that unmet need."

Cox, who also directs the Pediatric Trauma Program at Children's Memorial Hermann Hospital, aims to address problems that originate with a severe traumatic injury—the ones resulting in coma and placing the young trauma victims at risk for permanent disability. To mitigate that risk, he recently completed the first acute autologous cell therapy treatment for traumatic brain injury.

The applications of stem cell therapy in neurological injuries or disorders are extensive—Sean Savitz, M.D., professor of neurology at UTHealth Medical School, and his research teams have realized that adult derived stem cells from a patient's own bone marrow have the capacity to enhance recovery following a stroke.

"We started looking at mechanisms for that reparative potential and found that the cells are potentially releasing a number of biological factors that help the brain heal itself," Savitz explained. "It became a very different approach to how we think stem cells function." In July 2011, the first patient in Texas was enrolled in the country's first double-blind clinical trial studying the safety and efficacy of a stem cell therapy technique that can be given up to 19 days after an ischemic stroke. Savitz believes that expanding the time window for administering stem cells increases the number of patients who might be helped.

"I see really high potential for developing cell therapies for a range of neurological disorders," he added. "I think that's partly a goal here, thinking about which disorders might be amenable in using cell therapies and doing properly designed, rigorous clinical trials to assess their safety and effectiveness. I don't think the way that cell therapies are being applied is going to completely cure neurological disease, but I think some

of them have the potential to slow down the course of neurodegenerative disorders."

Rebuffing misconceptions is an essential aspect of any burgeoning discipline. At Rice University's Baker Institute for Public Policy, Kirstin R.W. Matthews, Ph.D., the fellow in science and technology policy, wanted to explore those dynamics.

"My research focuses on ethical and policy issues related to biomedical research and development," she said. "Specifically, I am looking at intellectual property rights for biotechnology, including genetics and stem cell related patents. Initially, when all of these decisions were being made, it seemed like they were occasionally being politically manipulated—often due to a lack of understanding of the science behind them."

In a recent paper that she co-authored with Maude Rowland Cuchiara, Ph.D., the Baker Institute scholar for science and technology policy, Matthews examined how some National Football League (NFL) players have been seeking out unproven stem cell therapies to help accelerate recoveries from injuries. While most players seem to receive treatment within the United States, several have traveled abroad for therapies unavailable domestically and may be unaware of the risks.

"With the rise of new and unproven stem cell treatments, the NFL faces a daunting task of trying to better understand and regulate the use of these therapies in order to protect the health of its players," said Matthews. "The online data on NFL players and the clinics where they obtained treatment suggests that players may be unaware of the risks they are taking. Furthermore, players who are official spokespersons for these clinics could influence others to view the therapies as safe and effective despite the lack of scientific research to support these claims."

Her paper was published in the 2014 World Stem Cell Report—a special supplement to the journal *Stem Cells and Development*. This past year, the Summit was held in San Antonio, Texas. Matthews, Cox, Decker, Cooke, Taylor, and Willerson all gave presentations illustrating highlights of their work in regenerative medicine.

"There are multiple ways that these advances in regenerative medicine can change the landscape of health sciences," affirmed Taylor. "I see regenerative medicine providing hope for people who haven't had hope for years, as well as alternatives—not just to treat the symptoms but to treat the underlying disease. That way, we can actually move people backwards on the disease continuum rather than simply palliating their symptoms."

"I truly hope participants at the World Stem Cell Summit walked away realizing that Texas is a place where, if you can imagine it, you can do it," she added. "It's not crazy to have a Stem Cell Summit in the middle of Texas. It's actually very progressive, because we have some of the best thinkers in the world here." ■

An Introduction

What are stem cells?

Stem cells have the remarkable potential to develop into many different cell types in the body during early life and growth. In addition, in many tissues they serve as a sort of internal repair system, dividing essentially without limit to replenish other cells as long as the person or animal is still alive. When a stem cell divides, each new cell has the potential either to remain a stem cell or become another type of cell with a more specialized function, such as a muscle cell or red blood cell.

What makes stem cells unique?

Stem cells differ from other kinds of cells in the body. All stem cells, regardless of their source, have three general properties: they are capable of dividing and renewing themselves for long periods; they are unspecialized; and they can give rise to specialized cell types.

What are embryonic stem cells?

Embryonic stem cells, as their name suggests, are derived from embryos. Most embryonic stem cells are derived from embryos that develop from eggs that have been fertilized in vitro—in an in vitro fertilization clinic—and then donated for research purposes with informed consent of the donors. They are not derived from eggs fertilized in a woman's body.

What are adult stem cells?

An adult stem cell is thought to be an undifferentiated cell, found among differentiated cells in a tissue or organ. The adult stem cell can renew itself and can differentiate to yield some or all of the major specialized cell types of the tissue or organ. The primary roles of adult stem cells in a living organism are to maintain and repair the tissue in which they are found.

Adult stem cells have been identified in many organs and tissues, including brain, bone marrow, peripheral blood, blood vessels, skeletal muscle, skin, teeth, heart, gut, liver, ovarian epithelium, and testis. They are thought to reside in a specific area of each tissue (called a “stem cell niche”). Stem cells may remain quiescent (non-dividing) for long periods of time until they are activated by a normal need for more cells to maintain tissues, or by disease or tissue injury.

What are the similarities and differences between embryonic and adult stem cells?

Human embryonic and adult stem cells each have advantages and disadvantages regarding potential use for cell-based regenerative therapies. One major difference between adult and embryonic stem cells is their different abilities in the number and type of differentiated cell types they can become. Embryonic stem cells can become all cell types of the body because they are pluripotent, while adult stem cells are thought to be limited to differentiating into different cell types of their tissue of origin.

Adult stem cells, and tissues derived from them, are currently believed less likely to initiate rejection after transplantation.

A single cell can replicate itself or differentiate into other cell types.



“There are multiple ways that these advances in regenerative medicine can change the landscape of health sciences. I see regenerative medicine providing hope for people who haven’t had hope for years...”

DORIS A. TAYLOR, PH.D.

Director of Regenerative Medicine Research at Texas Heart Institute

n to Stem Cells

This is because a patient's own cells could be expanded in culture, coaxed into assuming a specific cell type (differentiation), and then reintroduced into the patient. The use of adult stem cells and tissues derived from the patient's own adult stem cells would mean that the cells are unlikely to be rejected by the immune system. This represents a significant advantage, as immune rejection can be circumvented only by continuous administration of immunosuppressive drugs, and the drugs themselves may cause deleterious side effects.

What are induced pluripotent stem cells?

Induced pluripotent stem cells (iPSCs) are adult cells that have been genetically reprogrammed to an embryonic stem cell-like state by being forced to express genes and factors important for maintaining the defining properties of embryonic stem cells. Although these cells meet the defining criteria for pluripotent stem cells, it is not known if iPSCs and embryonic stem cells differ in clinically significant ways. Mouse iPSCs were first reported in 2006, and human iPSCs were first reported in late 2007.

iPSCs are already useful tools for drug development and modeling of diseases, and scientists hope to use them in transplantation medicine. This breakthrough discovery has created a powerful new way to "de-differentiate" cells whose developmental fates had been previously assumed to be determined. In addition, tissues derived from iPSCs will be a nearly identical match to the cell donor and thus probably avoid rejection by the immune system. The iPSC strategy creates pluripotent stem cells that, together with studies of other types of pluripotent stem cells, will help researchers learn how to reprogram cells to repair damaged tissues in the human body.

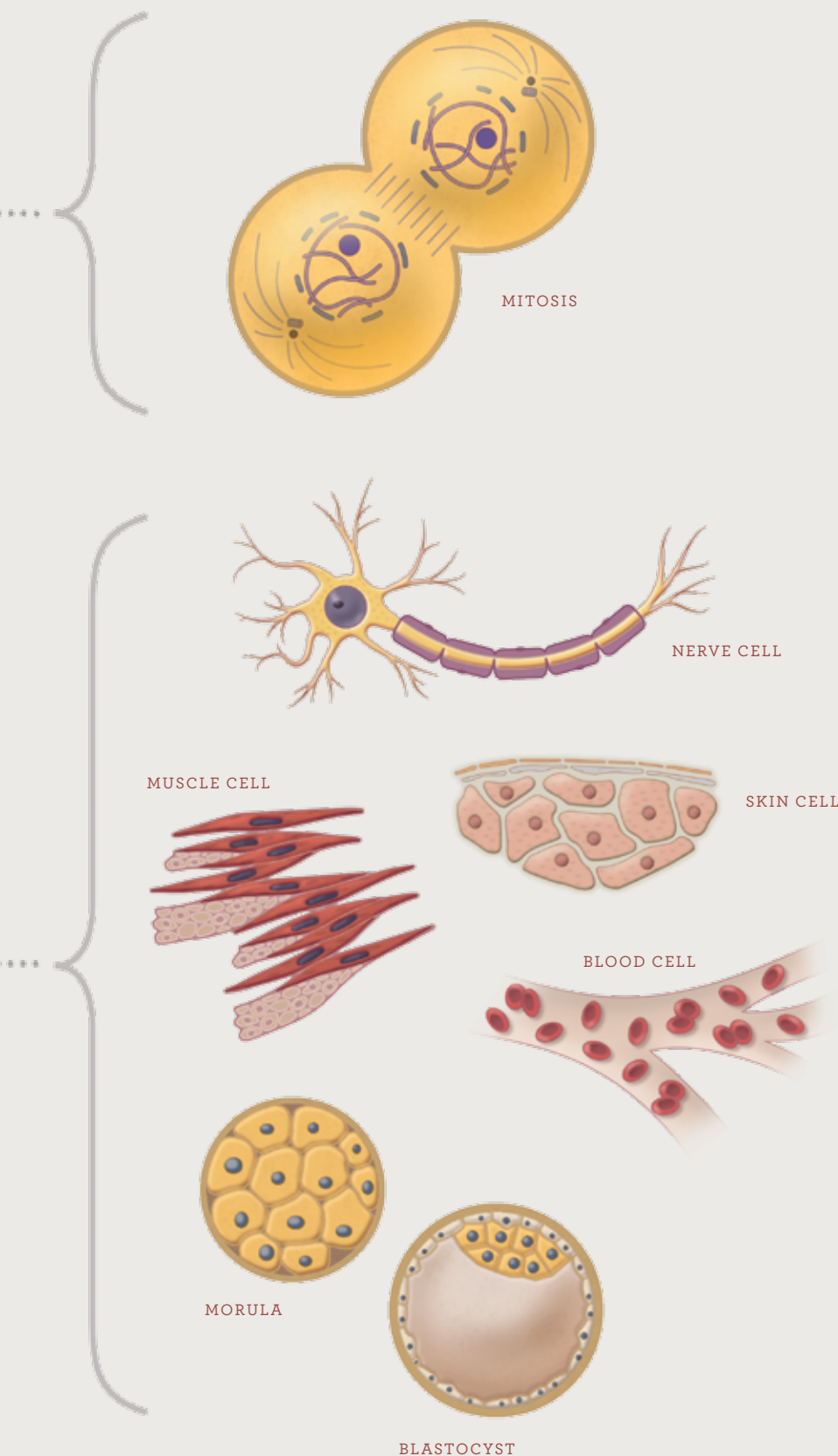
What are the potential uses of human stem cells?

