



Photo Provided

Hannah Campbell rides a horse, pain-free, after rib fixation surgery at MUSC Health.

Surgery offers hope for people in pain from unhealed broken ribs

BY LESLIE CANTU

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Tracy Campbell's little girl is all grown up and leaving home. Hannah Campbell, 18, set off from Tennessee to Colorado in January to embark on a Christian gap-year program where she expects to grow spiritually and physically – she'll be learning to ski and plans to work as a camp counselor in the mountains over the summer. After college, she'd like to pursue a career in federal law enforcement.

But none of that would be possible if Tracy and Hannah hadn't found MUSC Health's Evert Eriksson, M.D., they said.

After months of being told there was nothing to be

done for Hannah's unhealed broken rib, which left her in so much pain every second of the day that she couldn't complete basic tasks like reaching down to unload the dishwasher, Eriksson performed a rib fixation surgery, attaching a titanium plate to the rib to hold it in place so it could finally heal.

Suddenly, Hannah's future transformed. Instead of a life of pain, barely holding down a minimum wage job, the entire world opened up to her.

"That was the hardest part, feeling like there was no hope," Tracy said of the months before they connected with Eriksson. "And if we hadn't persevered, Hannah would be a disabled person for life."

See **SURGERY** on page 7

COVID tracking team releases estimates on immunity

BY HELEN ADAMS

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An estimated 37% of South Carolinians may be immune to COVID-19 through vaccination or from being infected with the coronavirus during the last three months.

The numbers come from MUSC's COVID-19 Epidemiology Intelligence Project, a group of public health experts that's been tracking the coronavirus' impact for almost a year.

Project leader Michael Sweat, Ph.D., director of the MUSC Center for Global Health and a professor in the College of Medicine, did the analysis. "We are getting there. That's the message now," he said.

The Tri-county area, MUSC Health's home base, has an estimated immunity rate of 35.2%. That comes from combining the 20.9% of people vaccinated with the 15.2% of people who had an infection within the past three months in Berkeley, Charleston and Dorchester counties.

The Florence metro area, which has an MUSC Health hospital, has an estimated immunity rate of 50.3%. That's from combining the 27.5% of people vaccinated with the 24.7% estimated to have had a recent infection in Florence, Darlington, Marion and Williamsburg counties.

And the Lancaster metro area, another MUSC Health hospital site, comes in at 36.3%. There, 15.4% have been vaccinated, and 21.8% are estimated to have had a recent infection in Lancaster and Chester counties.

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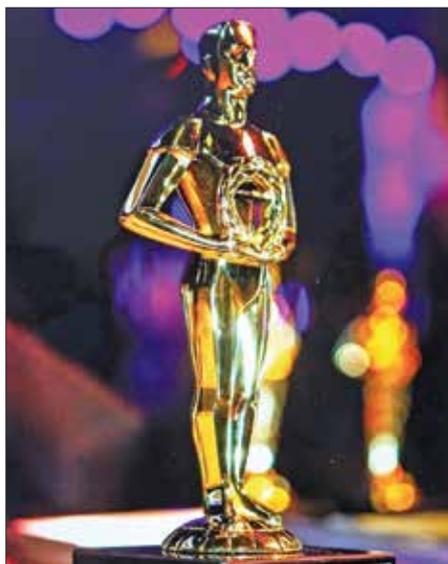
'Don't Go Viral' campaign wins statewide ADDY awards

Staff Report

MUSC Health's "Don't Go Viral" campaign won several awards in the 2021 American Advertising Awards hosted by the American Advertising Federation (AAF) Midlands (S.C.). The awards were announced virtually at the group's annual awards gala on Feb. 27.

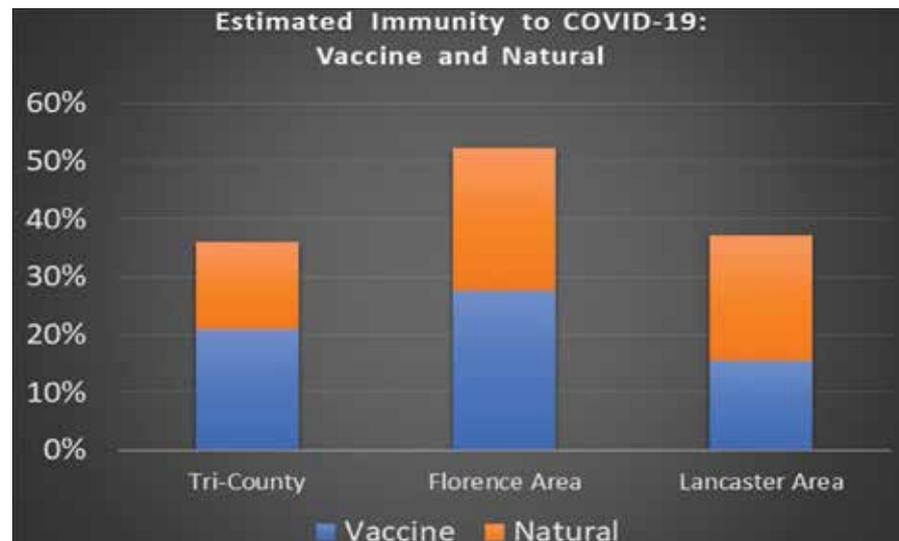
The campaign won a gold ADDY for the MUSC "Don't Go Viral" campaign (Integrated Branded Content Campaign), a silver ADDY (Audio/Radio Advertising – Regional/National Campaign) as well as a People's Choice Nomination (Integrated Branded Content Campaign).

Kelly M. Perritt, Ph.D., director of Marketing Campaigns for MUSC Health, was excited with the creativity and collaboration involved in the campaign. "We are thrilled to receive this recognition for our PSA campaign," said Perritt. "The 'Don't Go Viral' campaign demonstrates the level of quality, engagement and creativity produced by a group of talented professionals. Kudos to the MUSC Health and Chernoff Newman teams for this outstanding achievement. A special thanks also go to MUSC's Nick Murray, Elizabeth Rogers, Molly Hefka, Emma Vought and Betts Ellis."