There are many ways in which human stem cells can be used in research and the clinic. Studies of human embryonic stem cells will yield information about the complex events that occur during human development. A primary goal of this work is to identify how undifferentiated stem cells become the differentiated cells that form the tissues and organs.

Human stem cells are currently being used to test new drugs. New medications are tested for safety on differentiated cells generated from human pluripotent cell lines. Other kinds of cell lines have a long history of being used in this way. Cancer cell lines, for example, are used to screen potential anti-tumor drugs.

Perhaps the most important potential application of human stem cells is the generation of cells and tissues that could be used for cell-based therapies. Today, donated organs and tissues are often used to replace ailing or destroyed tissue, but the need for transplantable tissues and organs far outweighs the available supply. Stem cells, directed to differentiate into specific cell types, offer the possibility of a renewable source of replacement cells and tissues to treat a wide range of diseases. ■

Source: National Institutes of Health



CURRENTLY SERVING HIS SEVENTH TERM IN OFFICE, HARRIS COUNTY PRECINCT ONE COMMISSIONER EL FRANCO LEE HAS BEEN AN ACTIVE AND PASSIONATE PUBLIC SERVANT FOR MORE THAN 30 YEARS. HE RECENTLY SAT DOWN WITH TEXAS MEDICAL CENTER EXECUTIVE VICE PRESIDENT AND CHIEF STRATEGY AND OPERATING OFFICER WILLIAM F. McKEON TO REFLECT ON THE MENTORS WHO HELPED SHAPE HIS CAREER, AND HOW HIS OWN CHILDHOOD INSPIRED THE THRIVING YOUTH PROGRAMS HE HAS BUILT IN HIS THREE DECADES IN OFFICE.



Q | Can you tell us about your formative years?

A | I was born in Houston, and spent my formative years in Houston near the northeast side, what is known as the Fifth Ward. I was born in St. Elizabeth Hospital and became extremely familiar with Ben Taub Hospital. I was born in 1949, and the Harris County Hospital District started in 1966. I used it quite a bit in the first 18 years of my life. The public system was my go-to. It was my insurance. I graduated from Wheatley High School and later attended San Jacinto College and Texas Southern University, where I received my bachelor's of science degree from the School of Technology.

Q | What was Houston like at that time?

A | Well, my experience was pretty rich. I was in kind of a protected environment with a lot of business folk. It was a pretty small community, but it felt large, and it felt like the Southern or Texas version of Harlem. Lyons Avenue was more of a main street than Main Street itself. My mother had a business and we lived behind the business. So my circulation, my movements in that small radius that was the Fifth Ward, was pretty protected. You could compare it to Spanky and 'Our Gang.' You could compare it to the Boys and Girls Club or the YMCA. I came up through the Julia C. Hester House program, which was my version of the Boys and Girls Club and my introduction to organized sports. It was where I learned how to swim, became a certified water safety instructor, and swam competitively. All of those pieces and segments of my development from elementary school, middle school, high school—which were Atherton, E.O. Smith and Wheatley—were layered with all of the stuff that you see now in what we call the Harris County Street Olympics.

Q | Why swimming?

A | Swimming had a rich history back then. Even under a system of separate but equal, Houston was a driver. Every inner-city high school had a natatorium.

When I went to the state championship swim competition, we traveled to Prairie View A&M University until '67, and white schools went to Austin until '67. There were separate competitions for white and black students. So I was in this interesting cross between having competed in the 9th, 10th, and 11th grade in swimming and track. I was a pole vaulter and went to state championship in swimming and track. And then in '67, they first integrated the extracurricular activities such as sports. The schools phased in integration. They integrated the teachers from prominent black

institutions all over the district and infused them across town.

Facilities-wise, we had a pretty potent voting, civic-minded activist black population. The Fifth Ward, Third Ward and Fourth Ward pockets of communities demanded such. They kind of progressively saw to it that the facilities were as close to equal as possible. So the facilities were never a problem.

The late U.S. Rep. Mickey Leland and I kind of interpreted the civil rights activism of that time by doing these programs—breakfast programs and free health care clinics—and so the origin of this stuff that I do now grew out of the activism of the day. I am almost doing the same identical thing now that I was doing 45 years ago.

Q | Tell us about your early days in your calling to service.

A | It was completely out of indifference. I didn't want to be elected to anything. I enjoyed the hobby of managing people's races, managing offices, and playing with numbers—civil technology was my area of study and my pursuit was civil engineering. I had this eclectic kind of exposure—athletics, numbers, swimming—so I was and still remain pretty curious about a whole range of things. And so it manifested itself into these programs. I helped Mickey several times run for state representative. I had never been to a ceremony, and Mickey had served about three terms in the statehouse in the seat to which I ultimately was elected. I had no interest; I didn't even want to become interested in that arena. I got a job, and I was married. My focus was to take care of my family. I had already spent a number of years taking care of my mother, who was chronically ill with Parkinson's disease. That was how I became partly familiar with the inner-workings of the Texas Medical Center and the public hospitals, because I was sitting in those waiting rooms with my mother on a number of occasions, more occasions than you really should—11 hours at a time. I kind of started that trend in junior high school. So that, in a subliminal way, molded me. When she died in 1970—I got married in '71—those things kind of molded what I did. I didn't have a whole lot of room for anything other than taking care of the house, taking care of the family, that kind of thing.

I was not that adventurous, and I was pretty shy. I didn't like public presentations. And my brother was just the opposite. Mickey was just the opposite. He said, 'You need to run!' And Mickey was pretty persuasive, and he was pushing the political envelope a lot. He had the capacity, he had the contacts, and he was

“ You can kind of study and assume how relevant something is, but you don't really know until after you do it. I am proud of the relevance of what has been done, and the embracing of it. It is almost a staple. It is almost automatic. It is seamless to the point that there is a generation of people who can't envision not having it. So that lets me know that it's working. ”

pretty gregarious about it. He kind of viewed me as a little brother. Mickey said, 'Go ahead and run because it will look good on your resume.'

So, the running was more fun for me and more interesting to me than the service because I didn't know anything about service. What I saw and observed about service, Mickey made it seem really hard, because he was always broke. And I thought, 'I can't do that! I have to feed three other people.' I was extremely reluctant about going down that track because I just didn't have a need to be elected. But I had this other life that nobody knew I had—a job. And then I had this hobby in my home environment, in my community, and it was just fun to do. You know, get the ditches cleaned, complain about something, play with these numbers...and get some streets done. So I kind of backed into this by trying to get my ditch cleaned.

Q | Did you find that you had a natural propensity to run programs?

A | Yeah, that kind of evolved out of that. I came back to Texas Southern University because I was being exposed to marketing with the Bloom Engineering, and then pursued understanding public agencies. So I took organizational development, public administration, and accrued about 15 hours and it was boring. But that helped me understand the personality of public agencies, departments and subsets. So then I just kind of fit that in, and that becomes so theoretical when you are in a classroom. Then you are over here doing it in real life by volunteering your time. It just wasn't realistic. The late U.S. Rep. Barbara Jordan retired, her seat became vacant and Mickey decided to run for it. He was then trying to get me convinced to run for his seat in the statehouse. I said, 'I will help whoever you want to help, but I don't want to run.'

And the guy who considered running was in Mickey's class. He was a good guy, a lawyer, but he was not well connected to the community. So I started to try to promote him to these precinct judges, with whom I had some rapport. They weren't feeling it at

all, so they were looking at me as the one they really wanted. And I said, 'That's not the answer!'

So Mickey brokered this meeting, and said, 'I can only support one of you.' By that point it had piqued my interest, and my competitive juices were flowing. I started with about a \$400 check, and I spent it well. From January to May were the primaries, and I ran from January to May. There were six people in the race, and I spent \$400. Not one political ad ran.

I tried to file by petition to save the \$400. I led the pack with 39 percent of the vote going into the runoff with a female lawyer. And they were all kinds of inexperienced.

Q | Even with the incredible medical center that we have, there is still significant room for improvement in the health of Houstonians. What are your thoughts on that?

A | You have the best health care facilities in the world—world class. And in the shadows of it, you have problems equivalent to Third World countries—especially infant mortality, low-birth-weight babies, communicable diseases, lack of knowledge of how to access the health care system. My antenna is always up because I know and appreciate the Medical Center's presence. But I also know that I am the shepherd and I am the overseer of the public hospital system. And the public system is not a major part of the center itself unless you continue to work at forging that meaningful relationship.

Q | Can you tell us about your programs over the last 28 years?

A | There were the Street Olympics Summer Games, which was first, and from that grew the teen clinic and other programs. It was the Northeast Adolescent Program that grew into the partnership with Baylor College of Medicine Teen Clinics. Then the Harris County Aquatics Program came online as we planned and could afford to do it.



“ The late U.S. Rep. Mickey Leland and I kind of interpreted the civil rights activism of that time by doing these programs—breakfast programs and free health care clinics—and so the origin of this stuff that I do now grew out of the activism of the day. I am almost doing the same identical thing now that I was doing 45 years ago. ”

And what that meant was that the first major partner was HISD Houston Independent School District. In order for the Baylor Teen Clinic to work, and the Northeast Adolescent Program to work, we had to have a buy-in by HISD in this region, in the northeast pocket, where the highest incidents of infant mortality occurred.

Q | Can you tell us more about the Aquatics Program? I know that one is near and dear to your heart.

A | My real good friend Johnnie Means, who is director of the program, had been a lifelong swimmer and aquatics director. He worked 40 years at TSU as a competitive swimming coach and strength coach. He's nine years older than me. I backed into this, out of frustration, trying to find a place for my son to go swimming. We taught him how to swim, and I was trying to catch him at the right age. By the time I found a program, he was almost too old and disinterested, and too focused on his own things. So the fledgling program I saw may open or it may not. You can't run a good swim program like that. I thought no other parent should go through that.

By the time I caught him, he thought swimming was drudgery. It was a lot of work; six days a week you're in the water two or three hours. So, that first group that we started the swim team, we spent a lot of time scribbling on napkins, thinking, 'Wouldn't it be nice?' And I was trying to close the gap between what I did in '67/'68. That was the last competitive swim team in my area. It just died. Because when they integrated in '67, coaches, principals, and administrators thought that now they would get quality coaching and quality training. But in reality, it died. Swimming took a big hit. From '68 to '86, there was no competitive swimming. TSU discontinued competitive swimming. When TSU stopped, many of the others did, too.

What I was trying to do was promote the history, reconnect the dots and rebuild the sport, because it hadn't just declined in black neighborhoods, it had declined period in this Gulf Coast region. It was very strange to see a decline, because of water safety in the Gulf Coast region and major floods. The whole issue that we were embracing in the early years, in the '40s, '50s, '60s, was just starting to slide into oblivion. You had these major floods, hurricanes, and so then you are getting these summer drownings. And they

started spiking much higher. I started talking to the Coast Guard and different interested parties. There was a decline in Red Cross. Red Cross taught Learn to Swim classes. You got a decline in YMCA competitive swimming. All of this started happening around the same time, which made it even more relevant to what we were trying to reclaim.

Q | So it wasn't just the programs, it was also the facilities?

A | Yes. We started really basic. I knew of, and had competed in, at least six HISD natatoriums. My pitch was: let me use your pool and help maintain it to a healthy level, chemical balance. They were obsolete pools. They weren't conditioned to host a meet or anything like that. That is how I got the buy-in from the school district. They were letting me use their pools, and we would go to elementary schools and ask them 'Do you want to learn how to swim?' and raise money to do that. Then USA Swimming joined the cause. They say that we had predominantly minority swimmers, but not all were minority swimmers. We have some tough, tough swimmers, period. And they started to give us grants for Learn to Swim.

Q | How did the Street Olympics come to be?

A | Well, it was all of the things that I did at the Hester House, for the most part—jacks, hula hoop, skating, swimming and piano. We kind of defined 11 things to compete in, and we weren't looking for hardcore major sports. We were looking for things that people liked to compete. So we captured that nostalgia with jacks, hula hoop, hopscotch, jump rope and basketball obstacle course. Those were just carrots to lure kids to come and do this free play while they interact socially. You have all of these groups of people together, and just let them meet police and firemen. And then we have this hundred-booth Bright Futures Fair, an educational opportunity for youth to learn about health, safety and careers.

I really didn't want parents there at first. I wanted the kids to be uninhibited. I wanted the parents to feel safe enough to send them, knowing they will be safe and have fun. It's a children's day, and when the parents come, they get competitive. You have to win that medal!

And 90 percent of the people who are driving this are volunteers, and they don't care who wins. They're volunteers! It's a distinct difference between the attitudes of those kids and their uninhibited nature when they are with their parents versus when they are without them.

Q | How long have you been doing this?

A | We've been doing this for 28 years. We have about 10,000 children and young adults who participate

annually in all the Street Olympics programs—the Summer Games, Discovery Camp/Traveling Naturalist, Aquatics Program, and the Northeast Adolescents Program.

Q | Looking back over your career, what are the things that you are most proud of?
A | It's not just one thing. I guess I'm most proud of the response of the public to each one of those venues of activity. We didn't talk about seniors, but that program has had the same result. You can kind of study and assume how relevant something is, but you don't really know until after you do it. I am proud of the relevance of what has been done, and the embracing of it. It is almost a staple. It is almost automatic. It is seamless to the point that there is a generation of people who can't envision not having it. So that lets me know that it's working.

Q | What is the significance of the Texas Medical Center, from your perspective, through the years and actually looking forward?
A | My angle to the center was always through the public health care system. Being a shepherd of the resources for that system, I have to try to achieve some balance. You still have some people in high levels of authority who think that the hospital district or the public health care system is better than it needs to be. And that is a very recent thought that was put to me. I experienced that when I first started. The floors are clean and it doesn't look like squalor. You don't have blood splattered on the walls. So the concept of what a public system is supposed to do and how it is supposed to function and who it is supposed to protect, that is still not known well enough on the informed side of the community, let alone the uninformed. I've seen that we have a little work to do.
It's like voter registration. The more you do, the more you need to do. But it is really needed.

Q | Any closing thoughts?
A | All the Precinct One programs were put in place to fill a void in various communities. We are providing social, health, educational, and recreational services for our youth, young adults and seniors. The Street Olympics, for example, has an athletic component. But the main purpose is to implement and sustain programs that provide training, support, and resources that lead to healthy and productive lives for Houston-area youth.
Within our seven senior centers, we provide exercise, swimming, nutrition, educational, drama, and other programs to keep seniors active and healthy.
It's just the Precinct One way of providing vital, free services that otherwise would be difficult to find. ■

HARRIS COUNTY PRECINCT ONE PROGRAMS

Street Olympics | From aspiring athletes to future environmentalists, Street Olympics programs have something for everyone. Street Olympics provides comprehensive, community-based initiatives that are funded through the joint efforts of many private and public entities. Because of this collaborative model, Street Olympics has grown from a recreational summer program to an organization with four major components that address the various needs of Harris County's youth.

Summer Games | The Summer Games program has grown into one of the most popular events of the season. The program provides organized activities centered on the games that young people traditionally play in the streets. These games are redesigned into positive, rewarding Olympic-style competition. Events include kickball, jacks, hopscotch, basketball (dribble and free throw), Frisbee accuracy, softball throw, hula hoop medley, jump rope marathon, shuttle relays, and 50- and 100-yard dashes. Participants must be between the ages of six and 15, and must be registered with one of the participating agencies. For a list of these agencies, visit www.streetolympics.org.

Bright Futures | The Bright Futures Fair—which emphasizes health, safety, and environmental awareness—is an integral part of the Summer Games. The fair is held during the Summer Games Final Event and features interactive booths and hands-on activities, which provide opportunities for children to receive important health care services and safety information.

Discovery Camp | This fun summer program is aimed at children ages six to 13 and uses educational activities, games, crafts, and projects to help campers gain a better understanding of nature and everyone's role in preserving our environment. Discovery Camp is the perfect summer setting for exploring everything from insects and birds to fish and forests.

Traveling Naturalist | The year-round Traveling Naturalist Program brings nature to life for

grade-school students by giving them hands-on experience with living creatures. The Traveling Naturalist Program is an excellent enrichment activity for science and social studies classes. Supported by technological visual aids, presentations include live animals and natural artifacts. These sessions help children connect with the world around them and are arranged according to class sizes, ages and schedules.

Aquatics Program | The Harris County Aquatics Program (HCAP), created in 1992, teaches discipline, leadership and teamwork skills for youth through the sport of swimming. In 2009, Precinct One opened the Harris County Aquatics Center, a 22,000-square-foot indoor pool with eight 25-yard competitive swimming lanes and three practice/training lanes. HCAP, which is led by Head Swim Coach Johnnie Means, operates programs at local schools and community facilities.
Each site is staffed by coaches, water safety instructors, and lifeguards certified by USA Swimming and American Red Cross. HCAP offers instructions and lessons for beginning swimmers, swim stroke development for intermediate swimmers, and competition for advanced swimmers. HCAP's award-winning team, the Mighty Dolphins, competes all year in local, regional, and national meets.

The Northeast Adolescent Program | For more than 15 years, this program has provided valuable educational, social, and medical services to area teens. Designed to combat infant mortality, teen pregnancy, and other health and social issues in inner-city neighborhoods, the Northeast Adolescents Program (NEAP) is a collaboration of Harris County Precinct One, Houston ISD, Aldine ISD, Baylor College of Medicine, and the Harris County Hospital District. NEAP helps teens make smart and healthy choices. The program includes a male-outreach component that focuses on the role of young men in addressing the problems young people face in our society. For more information about NEAP services, call 281-820-6341 or 281-847-3901.

— Information provided by Harris County Precinct One



A Warm Welcome Home

THE HIRING RED, WHITE, & YOU! INITIATIVE OFFERS TEXAS MEDICAL CENTER INSTITUTIONS THE OPPORTUNITY TO HELP OUR NATION'S VETERANS RETURN TO CIVILIAN LIFE

BY SHEA CONNELLY

Over 200,000 men and women transition out of the military each year leaving a structured, disciplined lifestyle for the unknowns of the civilian world. According to a recent poll conducted by the Kaiser Family Foundation and The Washington Post, 50 percent of veterans found readjusting to civilian life to be difficult. For the past few years, the institutions at the Texas Medical Center have been working to ease the stress of that transition through their veteran hiring program “Hiring Red, White & You!”