The AAF is the oldest national advertising trade association in the U.S. The group has a national network of nearly 200 local federations, representing 40,000 advertising professionals, who are located across the country, and more than 200 AAF college chapters with more than 6,500 student members.

The American Advertising Awards are one of the U.S. ad industry's largest competitions and is unique in its three-tier structure. The AAF Midlands awards listed below qualify the "Don't Go Viral" campaign for the district competition level. District level winners then qualify for entry in the National ADDY Award competition.



Graphic Provided

An estimated 37% of South Carolinians may be immune to COVID-19 through vaccination or from being infected with the coronavirus during the last three months. The numbers come from MUSC's COVID-19 Epidemiology Intelligence Project, a group of public health experts who have been tracking the impact of the coronavirus for almost a year.

IMMUNITY *Continued from Page One*

Sweat cautioned that his team is still working on refining the analysis, but said he was conservative with the numbers he used. "The percentages are probably even higher."

An example of that conservative approach: The analysis only included people infected with the virus that causes the illness COVID-19 during the past three months. "There's some uncertainty how long will native natural immunity lasts, but everybody pretty clearly says at least three months. It may be up to a year, maybe longer, but we just don't know," Sweat said.

He arrived at the percentages through a complex series of computer-assisted calculations that factored in such questions as: How many people have been diagnosed? How many have gone undiagnosed? How effective are the vaccines based on clinical trial data? How do you include people who have been both infected and vaccinated without double counting them?

The answers were based on scientific standards, leading to the percentages. Sweat, who specializes in the statistical analysis of health care threats and treatments, said his

team's figures are not a sign that the pandemic is over. "We're nowhere near herd immunity. That's unique to each pathogen, and when something is highly transmissible like COVID-19, it requires a pretty high rate of immunity, and many think with COVID-19 it will probably require no less than 70% of people to have immunity, perhaps more."

But Sweat said people should be optimistic. "Everything's looking good. It's just not going to happen overnight. We have to watch the signals and wait for the science to address some of the nuanced issues. Until we get to herd immunity levels it's important to still practice prevention behaviors."

Those issues include the threat of variants, the possibility of another surge and the ongoing need for vaccines to be updated.

Sweat and his team update their online project daily when it comes to cases per day and give a big picture update once a week, typically on Wednesday or Thursday. The team's goal is to help officials and the public understand COVID-19 trends, predict any strain on the health care system and give everyone the best possible information so they can make good decisions. By mid-March, the team plans to start including data about estimated immunity.

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Bringing preventive health to work: benefits of MUSC worksite screenings

Most of us recognize the need for regular home or vehicle maintenance because we know that if we do not maintain our assets on a regular basis, larger and more complicated problems tend to ensue. The same can be said for our health and well-being. In order to ensure that we stay well and can manage and mitigate risk for chronic disease, we must be proactive and engage in preventive measures that allow us to have a clearer picture of our current health status as well as identify behaviors or interventions that will allow us to live healthier, longer and more vibrant lives.

That said, research suggests that less than 10% of Americans age 35 or older receive regular preventive services as recommended by the Centers for Disease Control and Prevention. While most adults recognize that participating in regular health screenings is beneficial to their longevity and well-being, the demands of the fast-paced workplace and ever-busy personal and family life can make compliance challenging for many individuals.

As the state's only academic health sciences center, MUSC understands the importance of meeting our care team members where they are and enabling them to participate in their preventive health care in a format that is both accessible and convenient for them. As a result, the MUSC Office of Health Promotion has created a robust Worksite Biometric Screening Program that all MUSC care team members and retirees, along with their covered spouses and adult dependents, are eligible to participate in.

In an effort to make these screenings as convenient as possible, the screenings are hosted on a monthly basis on MUSC's Main Campus. The Worksite Screening Program will also be expanding to all MUSC Regional Hospital locations in the coming months.

WHO IS ELIGIBLE TO PARTICIPATE?

The basic screening, a \$300+ value in most health care settings, is provided free to employees, retirees, COBRA subscribers and their covered spouses, if their primary coverage is the Blue Cross Savings Plan (or MUSC Health Plan). According to the PEBA website, the zero copay applies to the basic screening – one per year. Optional tests are available at an additional charge. Those not covered or subsequent screenings will be \$47 for the basic screening.

What is measured and included in the MUSC Worksite Biometric Screening?

The basic screening will measure the following metrics:

- Height, weight, body mass index and blood pressure.

Additionally, the lab work will include the following:

- Lipid profile including total cholesterol, LDL,

What are the 2021 screening dates and locations?

- April 2
- May 7
- June 4
- July 9
- August 13
- Sept. 10
- Oct. 8
- Nov. 12
- Dec. 10

❑ Screening time: 7 a.m. until 10:30 a.m.

❑ Screening location:

- Shawn Jenkins Auditorium – 7th floor, Room 7010
- 10 McClellan Banks Drive, Charleston, S.C. 29425

Appointments can be made online one month prior to each screening date at the following link:

<https://web.musc.edu/resources/health-and-wellness/ohp/employees/worksite-screenings>.

MUSC Health & Well-Being

By Susan L. Johnson, Ph.D.,
MUSC Office of Health
Promotion



HDL, triglycerides, protein, liver and kidney enzymes (including BUN) as well as platelets, glucose, electrolytes, red blood cells, hemoglobin, hematocrit and white blood cells.

There are also a number of optional tests that employees can add to their screening for an additional cost.

Results will be included in a digital personal health profile highlighting any values outside the normal range. Participants can even send this report to their physicians or take a copy with them on their next doctor's office visit, which may save them money and keep them from duplicating tests.

Please contact the MUSC Office of Health Promotion at musc-empwell@musc.edu for questions or more information on the Worksite Biometric Screening Program. Additionally, MUSC employees are invited to take the "Preventative Screening" Imagine U digital well-being program challenge at www.musc.edu/iu.

MUSC remembers gastroenterology leader

Staff Report

MUSC lost a valued colleague, researcher and mentor on Jan. 9 with the death of Donald O. Castell, M.D., professor emeritus of medicine and leader in the field of gastroenterology. He was 85 years old.

Castell was internationally renowned for teaching, mentoring and researching esophageal function and disease. Among his many contributions, Castell co-authored more than 600 peer-reviewed papers and served as editor of the journal *The Esophagus*, the primary text in this field. Throughout his long and distinguished career, Castell mentored countless medical students, residents and GI fellows, many of whom are now leaders in the field of esophagology.

In 2001, Castell joined the MUSC faculty in the Division of Gastroenterology and Hepatology as director of the Esophageal Disorders Program. Within a short time, he established an impressive esophageal program and continued to nurture

students and trainees, many of whom are now practicing across the world. While at MUSC, Castell established his role as a pioneer in the use of esophageal impedance testing, first in elaborating esophageal function and then esophageal disease. Several landmark studies on this subject were published in the *American Journal of Physiology*, *Gastroenterology*, *Clinical Gastroenterology* and *Hepatology* and the *American Journal of Gastroenterology*.

Castell was born in Washington, D.C., on Sept. 19, 1935. He received his medical degree from the George Washington University School of Medicine in 1960, where he graduated as a member of Alpha Omega Alpha. After a residency in internal medicine at Bethesda Naval Hospital, he received his GI fellowship training at Tufts University. During his career, Castell assumed a number of important leadership roles, including chief of Gastroenterology at the Naval Hospital in

See **CASTELL** on page 11

Researcher awarded \$9.9M for tuberculosis treatment, prevention

By CORTNEY GENSEMER

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Susan Dorman, M.D., an infectious disease physician at MUSC, was recently awarded a 10-year, \$9.9 million contract by the Centers for Disease Control and Prevention to run trials for the Tuberculosis Trials Consortium" (TBTC). The TBTC is a collaboration of researchers whose goal is to improve the diagnosis, management and prevention of tuberculosis (TB) around the world.



Dorman

Dorman, who has dedicated her career to studying the disease, serves as a TB medical consultant for the South Carolina Department of Health and Environmental Control and leads research efforts to improve TB treatment



3D computer-generated image of a cluster of rod-shaped, drug-resistant Mycobacterium tuberculosis bacteria, the pathogen responsible for causing the disease tuberculosis.

Image Courtesy of the CDC

and prevention.

“In the U.S., we think of TB as a disease of the past, and we do have good TB control in this country,”

“However, in many other parts of the world, it (tuberculosis) is still a contemporary health problem that impacts people’s lives in terms of morbidity and mortality.”

Susan Dorman, M.D.

Dorman explained. “However, in many other parts of the world, it is still a contemporary health problem that impacts people’s lives in terms of morbidity and mortality,” said Dorman.

According to the World Health Organization, TB is one of the top 10 leading causes of death in low-income countries. That’s why Dorman has a long-term collaboration with a research team at the University of Cape Town Lung Institute in South Africa, where TB is very common. For one of the TBTC projects, she will partner with the Cape Town team to test TB treatment interventions in an area where people are

severely affected by the disease.

The leaders of the TBTC will set the research agenda for funded investigators and ensure it is relevant both globally and in the U.S. In this country, social disparities in health care are contributing factors to TB infection and transmission. People living in poverty and crowded living environments are at a higher risk for TB transmission. Lack of access to proper nutrition can increase disease susceptibility, and health care costs can negatively affect treatment outcomes. Future work from the TBTC will attempt to address strategies for better managing TB and latent TB in underserved populations in the U.S.

Although TB is curable, Dorman said, it is a challenging course of treatment that can involve six months of antibiotics, with more than one antibiotic often being taken at the same time. The treatment can be difficult for patients to complete and can lead to side effects. One component of this funded work would be to shorten the treatment duration to improve the likelihood of patients completing it.

Another hurdle to effective management of the disease is latent TB infection. The bacterium that causes TB can live inside people for years without causing any signs or symptoms. Later in life, they can ‘wake up’ and cause sickness, and so it is important that we have effective tools for preventing TB. The treatment for latent TB, much like that for active disease, involves an intense course of antibiotics that doesn’t foster patient adherence, especially in people who feel healthy.

The consortium will focus on improving the prevention of TB infection in individuals with latent TB. Ultimately, the efforts of Dorman and her team could vastly improve TB treatment and prevention and alter clinical guidelines for treating TB.

Dorman is driven by her passion to prevent and treat TB.

“I really am motivated to try to help to do a better job of preventing people from getting TB, and, if they do get it, doing a better job at treating them so they survive it.”



MEET JULIE



Julie Woolworth Hirschhorn, Ph.D.

Department; Years at MUSC

Pathology and Laboratory Medicine; 18 years

How are you changing what's possible at MUSC

In the Clinical Pathology Labs, I get to do research and development of new assays to add to the clinical test menu in the areas of molecular pathology and molecular genomics. I validated our first next generation sequencing assay and continue to help shape our oncology test menu validating gene panels for solid tumors and hematological malignancies. In the past year, I've been rapidly building MUSC's testing capacity for COVID-19 testing. Personally, I've worked to validate five COVID-19 molecular diagnostic assays.

Family *Husband, Josh; mom, Tammy; and children, Henry (4) and Harper (3)*

A vacation I'm looking forward to *Ireland*

An inspiring woman in my life and why

There are many female leaders that surround me in the Anatomic and Clinical Pathology labs, serving as medical directors, managers and coordinators. Their dedication to patient care and support for each other is a testament to leadership of women in the workplace.

HAVE AN IDEA BUT NOT SURE WHERE TO SUBMIT IT? 



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Professor grapples with uncertainty of family's fate

BY BRYCE DONOVAN

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The world is full of people who are weary. And lonely. And scared.

And for good reason: A global pandemic has completely shifted the way we operate. A single microscopic virus – invisible to the naked eye yet looming so massively large on our minds – has completely upended our daily lives, putting physical and emotional distance between us. And while few can imagine anything worse than the inconvenience of relentless cancellations, the monotony of Zoom meetings and the possibility of forced lockdowns, for some, those fears are much larger.

Since this past November, in a small corner of the world, tens of thousands of people have been killed and millions more have been forced from their homes. Towns and villages have been demolished by artillery shelling, health and educational facilities looted and destroyed. And yet in the United States – in large part due to our daily headlines being dominated by contentious political issues and new coronavirus variant strains – most of us know nothing about what is happening in the Tigray region of Ethiopia.