The initiative began four years ago as a result of a challenge by James H. “Red” Duke Jr., M.D., the John B. Holmes Professor in the Clinical Sciences at The University of Texas Health Science Center at Houston (UTHealth) and medical director of Life Flight at Memorial Hermann Texas Trauma Institute, and retired Col. John Holcomb, M.D., director of the Center for Translational Injury Research, chief of the Division of Acute Care Surgery and vice chair of the Department of Surgery at UTHealth, and director of the Memorial Hermann Texas Trauma Institute.

Both veterans themselves, Duke and Holcomb attended a human resources council meeting, along with retired TMC executive Patricia Mitchell, and charged the attendees with lessening the disparity between veteran and civilian unemployment. The group also met with many of the CEOs in the medical center to challenge them individually to hire more veterans.

“Health care was one of the few industries at that time that was really still having robust hiring,” said Willie French, director of talent acquisition at Houston Methodist Hospital and committee chair of Hiring Red, White & You! “As a result of that discussion, we formed a committee of various members of the Texas Medical Center.”

Though the overall unemployment rate continues to improve, joblessness among many veteran groups,

particularly the younger veterans who served in Afghanistan and Iraq, remains higher than the rate for civilians. Hiring Red, White & You! seeks to lessen the gap.

“We felt that we could impact three different areas,” said French. “One, we definitely wanted to see what we could do to increase the hiring of veterans. Two, we wanted to have more recognition for veterans, specifically in the Texas Medical Center but elsewhere as well. And three, we wanted to look at how we can start to channel veterans that are coming out of the service into our hard-to-fill positions.”

In order to accomplish those goals, the committee holds special hiring events for veterans and maintains a website where veterans can register their information and search for opportunities across the medical center. The committee also holds recognition breakfasts each year where new veteran hires can network and mingle with their fellow veteran employees.

“These men and women volunteer to go protect us, and then when they come home, the least we can do is provide them opportunities to work so they can provide for themselves and their families,” said Duke. “Our debt to them is greater than we can pay, but it is our obligation to ensure that they get an opportunity to work if they want to work and they are able to work.”

Like Duke, Holcomb has long served as an advocate for veterans in the medical center. In addition to his many medical center titles, Holcomb retired from the Army in 2008 after serving 23 years.

“When the time came to get out, I was fortunate enough to come back to the TMC and have a job doing trauma research, taking care of trauma patients and acute care surgery patients and training residents and students,” Holcomb said. “I was very lucky.”

Holcomb acknowledged, however, that many other veterans aren’t as lucky and can struggle during the transition period.

“We’re Americans and Americans have always helped veterans any way they can back to the beginning of the country,” he said. “It’s an all-volunteer military—they’ve gone where the president has asked them to go, they do hard jobs, and they come home. Over the last several years the economy wasn’t great. That’s starting to turn around a little bit, but not everyone has seen that recovery yet.”

Thus far, TMC institutions have employed close to 2,000 veterans through the program, French said. He also outlined a future goal for the program: to address hard-to-fill positions in the medical center. One possibility for achieving that goal would be to create a cohort program that would train veterans leaving the service in the hard-to-fill areas to prepare them for those opportunities. He described hiring veterans in any capacity as mutually beneficial for the medical center and veterans.

“We do have opportunities and we are hiring, so we want individuals who possess the skills veterans have that in many ways mirror the corporate values of our many organizations,” he said. “They are dedicated, compassionate, can work on a team environment, are culturally diverse and have strong cultural competencies—all those values and skills resonate with veterans. It’s a win-win situation to identify individuals that possess those qualities to bring into our organizations.”

Holcomb echoed those sentiments, noting that hiring veterans is something he puts into practice in his own departments in the medical center. He has also served as a mentor for fellow Army veterans as they transition back to civilian life.

“They understand how to work in groups. They understand how to be on time. They understand the importance of a mission and how to complete a mission. They understand how to adapt and overcome obstacles,” he explained. “I think they make the best employees in the world.” ■

“These men and women volunteer to go protect us, and then when they come home, the least we can do is provide them opportunities to work so they can provide for themselves and their families.”

— JAMES H. “RED” DUKE JR., M.D.

*John B. Holmes Professor in the Clinical Sciences at The University of Texas Health Science Center at Houston (UTHealth) and
Medical Director of Life Flight at Memorial Hermann Texas Trauma Institute*



Thomas De La Fuente

Flight Paramedic, Memorial Hermann Life Flight

SERVED 5½ YEARS IN THE ARMY RESERVES

How did you hear about Hiring Red, White & You?

I went around with the Life Flight team as part of a two-week training camp that they would set up for us. I really liked the program so I kept volunteering to go back. I went three times over a period of 18 months to two years. I would come back to Memorial Hermann every six months or so and fly with Life Flight for two weeks. I applied [for a permanent position] after leaving active duty in October.

What are your responsibilities in the medical center?

We have bases on the north, south, east, and west portions of the city and Life Flight will respond to pretty much anywhere within a 150-mile radius of anyone that needs to be brought in from another hospital for a higher level of care. Or it's someone on the side of the road who EMS already anticipates to be very critical, so they need to arrive to the hospital pretty quickly.

How did your military experiences prepare you for your current job?

I would say the Army gave me everything I needed. The Army gave me my paramedic certification, which took me six months. They trained me to get my flight paramedic certification, which took another three months, along with my initial training. Then they trained me over about a year with on-the-job training, flying and that aspect of it. So really the Army gave me everything.

What do you love most about your job?

I like the fact that you don't really have the same day twice. One day you could be doing a lot of sick transfers from hospitals and the next you could be landing on the side of the highway. You never know whenever you're responding. And the staff I work with is great. That's probably one of my favorite things—the people I work with. Everyone gets along. A lot of the pilots are ex-military as well, and these staff members

have befriended me and they remembered me from when I would rotate. So I was excited when I got hired and they showed the same amount of enthusiasm for me. They have really helped me out and I really do enjoy the different people I get to work with. There's just a really positive attitude here with Life Flight. Everybody seems really happy with the organization and the program and the way it's run.

Do you like working with others who also have a military background?

They definitely understand some of the growing pains and changes that I'm going through transitioning from active duty to this job. A lot of them are retired so they kind of understand because they went through it, too. I'm here transitioning and they totally understand what I'm doing and where I'm coming from. They offer bits of advice here and there.

For the full interview, visit TMCNews.org



Jonathan Bell

*Operations Manager III,
Houston Methodist Physician Specialty Group
CURRENTLY IN THE ARMY RESERVES*



Reem Carter

*Licensed Vocational Nurse, Michael E. DeBakey
Veterans Affairs Medical Center Houston
SERVED 4 YEARS IN THE ARMY*



William Lyles

*Data Collector, Center for Translational Injury
Research at UTHHealth
SERVED 11 YEARS IN THE ARMY*

How did you hear about Hiring Red, White & You?

As I was leaving Korea after doing a tour there, I began looking for jobs. As I was applying for one here, I ran across the initiative. I'm from Houston.

What are your responsibilities in the medical center?

The job I'm doing here is the Ops Manager for OB-Gyn. What I do mostly is make sure the day-to-day operations are running smoothly, address any immediate patient problems or any issues the doctors are having, and pretty much make sure all the staff and team have what they need to do their job.

How did your military experiences prepare you for your current job?

As a captain, and especially one who has done command, you get an in-depth chance to learn about leadership because you're over a company and you're over various types of people within that company. You'll have your admin folks, and you'll have your doctors, nurses, or you may have just a different array of people. Being able to hone in on those experiences from the Army and being in the military and working with different folks in that arena, you can bring that back to the medical center field. It runs pretty parallel, just not as structured as the military. A different structure.

How was the transition from the military to civilian life?

It's a smooth transition. People here are really helpful and really friendly. I think Houston Methodist has a very employee-centric environment so they're all about making sure you're OK and making sure that you're moving into your position well.

How did you end up here in the Texas Medical Center?

I joined out of Katy, Texas, and my husband is active duty. I went to school and am an LVN (licensed vocational nurse) now. I used my GI Bill. My husband is retiring so we're back to home base, Houston.

What drew you to the medical center for your post-military careers?

When I was deployed in Iraq, they had this hospital in Ramadi called Charlie Med. A lot of Marines that were out in convoys, they would come back and they would announce, 'Any Type A, Type B blood come and donate right now.' There were so many people that were hurt and there was just nothing I could do but just start their IVs and that's it. That's even if I could get near them. A lot of people were helping out Charlie Med but they just needed staff. The desire to keep helping people—seeing combat in Ramadi was just life changing.

What are your responsibilities in the medical center?

Right now I work at the eye clinic. I'm a floater here. I'm a pre-op nurse, I do minor procedures, visual field exams, visual acuity sometimes.

How was the transition from the military to civilian life?

It was hard because I still lived near an Army base and I still felt obligated to show up to formation, I felt obligated to deploy even though I know my responsibilities to my family stateside. Working here at the VA, that's the closest I can get right now in my life to being active duty again. I'm surrounded by everyone with similar experiences and that feels like home to me. I feel at home here...I can see myself staying here for a very long time. I love working with veterans.

How did you hear about Hiring Red, White & You?

Dr. Holcomb. I met him a couple years ago, when I was trying to figure out what I was going to do after my Army career and trying to get into either medicine or health care in general. I met him and we just had discussions over a couple of years as he's been mentoring me.

What drew you to the medical center for your post-military career?

Everything that I've been through. I'm a bilateral above-knee amputee. I was wounded in Afghanistan and very lucky to be alive. What drew me to it was just my own personal experience as far as my medical care after being injured. Everything from doctors to nurses to everybody involved. I was treated very well and people didn't give up on me. I wouldn't be alive today if it wasn't for a lot of hardworking folks in that realm. I think that's the best way I can pay it forward, because there are a lot of people who maybe are facing similar circumstances to me or similar circumstances as I was and I can encourage them to move forward. Continue setting high goals. You can pretty much do whatever you want to do regardless of injury. If there's a will there's a way. It's a cliché but it's the truth.

How was the transition from the military to civilian life?

It's different but the thing I like about it is everybody here, in the Center for Translational Injury Research, has been really nice. It's similar in the sense that it's a very team-oriented atmosphere. Everybody is working towards a common goal and being successful, so I think it's been fairly easy. It's different but kind of the same dynamic.



Regina Bell

Proprietary Security Officer, Texas Medical Center
SERVED 8 YEARS IN THE ARMY

How did you hear about Hiring Red, White & You?

I had a friend who told me about it. Her name is Tina and she works here, too.

What drew you to the medical center for your post-military careers?

It just kind of fit. It fit the military style—the discipline, things like that.

How did your military experiences prepare you for your current job?

Being around different individuals, different people. You have to be around a lot of people so you have to try to get along and make do.

What is your favorite thing about working here in the medical center?

Being around different people from different parts of the country. Everybody comes to the Texas Medical Center and I just like working around people. People come in for medical treatment and they're already feeling kind of bad. When they get out of the vehicle, they see this big medical center and sometimes they're going for treatment and when they come out they're already sad and blue. We help them out. I feel good about it.

What are your responsibilities in the medical center?

We do a lot of motorist assistance. We go inside the garage if someone gets lost—I do it myself sometimes, get out of the car and just walk away, and then come out and think, 'Where did I park?' So we assist in

finding the vehicles, we assist if they leave their lights on and need a boost. We're kind of like AAA, in a way. Putting air in the tires, we assist them in getting out of the garage. Sometimes people have difficulty with the machine itself. They have to work the chip, put the credit card in. So they'll call us out to help with that.

How was the transition from the military to civilian life?

It was a change. I miss the camaraderie of it. That's here, too, but in the military you're more of a group and you work together. Here we're working on becoming a team, but I kind of miss that a little bit.

A Dream Achieved

With hard work and determination, TIRR Memorial Hermann Junior Hotwheels wheelchair basketball star Fabian Romo dribbled his way to a college scholarship

BY SHEA CONNELLY



Elkins High School senior Fabian Romo takes a shot at the TIRR Memorial Hermann Hotwheels weekly practice.

Every Tuesday night, the basketball court at the West Gray Metropolitan Multi-Service Center fills with the shouts of eager young athletes and the swish of baskets being made. But this isn't your average practice. These are the TIRR Memorial Hermann Junior Hotwheels, the Houston area's national championship-winning wheelchair basketball team. The players may come from different circumstances—some have been using wheelchairs their entire lives, while others have faced more recent challenges leading them to the bright gym on West Gray—but all prove having a physical disability does not eliminate the dream of seeking glory on the court.

Few young players exemplify the doors wheelchair basketball can open better than Fabian Romo. The senior at Elkins High School in Fort Bend has played with TIRR Memorial Hermann Hotwheels for the past three seasons. In that short amount of time, he rose through the ranks to become one of the team's most formidable players. Though Romo is polite and soft-spoken off the court, he does not hold back on the court and has taken on a leadership role on the nationally top-ranked team. Romo's qualities on and off the court caught the attention of the coaching staff at the University of Texas at Arlington (UTA), who signed Romo to their team, complete with a full scholarship.

"Fabian came here before he was on the [Hotwheels] roster, and I just noticed how he carried himself, how he presented himself. Those are the kind of off the court things that you want to see in your athletes," said Doug Garner, coach of UTA's Movin' Mavs wheelchair basketball team. "The year after that, he actually was on the roster and started playing, and you could tell by watching him play that he put in the time outside

practices and games to really develop. He developed very quickly.”

That dedication does not surprise anyone who knows Romo. A hard-working student who makes excellent grades, he plans to study biochemical engineering and would like to help make prosthetics once he graduates.

“You can always count on him. He’s a great young man,” said TIRR Memorial Hermann Hotwheels Coach Trice Ham. “I’ve met many of his teachers who all say he’s incredibly respectful and hardworking, diligent, all the things you want to hear.”

Prior to joining TIRR Memorial Hermann Hotwheels, Romo, who had his left leg amputated at four due to a birth defect, played able-bodied basketball wearing his prosthetic leg. After learning about the team during his freshman year of high school, he quickly fell in love with the sport, though there was a learning curve.

“It was a huge adjustment. I’m tall, and going down a little bit in height, it was weird,” Romo said. “I had to adjust my shot and everything and just being in a wheelchair you have to get adjusted to pushing, you get that row of blisters on your hand.”

Soon enough, Romo became a key member of the team. His first season as an official member, the team won the national championship. That’s when Romo realized wheelchair basketball could be more than fun and games. It could become his ticket to the next level.

“It was my rookie year and if we could do this and if I was able to help out the team so much in just my first year, I thought, ‘Hey, if I develop myself more as a player and skill-wise as well, I could play in college,’” he said.

Just a few short years later, Romo was being courted by the top college wheelchair basketball teams in the country.

“He was a five-star recruit, every program in the country wanted him,” said Ham. “That was a really cool thing, to see him get to experience the same kind of recruitment process you watch on ESPN for college football.”

Romo said the choice was always clear to him. Though he visited a number of campuses, UTA was the only one that really struck him as a place he could see himself spending the next four years. Even just being invited to visit campuses as an athletic recruit, however, was the realization of a dream that Romo once did not think was a possibility.

“I never thought I would be a college athlete and I’m grateful to have the opportunity,” he said. “I grew up thinking I’m not going to be able to do anything because of my disability, but then as I matured, I changed the way I view things. I was like, ‘I’m just like anybody else.’”

That change in attitude is one of the most important benefits teams like the TIRR Memorial Hermann Hotwheels offer young people with disabilities: the chance to believe in their own athletic prowess and potential, just like any other kid.

“Sports is sports,” said Garner, whose own son was born with a disability and played for the UTA team. “The fact that people with disabilities have the opportunity to reach their own human potential, whatever that is, through sport—I think it’s very important that those opportunities be out there.”

Romo is not the first player on the team to earn a college scholarship. In recent years, Ham said about half the players have been able to go on to play in college. But every story like Romo’s serves as motivation and inspiration for other players.

“For the younger kids, it shows if you



“I grew up thinking I’m not going to be able to do anything because of my disability, but then as I matured, I changed the way I view things. I was like, ‘I’m just like anybody else.’”

— FABIAN ROMO
High School Senior

want to play wheelchair basketball in college, you can do that, too,” said Ava Skrabanek, adaptive sports coordinator at TIRR Memorial Hermann. “You can get signed and have the whole excitement and all of that. Just seeing somebody they know do that makes it more of a reality.”

As he excitedly prepares for the next step in his basketball career, Romo is happy to take on the responsibility of serving as a role model for the younger players and to offer words of encouragement.

“To anyone who is doubting themselves about fulfilling their dreams because of a disability, don’t let yourself get into that mentality,” he said. “Be optimistic about things in life, just have a positive mind, and that will get you very, very far.” ■

When Doctor Becomes Patient

A shocking cancer diagnosis brings one Houston Methodist Research Institute researcher a new perspective on life and work

BY SHEA CONNELLY

In March 2014, Nazish Sayed, M.D., Ph.D., was at the top of his game. Fresh off a postdoctoral fellowship at Stanford University, he had been working as an assistant member in the Department of Cardiovascular Sciences at Houston Methodist Research Institute since July 2013. Busy at work, and at home with his toddler daughter, Sayed never expected to be sidelined by a fight for his life.

"I had recently applied and was awarded a grant by the NIH," said Sayed. "I went on a trip to India for a vacation for three weeks, came back and boom. That's when I got sick."

It seems counterintuitive—of all people, those working in medicine should be acutely aware of how vulnerable the human body is. And yet, preoccupied by his research in regenerative medicine, searching for ways to restore normalcy to cells, tissues, organs

ravaged by illness, Sayed was shocked to become so ill himself.

"I was diagnosed with high-grade muscle invasive bladder cancer," he said. "It kind of took me by surprise. I had no contributing factors, no family history of cancer, I'm still young. It was quite a traumatic and heartbreaking experience."

Sayed sought care at The University of Texas MD Anderson Cancer Center under Ashish Kamat, M.D., Jennifer Wang, M.D., and Priya Rao, M.D., where he was told the cancer was high grade. Doctors recommended he immediately start chemotherapy. As he transitioned from researcher to patient, Sayed found solace in the story of David and Goliath.

"At that time I was David because I was a small person and cancer was this huge big monster who had just appeared in the valley," he explained. "I thought, 'I want to kick the butt of

“Now I understand how the patients and the caregivers feel. What they go through. It's totally different than what a physician or surgeon's doing when you're on the other side.”

—NAZISH SAYED, M.D., PH.D.

Assistant Member in the Department of Cardiovascular Sciences at Houston Methodist Research

this cancer and I want to do it with the help of this medical center.” Just like Goliath, cancer seems big from a distance, but once its weaknesses are known, it can be defeated.

As the old saying goes, doctors make the worst patients. But Sayed's experiences raise the question: Can being a patient give a medical expert a new perspective on the world of medicine and a new outlook on future work?

"Seeing the medicine go into your

body is just surreal," said Sayed. "I have been on the other side and I now realize how immune I was at that time. I have treated patients with cancer back in India, but this gave me the perspective, as a patient, that it is a scary thing to lie down there and see these different color chemotherapy drugs going into your body."

That first round left Sayed feeling like he "was knocked out as if Muhammad Ali had punched me from both sides at the same time and squished me," but just days later, he was ready to head back into the office, determined to distract himself by working harder than ever to expand upon the work he completed while in California.

"At Stanford, we published a paper in *Cell* where we showed that the innate immunity in our body that fights back against viruses and pathogens was actually making cells kind of vulnerable, allowing the cell to make a decision whether to either die—apoptosis—or try to adapt," he explained. "We discovered if we try to put the cell into this vulnerable state we can reprogram the cell to our choice."

Here in Houston, prior to his diagnosis, Sayed and his colleagues had been exploring how to take that research a few steps further.

"We wanted to see, 'Can this be translated into a more clinical use?'" he said.