This is a place that knows fear.

Food. Water. Medicine. All gone. A region of more than 5 million people finds the vast majority of its citizens without shelter, order, hope. And they are scared to death.

So while some of us want nothing more than to hug our parents for a few precious seconds, for these people, it's an altogether different story – hugs are a luxury; they just pray their loved ones live through the day.

AMERICAN DREAM, ETHIOPIAN NIGHTMARE

For the past 20 years, Mulugeta Gebregziabher, Ph.D., has spent his professional life focusing on research using data, statistics and models in the hopes of improving the world through health care. Each day, he wakes up solely focused on making the lives of others better. Whether through ensuring veterans are getting adequate health services or addressing health disparities like diabetes, HIV and lung cancer, Gebregziabher's goal is to tackle the tough global health issues facing our world.

But today, the MUSC biostatistician is doing something he wishes he never had to: asking the world



Photo by Adobe Stock

Since November of 2020, Ethiopia has been embroiled in an ugly war pitting the government against its own people.

to return the favor.

Nearly two decades ago, Gebregziabher, his wife and then 1-year-old son made the leap of faith and left their hometown of Adwa, Ethiopia, to come to the United States in the hopes of a better life and education. It was a gamble that paid off, with the family eventually settling in Charleston. Today, the husband and wife duo both work at MUSC, his wife in the role of research associate and he as a professor and departmental vice chair. Along the way they added another child, and that little 1-year-old graduates from college next year.

Though he is proud of what he and his family have accomplished in America, a part of Gebregziabher's heart has always remained 8,000 miles away in the remote northern mountains of the Tigray region of Ethiopia. His mother, brother, three sisters and his wife's family still call the area home. And, normally, he checks in with them, via phone, every two weeks. It's a tradition that began two decades ago as a way to stay connected with an indelible part of what makes him who he is. Unfortunately, it's been almost four months – 96 days to be exact – since he last heard his 79-year-old mother's voice.

"I honestly don't know if she's even alive," he says. "It's hard to talk about without getting emotional."

This terrible question, "Is my family alive?" is something no human should ever have to ask. Yet it has been gnawing at Gebregziabher ever since the Tigray War began on November 4 of 2020. At the heart of this battle is a conflict between Ethiopia's prime minister – a man who, according to the media, allied himself with the neighboring country of Eritrea – and the government of the Tigray region, led by the Tigray

People's Liberation Front. The spark that lit the fuse was Tigray holding local elections in defiance of the prime minister's postponement of all such elections nationwide. The result is a complicated, tangled mess that has embroiled the entire country in a deadly war, the epicenter of which just so happens to be where Gebregziabher's family lives.

This has been developing for the past year or so," he says. "But even still, you never actually think it's going to lead to war. It's really hard to wrap my mind around what's going on. What I tell people here, people who might not fully understand what is going on in Ethiopia, I tell them to imagine the U.S. government teaming up with Cuba to attack Florida. That's what this is like."

Understandably, Gebregziabher just wants people to pay attention. And if it means sharing his pain publicly, then that's a price he's willing to pay.

THINKING BIG

Gebregziabher knew that if he wanted to reach a larger audience – get more people involved – he had to become bigger in his thinking, get more creative. And that's when he thought of a way to open the world's eyes to a problem that not only has affected his people but people all over the world.

The American Public Health Association (APHA) is a globally recognized and respected leader in the field of public health. Each year, they publish a list of the 35 most pressing public health issues facing the world – things like chronic disease, prescription drug overdose

See **ETHIOPIA** on page 10

COVID-19 Vaccines

Rising temperatures, third shots and other things you should know

BY **BRYCE DONOVAN**

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With the weather starting to warm up, it's fitting that vaccines are following suit.

In the past week, the Food and Drug Administration (FDA) authorized Johnson & Johnson's new vaccine — a single-dose option that can be stored at standard refrigeration temperatures — as well as eased guidelines on how cold the Pfizer-BioNTech vaccine needs to be kept. Previously, Pfizer's vaccine was required to be stored between -112 and -76 degrees Fahrenheit, a temperature range impossible for many potential vaccinators. Now, the FDA has determined it can be safely stored at



Scheurer

standard freezer temperatures of -13 to 5 degrees Fahrenheit for up to two weeks, opening up more possibilities for the vaccine and who might be able to offer it.

"Anything that increases the time the vaccine can remain outside of the ultra-cold range makes a huge difference," said Danielle Scheurer, M.D., MUSC Health chief quality officer. "Even for us, who have plenty of the super-cold freezers, it's a hard restriction to comply with. So anything that extends its lifespan is a big deal."

As for the other player in the vaccine game, Moderna, it has now entered the MUSC orbit, albeit for possibly a short time. MUSC was recently given some surplus Moderna vaccine from long-term care facilities that didn't need them. Scheurer said she's not sure if this will be a one-time thing or if the hospital will continue to receive more Moderna, but these allocations were specifically given to counties where vaccine uptake has been low. She also said that MUSC will happily accept the Johnson & Johnson



Photo by Dev Benjamin for Unsplash

Move over, frozen treats. Let's make room for some vaccine in there.

vaccine if it becomes available to them.

With the vaccine landscape changing almost daily, each week we are checking in with Scheurer to ask her the most

pertinent questions that are hanging in the balance.

See VACCINE Q&As on page 9

SURGERY *Continued from Page One*

The Campbells wanted to share their story to spread the word that there are treatments available for unhealed broken ribs.

Eriksson has been trying to spread the word to doctors in the South Carolina Lowcountry. In 2020, he started a rib fracture clinic that takes referrals from providers from across the state and, lately, across the Southeast. The issue, he said, is that doctors are taught in medical school that broken ribs heal on their own, and there's nothing to be done beyond pain management.

"It's a weird ask of physicians because they were all taught in medical school there's absolutely nothing to do for rib fractures — so why would you have a rib fracture clinic? It's been an educational event," he said.

Although most rib fractures do heal on their own, some don't. And patients with these nonunion rib fractures find themselves with few options.

"There is a clear group of patients that benefit from surgical rib fixation after they break their ribs. Less is known about ribs that do not heal," Eriksson noted. However, he added, "A lot of us who have operated on nonunion rib fractures have similar results to Hannah's

— the patient feels considerably better."

Hannah's medical journey began with an Ultimate Frisbee tournament on Nov. 16, 2019. Growing up on a farm in the mountains of Tennessee, Hannah enjoyed a very active lifestyle, and the flying disc sport was just one part of it. But on that day, Hannah and another player were both going for the same disc.

"We collided at full speed in opposite directions, so I got hit pretty hard," she said.

Hannah doesn't recall the immediate aftermath of the accident, but her mother does. She said Hannah was clearly stunned and started going into shock, shivering intensely. But when someone tried to drape a blanket over her shoulder, she cried out in pain. An ambulance took them to the local emergency room, where they were told that Hannah had bruised a rib, and they should go home and rest.

They immediately knew that this information couldn't be correct, Tracy said. Hannah couldn't walk without help.

"The first few nights Hannah was sitting up in a chair to sleep because she couldn't breathe. She actually collapsed a lung," Tracy said.

The family followed up with Hannah's primary care doctor about a week later. He ordered X-rays, which

confirmed that Hannah had broken at least one, and possibly two, ribs. He told them that broken ribs usually take four to six weeks to heal, and that Hannah should take it easy. But four weeks came and went, then five weeks, and then six. Hannah was still in pain. At a return visit, her doctor acknowledged that the rib hadn't healed but didn't have any further suggestions.

It's hard to say why rib fractures sometimes don't heal, Eriksson said. If there's too much movement in the area, the bones might not have the chance to heal.

Meanwhile, during that six weeks, there were a few moments when Hannah had such trouble breathing that her mother thought about taking her back to the ER, yet she didn't want to put her daughter through more of an ordeal only to be told there was nothing wrong.

"I pretty much couldn't do anything," Hannah said. "It got really frustrating because I was still in the same amount of pain that I was in the beginning, but everybody was expecting me to get better, so they were like, 'There's no way you can be in that much pain.' So I had to try to fake not being that hurt. But it hurt every second of the day."

Frustrated, at the two-month mark, Tracy took

See SURGERY on page 11

Celebrating one year at MUSC Shawn Jenkins Children's Hospital and Pearl Tourville Women's Pavilion

One year, 365 days or 525,600 minutes all serve to mark the first day on Feb. 22, when the MUSC Shawn Jenkins Children's Hospital and Pearl Tourville Women's Pavilion opened its doors to Tri-county patients and others across the state. Despite the past 12 months being especially challenging for MUSC Children's Health team members and patients due to the COVID-19 pandemic, employees rallied together and worked tirelessly to adjust and meet patient needs.

"It's been quite a year," said namesake and donor Shawn Jenkins in a video he recorded earlier to mark the birthday celebration. "We're so excited to celebrate

the physicians, nurses, staff and volunteers for their hard work as well as patients and families who have come through the hospital. It's wonderful to see babies being born and children being cared for. Thank you for all you do. We can't wait to see what the second year brings."

To mark the occasion, birthday banners and activities were planned. In a virtual celebration, special messages were shared with care team members, featuring recorded birthday messages by celebrities Maelyn Jarmon, Marie Osmond, Edwin McCain and Mark Bryan.



Photos Provided

Namesake Shawn Jenkins, from left, is joined by his family to kick off the celebration of the one-year anniversary of the new hospital.



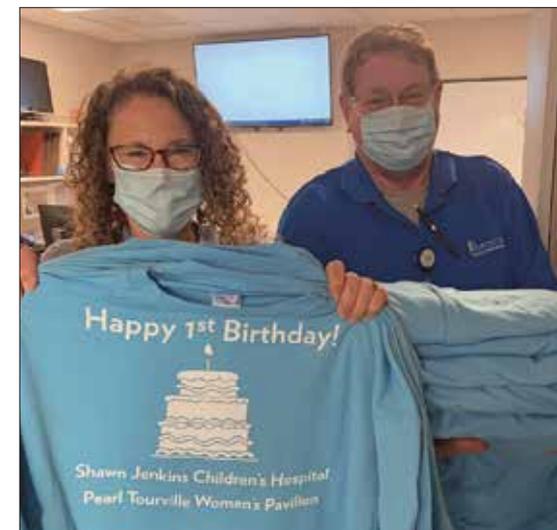
MUSC Health leadership engaged virtually with Children's and Women's leadership, care team members, volunteers and others via Microsoft



Top photo: MUSC Children's Health therapy dogs Agnes, left, and Baskin dressed up in celebratory costumes as they joined in the birthday festivities. Right photo: Sallyann Koontz, left, and Curtis Peterson display specially designed birthday T-shirts created and distributed as a present to MUSC Children's Health team members.



Sodexo cafeteria employees participated in the birthday fun, taking photos of each other at the birthday photo booth created for the event.



What you need to know about the COVID-19 vaccine – Part 3

Danielle Scheurer, M.D., MUSC Health System's chief quality officer, weighs in on the most pressing issues related to COVID-19 and vaccination. The following is a condensed compilation from recent articles that can be found in their entirety on the MUSC Catalyst News digital platform at web.musc.edu/about/news-center.

Q. The number of new COVID cases has stopped declining in the U.S., and S.C. leads the nation in the highest rate of new COVID cases. What do you attribute that to? And does that concern you?

A. A little bit, but I'm not overly concerned. I think people are just getting tired of the social restrictions, and it's being reflected in the numbers. We are on the lower end of state populations being vaccinated – we're at around 7% of the population being fully vaccinated (e.g. two doses) – plus with the weather changing, everyone is out and about again. It's very difficult for people to restrain themselves from resuming "normalcy" for this duration of time.

Q. Are you at all worried that the Johnson & Johnson vaccine will be viewed as a second-rate choice?

A. A little bit, yes. Lots of people just look at the 72% efficacy number and compare it to the 95% of Pfizer and Moderna. But when they do that, they're not getting the whole picture. The way the study was done for the Johnson & Johnson vaccine, they didn't look at all COVID, just how it fared against moderate to severe COVID. So their bar was higher. Not to mention, they started their trials later, when there were more variants out there. To simply compare numbers between the vaccines is an apples-to-oranges comparison. This is not an inferior vaccine, and all the vaccines are extremely effective at preventing death, which is obviously the ultimate goal.