Sayed cited taking skin fibroblasts, or cells that cause scarring, and turning them into functional endothelial cells, which form a barrier between blood





LEFT: Sayed went through four phases of chemotherapy during cancer treatment. **RIGHT:** Sayed and his family on a celebratory trip to Disney World less than six months after his chemotherapy and surgery were complete.

vessel walls and blood. Other researchers have generated endothelial cells by using infectious virus particles to instigate the process. Sayed and his colleagues were hoping to accomplish the same task by essentially tricking the cells into reacting as if attacked by a virus rather than actually introducing a virus.

The benefit of being able to turn fibroblasts into vascular cells is we have ample skin cells, but cardiac cells damaged by a heart attack, for example, cannot be replaced.

“People who have peripheral artery disease or coronary artery disease, we could take their skin cells and convert them into endothelial cells or cardiac cells and then basically put them back into the person,” said Sayed. “We can provide functional cells from their own cells.”

As Sayed and his lab worked to coax those cells to transform, Sayed’s doctors were trying to eliminate the cancer from his body and bring him back to health. But treatment didn’t end with the fourth and final round of chemo. However debilitating chemo may have been, Sayed faced an even more daunting hurdle: surgery.

“I’m sitting with the doctor and he says, ‘Nazish, if you think chemo has affected you, you are wrong. If you were 100 percent before the chemo, the chemo brought you to 70 percent. But when you come out of surgery, you’re going to be down to 20 percent.’ That was scary,” said Sayed.

Sayed’s medical background gave him an advantage over most patients in terms of knowledge, but he soon found more information was not always helpful.

“I knew what I was jumping into—chemotherapy, the side effects, what surgery will bring about, the complications of surgery,” he said. “Was I happy that I had this knowledge? It was good because it prepared me well for the fight. But at the same time it scared me. It was a curse that I knew the consequences. A blessing and a curse.”

Like chemotherapy, surgery was another life-altering experience. Sayed recalled “Alice in Wonderland”—through the looking glass, he was now being wheeled into the operating room on a gurney, while he had formerly been the one pushing the gurney.

“I know saying goodbye to my wife and saying, ‘I’ll see you on the other side.’ Next, I remember waking up, saying, ‘There’s something in my back bothering me.’ That’s all I remember,” he said. “Now I understand how the patients and the caregivers feel. What they go through. It’s totally different than what a physician or surgeon’s doing when you’re on the other side.”

After five days at MD Anderson and a grueling five weeks of recovery time, Sayed headed back to work full time August 18 with a renewed sense of purpose.

“Everything is totally worth it if I can see my daughter grow up and if I can do something in my medical field,”

said Sayed. “I feel everything about the pain and the emotional stress, I can convert that disadvantage and turn it into an advantage. That is my goal.”

Sayed and his family moved from Sugar Land closer to the medical center, cutting down his commute so he could maximize his time with family and at work. In October, Sayed and his colleagues published their research regarding the transformation of skin fibroblasts into endothelial cells in *Circulation*. As the pain from surgery and chemo faded, the emotional toll lingered.

At the suggestion of his grief counselor, Sayed kept a journal throughout treatment. Before becoming ill, “writing” meant research papers. Now he records his thoughts and feelings, often focused on sorting out the strange dichotomies that arise when doctor becomes patient.

“From the physician’s perspective chemotherapy is a boon we got, but as a patient, it’s a horrible thing. It changes your mood, you don’t want to see light, you don’t want to hear noise, you don’t want to smell anything,” he described. “As a physician, I knew it was the best thing that researchers and scientists have come up with to cure the disease.”

His new perspective as a patient also had him reflecting on the emotional role a physician can provide for the patient.

“I don’t see patients anymore, because I’m focused on research. But if I was still seeing patients I’d be much

more compassionate, much more understanding,” he said. “Nowadays it’s all about the patient comes in, you have 50 patients waiting outside, you want to quickly go through the physical. I yearned for encouragement when I was at MD Anderson, whether it came from a top surgeon or it came from someone passing by who just said, ‘You’ll be fine.’”

Sayed recalled the hug from a woman who cleans his office after he told her what he had been going through. Such simple gestures, like the words of encouragement from fellow patients at MD Anderson, have shown there is much more to medicine and cancer treatment than hard facts and science.

Sayed feels an increased drive to work harder than ever, but treatment also left him with emotional goals. His experiences inspired him to give back to patients going through similar ordeals. He is interested in publishing his journal, in the hopes that his candid writing about everything from the physical effects of treatment to the strain it can put on familial relationships will help others.

“There is light at the end of the tunnel. It doesn’t matter what age you are, how much trauma, what consequences you’re going through, it will be good at the end,” he said. “I was just a scientist, running a lab, doing my work, trying to publish papers, having a happy life. Then you get this news and it brings out a lot of things inside of you that you don’t even know exist.” ■

MD Anderson Implements Tobacco-Free Hiring

STAFF REPORT

“One of the things about MD Anderson is that our whole mission has been making cancer a thing of the past [...] The change in our hiring policy is one small step in working towards the bigger mission of making cancer history.”

— SHIBU VARGHESE
Vice President for Human Resources at
The University of Texas
MD Anderson Cancer Center

The new year brought about the formal enactment of tobacco-free hiring at The University of Texas MD Anderson Cancer Center, requiring all new hire candidates, as a condition for employment, to be non-tobacco users or actively engaged in a cessation program.

MD Anderson joins the growing list of institutions within the Texas Medical Center to implement such policies. The Memorial Hermann Hospital System adopted their own policy in 2010, and Houston Methodist Hospital System followed suit in 2013. MD Anderson leadership applauds their efforts to encourage a healthier campus community. The cancer center also sees its own institution’s new policy as a way to further demonstrate a commitment to “Making Cancer History.”

“It really goes back to our comprehensive program—EndTobacco,” said MD Anderson Vice President for Human Resources, Shibu Varghese. “There are about 100 actions in policy education and community-based services that we’re leading as part of that comprehensive plan,” Varghese explained.

“Implementing the tobacco-free hiring internally is our first step in letting everyone know that we’re serious about this EndTobacco plan. We want to be an example and model the way, as well as help educate and motivate the rest of the community in taking these types of steps.”

The program will not impact current MD Anderson employees, although they, too, are encouraged to take advantage of cessation programs, which can involve nicotine replacement products and in-person counseling. The MD Anderson hiring policy is also unique in that those applicants currently following a cessation plan are eligible for hire. The goal of the plan is really geared towards hiring employees who share the institution’s commitment to ending cancer.

Those offered a position and deemed ineligible due to tobacco use will be offered the chance to take advantage of MD Anderson’s Tobacco Treatment Program—at no cost. The program, Varghese explained, does more than just offer a brochure on the health risks of tobacco use. It is an individualized therapy plan, designed to give participants the necessary tools and support to make a lifestyle change.

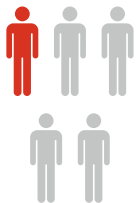
“Being a cancer center, we have patients and families who are suffering because of tobacco usage, which has led to several types of diseases, including cancers,” said Varghese. “We want people to know that we are serious about their health and that we are a caring organization—hence the reason that even if a potential employee is deemed positive for tobacco use, as an applicant, we’re willing to pay all of their cessation program costs to get them to a tobacco-free state.

“Tobacco is deadly. The risks and harms related to its use are well documented,” he added. “Making this big, bold commitment to play a critical role in ending tobacco is huge. One of the things about MD Anderson is that our whole mission has been making cancer a thing of the past, but in order for us to do that, we really have to get in front of it. The change in our hiring policy is one small step in working towards the bigger mission of making cancer history.” ■

FACTS & FIGURES

Today, more than **42,000,000** American adults smoke cigarettes.

In the United States, tobacco use is responsible for nearly **1 in 5 deaths**; this equals about **480,000 early deaths each year**.



Tobacco use accounts for at least **30% of all cancer deaths**, causing:

87% of lung cancer deaths in men | **70%** of lung cancer deaths in women



Each year, about **3,400 non-smoking adults die of lung cancer** as a result of breathing **secondhand smoke**.



The long-term health benefits of quitting smoking:

5 YEARS 5 years after, your risks of mouth, throat, esophagus and bladder cancer **are 50% less**.

10 YEARS 10 years after, you’re **50% less likely** to die from **lung cancer** and your risks of larynx, kidney and pancreatic cancers decrease.

15 YEARS 15 years after, your **heart disease risk** is that of a **non-smoker**.

Sources: American Cancer Society/National Cancer Institute

Making Connections

Nick Bonvino, new chief executive officer of Greater Houston Healthconnect, shares how the nonprofit can help patients and providers achieve increased efficiency and quality of care

BY SHEA CONNELLY

As the largest medical center in the world, the Texas Medical Center is a city within a city. TMC's 7.2 million patient visits per year far outstrip the population of the entire greater Houston area. This bustling medical metropolis represents a world of possibility, but coordinating vast numbers of patients and the often-lengthy medical records that accompany them can be daunting. Since its creation in 2010, Greater Houston Healthconnect has been committed to making patients' health information available to caregivers wherever they are seeking care.

Healthconnect is a network of electronic health records, known as a health information exchange (HIE). It links providers not just in the medical center but in 20 counties throughout Southeast Texas, with networks across the state and around the country. The nonprofit organization is entering 2015 under new leadership: in October, Nick Bonvino was named chief executive officer. Bonvino is new to Healthconnect, Texas' largest HIE, but he is familiar with the world of health IT. He has been an advocate of HIEs for years and spent the last decade starting and operating HIEs throughout the U.S.

"I began my career as a semiconductor engineer for IBM. Engineers solve problems, and I saw the HIE space as a critical problem to be solved," said Bonvino. "In terms of the Houston market, there's not anything unique other than size, so the challenge really is scale. I don't see that as an obstacle, but an opportunity to make a greater impact and to deliver more value."