Q. What should people do if they need or want to fly somewhere?

A. I think a big safety concern is the airport terminal itself. It's super hard to maintain social distance in an airport, so it's a risk for sure. And before you fly, make sure you know what your particular airline's protocols are. If they are putting people in all the seats on the plane, that's a hard pass for me. But if there's some distance and everyone's wearing N95s, it's less risky. But there's just no way to get around the fact you're in a closed box and sharing air with dozens of people. Direct flights are preferable. Anything that reduces your contact with more people. Flying is a risk, there's no doubt. But if you're fully vaccinated, I think the risk does go down.

Q. What is the latest guidance for those who have had COVID? Do we think they have better immunity and thus don't need to be vaccinated, or are they supposed to get it anyway?

A. There is still a lot we don't know about this virus. Immunity is one of those areas. How long are people immune? Is it better to have gotten COVID and recovered or to have been vaccinated? Now there's emerging data that people who have recovered from COVID might only need one dose of the Pfizer and Moderna vaccines, but the CDC has not yet endorsed that as a practice. Right

now, if you've had COVID and recovered, we are asking those who are eligible to wait 90 days before getting vaccinated.

Q. What is a reasonable timetable for reaching herd immunity? The Centers for Disease Control and Prevention estimates that more than 83 million people in the United States had COVID-19 by the end of 2020, putting the nation about a third of the way to herd immunity, the point at which enough people are protected against a disease so that it cannot spread through the population. If the pace of vaccinations continues at the current rate, the country could approach herd immunity through a combination of natural immunity and vaccination around June.

A. June sounds a little too early to me. That would be great, but I was thinking mid-summer. If we're able to get this under control before kids go back to school for the fall semester, I think that's a win. To me, that's a more realistic goal.

Q. How likely do you think a third shot (or additional booster) will be?

A. It totally depends on all of these variants. I know Moderna has come up with one and Pfizer is working on one, but will they be needed? It's hard to say.

Q. Is there a chance that one of these variants could make the vaccines we currently have completely ineffective or is that unlikely?

A. I don't think that's very likely. I don't fear going back to square one, but having that third shot? I can see that coming into play.

Q. Are people still having their first doses canceled? If so, should they be assured MUSC will call them back with the new time or is action required by them?

A. I know it's frustrating, but they just need to hang in there. We will reschedule them when we have vaccine. Right now, we have over 40,000 people on a waitlist – people who actually scheduled doses and were told they were temporarily canceled. If we could receive 30,000 doses per week, we could catch up in one to two weeks. But we are currently receiving a fraction of our requested doses each week. Vaccine supply is really out of our hands, and I know it frustrates people. It frustrates us too.

Q. Let's say somebody gets the first dose and then becomes COVID positive. Should they still get second dose or just stop right there?

A. The CDC does recommend finishing the course. So, they should still get the second one.

ETHIOPIA *Continued from Page Six*

and climate change, just to name a few. This year's list even has COVID-19, suicide and gun violence on it. But glaringly absent, Gebregziabher says, is war.

"I was looking at the list and noticed it wasn't included. And I'm thinking to myself, 'How can this be?' I mean, if you think about it, war is at the core of almost every single one of the current 35. Ignoring it seems to be unreasonable."

And now he has his reason to get others to care as much as he does. Recently, he wrote an essay on the subject and shared it with the university community, as well as some leaders in the APHA, with the intention of writing a more in-depth paper and presenting it in October at the association's annual conference. It's at this conference where discussions are held and decisions made as to what makes the next year's list. The reason being included on this list is important, Gebregziabher says, is that the APHA priority list is internationally respected and followed when it comes to funding, policy and long-term action. In other words – this list would provide much-needed awareness.

"Like any public health issue, war is preventable," he says. "I have hope that they will take this idea seriously. Racism was included last year, and it just seems like a logical step to include war on the list."

According to Gebregziabher, most



Photo Provided

Gebregziabher and his mother during his visit to Ethiopia in 2019.

people in Tigray have not been able to communicate with the outside world since the war began. In fact, the only information he receives comes from the media. He recently read a story that talked about a multi-million-dollar factory that was bombed and destroyed by drones. That factory was only two miles from his mother's house. He's seen images from the Adwa region – images that show rubble where health clinics and hospitals once stood. Recently, he got word that some of his mother's neighbors – people he knows personally – were killed in front of their home.

As of January, it is believed that more than 60,000 Ethiopians have fled the country out of fear and desperation. But even with all this new information, Gebregziabher still hasn't heard a word from or about his own family.

"I was helping one of my collaborators at the VA a few weeks ago, and she had heard about the situation in Ethiopia, so she asked how my family was," he says. He started to explain, but after just a few words, he had to step away.

"I just broke down. I couldn't control it. That's just not like me," he says. "I think that just tells you the magnitude of the situation."

GIVING BACK

A little over 10 years ago, Gebregziabher started making annual trips back to Ethiopia. At first, they were rudimentary and informal: He'd share medical tips with any locals who would listen. But eventually, it became something larger, and at some point, it flipped on its head, with the locals in the health care community actually seeking him out.

In 2014, he led an effort to sign a memorandum of understanding between MUSC and several Ethiopian universities, medical colleges and hospitals. From that agreement came an annual workshop, linking MUSC

and the young and vibrant health care community in Ethiopia. Over the years, the partnership has seen lots of progress, helping the Ethiopian people bolster their health care system through newer hospitals as well as centralizing and improving health records. Gebregziabher is especially proud of the partnerships he and his team – which includes fellow MUSC researcher John Vena, Ph.D. – built with three medical colleges located in Tigray in the area of translational research, a critical intersection of science and health care, which moves research out of the laboratory and ultimately to the patient's bedside. Even as recently as the middle of 2020, he coordinated efforts with MUSC and Clemson University along with four Ethiopian universities, including two from Tigray, on a proposal for a five-year transformational health information systems project titled "See-Ethiopia-Win."

Then came the war in 2020. Since that fateful day in November, he has been unable to communicate with the faculty and staff that had been part of the collaboration. As a result, his current global health project funded by the MUSC Center for Global Health is on hold indefinitely – because of war.

"It breaks my heart to see all that hard work undone – and for nothing," he says. "This is a repeat of a Rwanda-type genocide."

Gebregziabher hopes that in the future others won't have to suffer like he or his family. Recently, he took some time off to do some humanitarian work for the region, mainly in the area of fundraising. To raise funds, he is using www.ed-reap.org, a 501(c)(3) organization that he founded with four other professors in the U.S. to help with the rehabilitation efforts of the war-torn Tigray and its people. It helped a little bit, he says, just doing something. "I can't just sit here while this is happening and not speak out."

"War isn't just about Tigray," he says. "War happens everywhere. Nobody is immune unless we work to prevent it. Tigray needs immediate help – and maybe what I'm doing won't help them – but if people start to take this seriously, we might be able to stop future wars from happening."



The N3C Enclave

A National Database Dedicated to COVID-19

Wednesday, March 31st 2020
12:00 – 1:00 p.m.

The National COVID Cohort Collaborative (N3C) has created 'Enclave' a central registry of patients who have been tested for COVID-19 or have a clinical diagnosis of COVID-19. N3C Enclave has assembled a standardized collection of data from health records and health care plans for analysis within a accessible, secure, cloud-base resource.

Enclave is now available to the research community.

Presented by:
Stephane Meystre, MD, PhD
Biomedical Informatics



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More Information & Registration:
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SURGERY *Continued from Page Seven*

Hannah to the ER at a children's hospital an hour away. There, a doctor validated their concerns.

"He said, 'You are warranted to be concerned because it does give indication it's not going to heal, but I don't know where to send you,'" Tracy recounted. "But at least for the first time, we had someone who acknowledged the fact that it might not heal."

The pediatric emergency doctor was also the first to alert them to Hannah's pneumothorax, or partially collapsed lung, Tracy said. Although the doctor wasn't sure who could help them, he did give them a referral to a pediatric orthopedic surgeon.

Thus began a journey that Tracy refers to as "the dark ages," in which they consulted specialist after specialist, calling every hospital they could think of.

"They all said, 'We don't do ribs, we don't do ribs, we don't do ribs.' Everybody. We just hung up and cried. There was no hope," Tracy said. "And meanwhile, Hannah could not lift a backpack. She could not sit in a regular school chair. She could not carry in a bag of groceries. She couldn't unload the bottom of the dishwasher. She couldn't rotate laundry from the washing machine to the dryer. She couldn't make her own bed because of the reaching forward motion."

And then one night, while researching on the internet, Tracy came across Eriksson's email address. She was stunned. After months of trying to reach people and getting no further than receptionists, here was a surgeon's direct email address.

She sent him a brief email late on a Friday. That same night, at 10:11 p.m., Eriksson responded, saying that he'd love to try to help and the family should call on Monday morning. After months of rebuffs, Tracy was overwhelmed by that simple message. "I cried," she said.

As it turned out, the Campbells had a choice to make. Another hospital responded to them around the same time, but Eriksson and the other surgeon offered different surgical options. The other surgeon outlined a plan to stabilize the rib in order to relieve Hannah of the

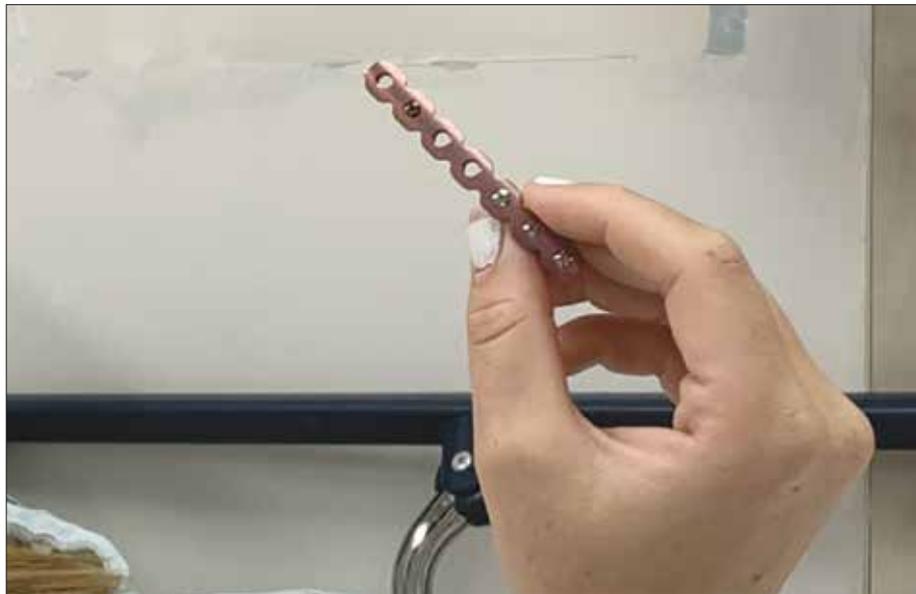


Image Provided

Hannah holds a titanium plate like the one used in her surgery. It holds two sections of the rib in place so the bone can heal.

pain she was in.

Eriksson's plan was to cut back the nonhealing bone, reestablish the intramedullary canal, and then use a titanium plate to connect the two parts of the bone so that it could regrow and heal.

When treating a broken rib, Eriksson said his preference is to operate as soon as possible after the initial injury. If that isn't possible, then he'll usually wait three to six months to see if the ribs heal on their own. Even if the ribs don't completely heal, some patients don't have pain and can still carry out their normal activities, so in those cases, surgery isn't necessary, he said. But if the patient is in pain, then surgery may be called for. Unfortunately, the longer a person is in pain, the less likely it is that intervention can help because the nerves become chronically irritated, Eriksson said.

The Campbells decided to trust Eriksson. Hannah told her mother that, were they to choose the first procedure, she would always know in the back of her head that her rib was still broken and had simply been prevented from causing her pain. She would rather the rib have an opportunity to heal.