HIEs offer increased quality of care, efficiency, and patient safety by giving a caregiver access to all of their patients' medical records. Those records include diagnosis history and test results, active medications and allergies—all the vital information to ensure a patient receives the best care. HIEs can also cut costs by eliminating

duplicate or unnecessary medical tests, for example, because each provider a patient sees would have access to previous test results.

"Providers need a 360-degree view of the patient," said Bonvino, "and the only way that can happen is if all providers are connected, communicate and collaborate."

Healthconnect's service begins with an event, such as a patient checking in at his or her doctor's front desk or registering at a hospital or emergency care. This can generate an automatic query to Healthconnect.

"What we do then is make sure the patient has given their informed consent to share their health information," said Bonvino. "Once the patient is matched and the consent is confirmed, we go out to all connected caregivers and pull that patient's information, aggregate it, and present it back to the requesting provider integrated with their electronic health record system."

Currently Healthconnect has about 35 percent participation among hospitals in its service area and 38 percent among physicians. Major participating providers in the Texas Medical Center include Houston Methodist Hospital, Texas Children's Hospital, Harris Health System, MD Anderson, Baylor College of Medicine, and UT Physicians, as well as outside entities that refer patients into the TMC. As CEO, Bonvino hopes to expand those numbers. Projected engagement by 2017 is 80 hospitals and 7,000 physicians.

"A great job has been done up to this point. We need to continue that progress, and that is exactly our goal," Bonvino said. "To connect every venue of care throughout our community."

In addition to expanding its member base, Bonvino said the organization is expanding offerings to members. To that end, Healthconnect recently rolled out a new diagnostic imaging exchange



“Providers need a 360-degree view of the patient, and the only way that can happen is if all providers are connected, communicate and collaborate.”

— NICK BONVINO

Chief Executive Officer of Greater Houston Healthconnect

service, which means participating providers can now share CT scans, MRIs, and other images.

The increased drive to make medical records more easily accessible through electronic health records can be traced all the way to the White House. In a 2004 State of the Union address, President George W. Bush outlined a plan to make electronic health records more available to American patients.

"By computerizing health records," Bush said, "We can avoid dangerous medical mistakes, reduce costs, and improve care." Medicare and Medicaid have put this directive into action by offering incentive programs for providers making meaningful use of electronic health records.

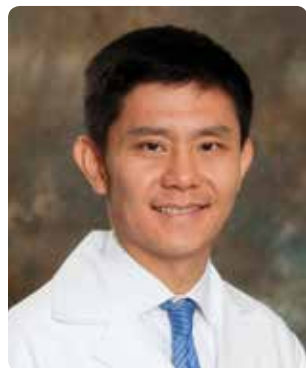
For Healthconnect, success is not measured in dollars. "This is not a

moneymaking endeavor. We're a nonprofit," Bonvino said. "Our governance allows us to serve the community in an unbiased way, representing all stakeholders—large and small hospitals, small and large practices, pharmacies, laboratories, imaging centers, all the venues of care."

Connecting all providers in the greater Houston area, from the massive hospitals in the medical center to small family practices, Bonvino said, is integral to providing patients with the best quality of care.

"The medical industry is very large, and Houston attracts patients not just from across the U.S. but from around the world," he added. "You can't collaborate in paper form very well. Once patient health information is digitized and we have these connections, then surely we can go anywhere." ■

ACCOLADES



DAVID CHIU, M.D., medical director of the Houston Methodist Hospital Eddy Scurlock Stroke Center and neurologist at the Houston Methodist Neurological Institute, is the first holder of the Elizabeth Blanton Wareing Chair in the Eddy Scurlock Stroke Center. His active clinical practice benefits from his extensive translational research in extending the time and quality of life for stroke patients, acute stroke treatment, stroke prevention in those who have experienced Transient Ischemic Attack and stroke. He is also a reviewer for Stroke and Journal of Neurology, Neurosurgery and Psychiatry.



HEIDI SCHWARZWALD, M.D., associate professor of pediatrics at Baylor College of Medicine, is the recipient of a Children at Risk Child Health Advocacy Award in recognition of her outstanding work in graduate medical education at Baylor and for promoting patient-family-centered medical care for children and pregnant women within the Texas Children's Health Plan. The organization noted that her work exemplifies the spirit of the Child Health Advocacy Award by bringing attention to crucial children's issues and inspiring fellow medical professionals to advocate for children's needs.



BRUCE KONE, M.D., professor in the Division of Renal Diseases and Hypertension at The University of Texas Health Science Center at Houston, has been named chairman of a Scientific Review Group (SRG) that evaluates training grant and career development award applications for the National Institutes of Health (NIH). It is called the Kidney, Urologic and Hematologic Diseases SRG. Kone chairs the 21-member panel that screens applications for the NIH's National Institute of Diabetes and Digestive and Kidney Diseases. His term extends through June 30, 2017.



JOHN TIMOTHY STOUT, M.D., chair and professor of ophthalmology at Baylor College of Medicine, was honored with a Secretariat Award at the annual meeting of the American Academy of Ophthalmology, held in Chicago earlier this month. He received the award from the Academy's secretaries for quality care, knowledge-base development, ophthalmic knowledge, online education/e-learning, and clinical education. The Secretariat Awards recognize individuals for special contributions to the Academy and the field of ophthalmology.



ARTHUR LAGANOWSKY, PH.D., assistant professor and director of the Waters Collaboratory for Analysis of Membrane Proteins at the Texas A&M Health Science Center Institute of Biosciences and Technology, was awarded the Biochemistry Distinguished Dissertation Award for his doctoral work on structural studies of amyloid-related proteins. Laganowsky is also the Nicholas Kurti Junior Research Fellow at the University of Oxford in world-renowned Dame Carol Robinson's Laboratory.



ELIZABETH L. TRAVIS, PH.D., FASTRO, associate vice president for Women Faculty Programs, Mattie Allen Fair Professor in Cancer Research, and professor in the Departments of Experimental Radiation Oncology and Pulmonary Medicine at The University of Texas MD Anderson Cancer Center, was elected chair of Group on Women in Medicine and Science (GWIMS) Steering Committee at the Association of American Medical Colleges (AAMC) and is the 2014 recipient of The Marie Sklodowska-Curie Award by The American Association for Women Radiologists.



MATTHEW SCHLUETER was recently named Chief Nurse Officer for Harris Health System for Ambulatory Care Services. He has more than 20 years of clinical and nursing leadership experience, most recently as administrative director of ambulatory specialty services for Harris Health. Schlueter began his career at Harris Health in 1999 as trauma coordinator for Lyndon B. Johnson Hospital's Level 3 trauma center. He was later promoted to nurse manager of perioperative services at the hospital. He has two master's degrees in Nursing and Business Administration from Texas Woman's University in Houston. He also holds nursing licenses in Texas and California.



HUA XU, PH.D., associate professor at The University of Texas Health Science Center at Houston (UTHealth) School of Biomedical Informatics, has been elected a fellow of the American College of Medical Informatics. The college of elected fellows is comprised of scholars and industry practitioners from across North America and the globe. Each fellow has made significant and sustained contributions and advancements in the field of biomedical informatics. ACMI Fellows are elected by their peers and each has a commitment to advancing the informatics field.

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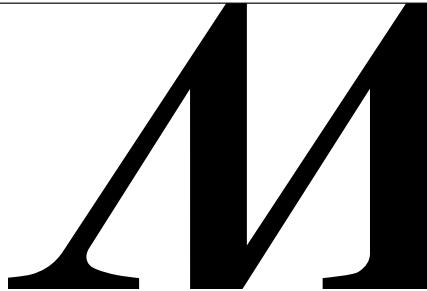
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Mata Conjoined Twins Take First Step Towards Separation with Tissue Expansion Surgery at Texas Children's Hospital

Knatallye Hope and Adeline Faith Mata, conjoined twin girls born at Texas Children's Pavilion for Women in April, underwent a five-hour surgery at Texas Children's Hospital on Dec. 16 to place custom-made tissue expanders into their chest and abdomen area. The tissue expanders will help to stretch the babies' skin in preparation for their separation surgery expected to take place in early 2015.

"We are pleased the babies did so well during this surgery and a multidisciplinary team continues to monitor them in our neonatal intensive care unit as they recover," said Larry Hollier, M.D., chief of plastic surgery at Texas Children's and chief of the division of plastic surgery at Baylor College of Medicine. "On a regular basis, additional fluid will be added to the tissue expanders, which are like balloons, to

allow the skin to be stretched gradually. We anticipate needing extra skin to provide coverage once the babies are separated."

The surgery, performed by Texas Children's plastic surgeons Hollier and Ed Buchanan, M.D., will require a recovery time of six to eight weeks, during which time the planning process for the separation surgery will continue among a team of multidisciplinary specialists in pediatric surgery, urology, plastic surgery, orthopedic surgery, cardiovascular surgery, and pediatric gynecology.

"We have been preparing for the twins' separation surgery for months and the process is ongoing," said Darrell Cass, M.D., pediatric surgeon, co-director of Texas Children's Fetal Center, and associate professor of surgery, pediatrics and obstetrics and gynecology at Baylor College of

Medicine. "In addition to multidisciplinary meetings, our plans have included, among other things, building a 3-D model of their organs, conducting simulations of the surgery and post-operative care they will receive, as well as helping create devices to support their care, such as a swing which will hold the girls upright to alleviate pressure on their healing incisions."

The separation surgery will involve multiple teams of surgeons who will work together to separate the twins who share a chest wall, lungs, pericardial sac (the lining of the heart), diaphragm, liver, intestines and pelvis.