Beyond that, they felt an immediate personal connection to MUSC Health that started when Tracy called Shaune Shivers, an administrative coordinator

within the Department of Surgery, on the Monday after she emailed with Eriksson for the first time.

"When I called Monday after contacting him, she said, 'Dr. Eriksson told me all about you!' We just really felt like family, like Hannah was a long-lost family member they were ready to bring home. Every single time. It was the most amazing experience," Tracy said.

Hannah's surgery was originally

scheduled for July 2020 but had to be rescheduled to Aug. 4 because of peaking COVID-19 cases in the Charleston area.

The improvement was almost immediate. Tracy said she remembers Hannah telling her within a few days that she had pain where the incision was, but she could tell it was a different type of pain than what she had been enduring for months.

"About two weeks after, it went from being really painful because of where the incision was to, 'Hey I just had hiccups, and nothing hurt at all,'" Hannah said.

Because of her months of inactivity, Hannah had gained weight and lost muscle on her injured side. When she began CrossFit as part of her recovery, she learned she had 17% less muscle on the left side than on the right. But after working diligently to get back in shape, she now has a bit more muscle on the left side than the right.

Today, Hannah is back to riding horses and can lift up to 125 pounds. And she's back to having fun — squealing along with the other kids, sledding down hills after a recent snow.

Tracy thinks about the alternative future that Hannah could have been living with.

"What if I hadn't prayed? What if I hadn't done due diligence?" she asks. "Dr. E. literally restored her life."

CASTELL *Continued from Page Three*

Philadelphia, Wake Forest University and Thomas Jefferson University. He served as the chairman of the Department of Medicine at the National Naval Medical Center in Bethesda, and the chair of the Department of Medicine at the Graduate Hospital in Philadelphia, Pennsylvania.

Castell's unparalleled ability to attract and empower mentees, spanning four decades, is visible across the globe with hundreds of trainees and faculty who owe their successes to his skilled mentorship.

His commitment to scholarship is evident in the numerous landmark studies he published on a variety of esophageal areas, including pH monitoring, extra esophageal manifestations of gastroesophageal reflux

disease and Barrett's esophagus, followed by his groundbreaking research on the concept of nocturnal acid breakthrough.

Castell received numerous awards for both his teaching and investigative efforts, including the AGA Kirsner Award for Clinical Research in 1992, followed by the AGA's most prestigious award: the Julius Friedenwald Medal, recognizing a lifetime of achievement in gastroenterology.

In remembrance and celebration of his life and contributions, the Division of Gastroenterology and Hepatology held a special GI grand rounds lecture on Jan. 20 dedicated to him.

To honor his outstanding career, the Department of Medicine and the Division of established the Donald O. Castell, M.D., Endowed Chair in Gastroenterology in 2017. To donate, visit <http://muscc.org/3qekyF1>.

Group that works with sexual assault nurse examiners at MUSC renamed

BY HELEN ADAMS

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A longtime Charleston organization known for helping people who survived sexual assault navigate the medical, emotional, legal and personal aftermath has a new name and an updated mission. People Against Rape is now Tri-County S.P.E.A.K.S.

“The acronym stands for sexual violence prevention, education, advocacy, knowledge and services,” said executive director Alex Russell. “The name change is to better reflect what services and programs we offer to the Tri-county area by focusing more on outreach, prevention, and resiliency building to aid in the healing journey for survivors.”

She said Tri-County S.P.E.A.K.S., which offers its services free of charge, wants to reach people who might not think of asking for help because they live outside of Charleston County or don’t think they fit the typical profile of a sexual assault survivor. The group has victim services advocates for not only Charleston but also Berkeley and Dorchester counties.

“Not all sexual assault is rape. Someone might dismiss the idea of utilizing our services because they think, ‘Oh, well, I wasn’t raped. Something else happened to me, so this group must not pertain to me,’” Russell said.

“We want to send the message to people impacted by sexual violence that we are here for you. It doesn’t matter your socioeconomic status, gender, sexual orientation, or if you’re in downtown Charleston or the rural Tri-county area. Our services are meant for you. We’re making sure we’re being as inclusive as possible to increase access to care.”

The organization wants to send a message to law enforcement agencies, too. Tennale Jones, a therapist and health educator at the MUSC’s National Crime Victims’ Research and Treatment Center, serves as chair of Tri-County S.P.E.A.K.S.’ board of directors. “We hope to partner with law enforcement agencies to open the dialogue on trauma-informed interactions and investigation with someone who is reporting a sexual assault crime.”

Victims aren’t always believed, Jones said. Tri-County S.P.E.A.K.S. wants to change that by giving investigators a better understanding of what they’re going through. “They’ve been traumatized, so they may not recall a lot of details. And there’s still a lot of victim blaming like, ‘Well, you are doing this’ and ‘You were wearing that.’ The goal is with this new rebrand, we can step up and really educate the community in ways that historically People Against Rape probably has not been able to do because of the name.”

The organization already has strong ties to the Sexual Assault Nurse Examiner program at MUSC Health



Photo Illustration

Women between the ages of 18 and 34 are at especially high risk of sexual assault according to the Rape, Abuse and Incest National Network.

and will continue to work closely with the SANE team. “Their services are invaluable to our patients,” said nurse Janette Ward.

“While the coronavirus pandemic has altered how Tri-County S.P.E.A.K.S. operates, our program is looking forward to returning to normal and having advocates in the exam room. Without having advocates in the room, the patient does not fully understand their value.”

Advocates stay with victims through the medical exam. Jones said that’s important. “It can be very intimidating. You’ve already had a trauma, and you cannot necessarily hear the things that you need to hear. You’re all emotional and distraught, right? Rightfully so. The advocates help communicate what the next steps need to be in order for them to move forward in their healing and recovery.”

And that will continue to be the core of Tri-County S.P.E.A.K.S.’ mission, Jones said — helping victims navigate an extremely stressful experience. The organization stays with them through the legal process, offering to go to police interviews and court with the victims, and connecting them with support groups and follow-up services.

“We strive to empower survivors to take control of their own healing journey when they are ready,” Russell said.

Jones agreed. “I think the most important part is this — the people who’ve experienced that need to know they don’t have to be defined by that experience.”



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