"We are so thankful for the support, thoughts and prayers for our girls as they continue to grow, recover and prepare for the next step in their journey," said Elysse Mata, mother of Knatallye and Adeline. "We feel fortunate to be



(Credit: Allen S. Kramer, Texas Children's Hospital)

in the hands of such caring and skilled physicians, surgeons and caregivers here at Texas Children's." ■

— Veronika Javor Romeis, Texas Children's Hospital

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thehealthmuseum.org/lab

Art with Heart 2015

Join San José Clinic for a gallery-inspired evening featuring art, jewelry, extraordinary experiences and more

Saturday, April 18, 2015 at The Corinthian

Portrait of Compassion Honoree: **Houston Methodist**

Honorary Event Co-Chairs: **Connie Dyer & Cathy Easter**

sanjoseclinic.org/artwithheart
 for ticket information, sponsorship opportunities and more

San José Clinic's mission is to provide quality healthcare and education to those with limited access to such services in an environment that respects the dignity of each person. We are a 501(c)(3) non-profit organization, a United Way agency and a ministry of the Archdiocese of Galveston-Houston.

THE BAYLOR COLLEGE OF MEDICINE MOOD & ANXIETY DISORDERS PROGRAM IS RECRUITING RESEARCH PARTICIPANTS

If you are between the ages of 18 and 65, and have been diagnosed with any of the following:

- Major Depressive Disorder (MDD)
- Bipolar Disorder
- Any other mood/anxiety disorder

Please contact us at our confidential number or email: **713-689-9856**

mood@bcm.edu

As God has loved us, we will meet people on common ground and journey together to the higher ground of life in Christ Jesus our Lord.

Southwest Central Church of Christ

<http://swcentral.org/>

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Blood Center Brings Marrow Donor Program Full Circle

When Caleb Winn walked through the doors of Gulf Coast Regional Blood Center to donate in December, he walked past the Bill T. Teague Neighborhood Donor Center, down a long hallway and into a quiet room labeled Medical Apheresis Suite. Here, Caleb donated, not blood, plasma or platelets, but the first peripheral blood stem cell donation (a type of bone marrow donation) ever collected at The Blood Center.

As The Blood Center celebrates its 40th anniversary this year, it's also expanding the "related services" piece of its mission: To partner with the community to help save and sustain lives by providing a safe supply of blood, blood components and related services.

Gulf Coast Regional Blood Center has been home to the Gulf Coast Marrow Donor Program, part of the National Marrow Donor Program's global transplant network, since 1996. The program recruits potential donors for the Be The Match Registry, which is the largest and most diverse marrow registry in the world.

Until December 2014, The Blood Center's marrow donor program staff facilitated every step of the process—from recruitment of potential donors to informed consent and preparation of selected donors—up to the actual marrow donation, which was done at Houston Methodist Hospital in the Texas Medical Center. Now, The Blood Center is equipped and approved to collect most of those donations at its own facility, just down the road from the main TMC campus.

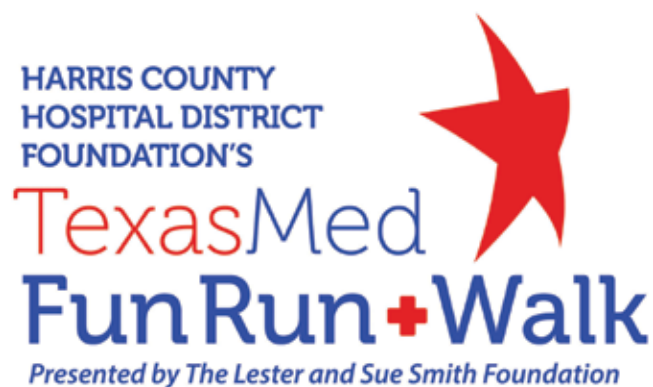
"Becoming an NMDP network apheresis center was a natural extension of our mission," Hope Guidry-Groves, Director of the Gulf Coast Marrow Donor Program said. "It's another way that we are able to partner with the community to save lives." ■

— Meagan Raeke,
Gulf Coast Regional Blood Center

For the full story, visit
TMCNews.org/marrow-donor

“Becoming an NMDP network apheresis center was a natural extension of our mission. It's another way that we are able to partner with the community to save lives.”

— HOPE GUIDRY-GROVES
Director of the Gulf Coast Marrow Donor Program



February 7, 2015

*It is time to lace up your tennis shoes and get ready for the
TexasMed Fun Run + Walk!*

The 5K and 10K race courses are around the Medical Center, with the starting line at the corner of Cambridge and N. MacGregor Way just down the street from Ben Taub General Hospital!

*This is one Fun Run you do not want to miss!
Vendor Booths and After Party for Awards!*

Register Today: www.TexasMedFunRun.com

Thank you to our sponsors! (at time of printing)

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www.listotranslating.com

February 2015

- 6-7

3rd Conference on Medical Issues in Cancer Patients & Survivors
Friday, 12:00 p.m.-6:00 p.m.
Saturday, 7:00 a.m.-4:30 p.m.
MD Anderson Duncan Building (CPB)
1155 Pressler Street, 8th Floor
ctierney@mdanderson.org
713-792-2223

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- 7

TexasMed Fun Run + Walk
Saturday, 8:00 a.m.-11:00 a.m.
Ben Taub General Hospital
1504 Taub Loop
texasmedfunrun.com
713-566-6409

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- 10

Bipolar Disorders: What Can Psychology Provide?
Tuesday, 11:30 a.m.-1:00 p.m.
Behavioral and Biomedical Sciences Building
1941 East Road, 2nd Floor
margaret.thornsborg@uth.tmc.edu
713-486-2783

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- 12

2015 Distinguished Lecture in the Neurosciences
Thursday, 4:00 p.m.-5:00 p.m.
UTHealth Medical School Building
6431 Fannin Street, Rm 3.001
nba-nrc@uth.tmc.edu
713-500-5538

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- 12

Jones Partners-Healthcare Reform: Policy, Practice and Common Sense
Thursday, 6:00 p.m.-8:30 p.m.
Rice University
6100 Main Street, McNair Hall
jonespartners@rice.edu
713-348-6222

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- 14

4th Annual Symposium on Enhancing Geriatric Understanding and Education (SEGUE): Geriatric Ophthalmology for Non-Geriatricians
Saturday, 8:00 a.m.-3:00 p.m.
Houston Methodist Research Institute
6670 Bertner Ave
cme@houstonmethodist.org
713-441-4971

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- 20-21

9th Annual Kempfer Neuroanatomy Seminar
Friday-Saturday, 7:30 a.m.-4:15 p.m.
Baylor College of Medicine
Kleeberg Auditorium
One Baylor Plaza
ceowen@mdanderson.org
713-563-8710

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- 26

Cardiovascular Research Institute 3rd Annual Symposium
Thursday, 8:30 a.m.-5:00 p.m.
Baylor College of Medicine
Cullen Auditorium
One Baylor Plaza
cvri@bcm.edu
713-798-6850

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- 27-28

5th Annual Texas Adolescent and Young Adult Oncology Conference
Friday-Saturday, 12:00 p.m.-3:45 p.m.
MD Anderson Cancer Center
6767 Bertner Ave, Mitchell Building, 3rd Floor
keldavis@mdanderson.org
713-563-0603

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- 28

Bedside Ultrasound: A Case-Based Approach
Saturday, 7:30 a.m.-5:00 p.m.
JW Marriott
5150 Westheimer Rd
stanleyw@bcm.edu
713-873-2630

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FOR MORE EVENTS, VISIT TMCNews.org

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To our friends in the Med Center Community,

Russell & Smith would like to extend the benefit of **"Family Pricing"** to you! Family pricing is the absolute greatest value we can offer our preferred clients. We have one individual sales associate from each of our locations that handles our preferred clients. Below are the names and contact information for each of these associates.



Russell & Smith Ford

Sales Manager

Chris Rehkopf

(O) 713.663.4136

(C) 832.620.3658

crehkopf@russellsmith.com

General Manager: Jack Carney



Russell & Smith Honda

Sales Manager

Dino Vacardos

(O) 713.663.4260

(C) 832.563.5297

jvacardos@russellsmith.com

General Manager: Mark Rehkopf



Russell & Smith Mazda

Sales Manager

Ravi Sapkota

(O) 713.663.4166

(C) 713.345.0899

rsapkota@russellsmith.com

General Manager: Steve Rodriquez

We know you have high standards when it comes to purchasing or servicing your vehicle and our team here at Russell & Smith takes pride in providing you with exceptional service and an unmatched experience. Being a family owned and operated business, we understand the importance of the safety of your family. Houstonians have supported us since 1937, and we appreciate any chance we get to support our Houston family.

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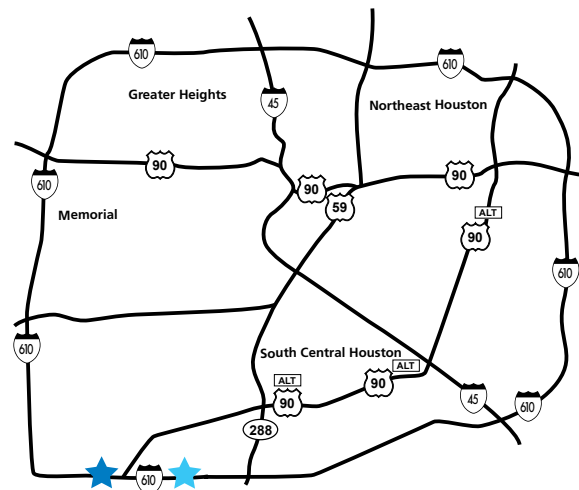
Sincerely,

Chase Smith, President/Co-Owner

713.663.4147

csmith@russellsmith.com

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Houston's Texas Medical Center, globally recognized for excellence in adult and pediatric care, should also be known as the destination for hosting medical meetings. Just as the TMC has state-of-the-art medical facilities, our convention campus offers first class meeting facilities. The Greater Houston Convention and Visitors Bureau (GHCVB) has partnered with the Texas Medical Center to provide an unparalleled set of resources to ensure that conventions and special events are a success here in Houston.

How it works: The GHCVB Destination Sales staff will handle all of the logistics and negotiations required for hosting conferences and will work in tandem with the TMC to pair the best professionals for each event.

If you are part of a professional medical association, such as AMA, ADA, AHE or ASCO, our Destination Sales staff encourages you to promote Houston as a future meeting destination and let us do the rest!

**We are here to assist you every step of the way.
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