

In gratitude...

Cancer survivor forms decades-long friendships with Hollings infusion nurses



Photo by Marquel Coaxum

A diagnosis of stage 3 anaplastic astrocytoma started decade-long friendships between Frank Gary and his infusion nurses.

BY JOSH BIRCH

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Nicole Meiklejohn, R.N., always keeps a special binder in her office. The MUSC Hollings Cancer Center infusion nurse calls it her “happy things” binder – it is full of pictures, letters and gifts patients have given to her over the years. Each of the keepsakes has a special place in her heart, reminding her of why she does what she does. But one patient comes to mind when asked about a

special bond that was formed in the infusion suite years ago – the friendship with Frank Gary.

“We get former patients that come back to visit us and thank us for all we did. But without fail, Mr. Gary has visited us at least once a year for the past 12 years,” Meiklejohn said. “That means a lot to me. I always look forward to seeing him.”

Helping people and making a positive impact has always been something Meiklejohn has wanted to do. She still

has a picture of her first Halloween costume when she was only 3 years old – that year, she went as a nurse. Ever since then, nursing has been her passion.

“I always wanted to be involved in oncology and help care for patients going through really difficult times. I think the patients we see in the infusion suite are some of the kindest, most grateful people you will ever meet,” she said. “It’s an honor to be with them and be able to share in both the good and bad

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What to know about COVID heading into the holidays

BY HELEN ADAMS

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Right now, we’re in a good position heading into the holidays when it comes to COVID case numbers. They dropped another 18% in the Charleston Tri-county area in last week’s update from MUSC’s COVID-19 Epidemiology Intelligence Project.

“We’re close to the same level we were this time last year,” said project leader Michael Sweat, Ph.D. “My advice for now would be to go enjoy your time with your family, especially if they’ve been vaccinated and you’ve been vaccinated. And you’re probably fine.”

His advice will change if the numbers start going up like they did last winter. “Around Thanksgiving through the Christmas period is when it really kind of blew up on us. Watch the growth rate. If it’s going up, be as careful as you can be, no matter what, because it’s not over.”

Cooler parts of the United States have already seen case numbers rise. What that means for South Carolina is unclear. “In the Southeast, the last winter wave hit later than it did in the rest of the country. It was clearly driven by the holidays and the colder weather, and it

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PA bikes 640 miles to
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Tackling injury prevention, MUSC seeks to reduce firearm injuries

By LESLIE CANTU

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Firearm injuries are not inevitable. Whether they come about unintentionally or by an assault or through an attempted suicide, firearm injuries are preventable.

That's the key message as MUSC Children's Health and MUSC Health recognize National Injury Prevention Day on Nov. 18. This year, MUSC is using the awareness day to focus on gunshot injuries because of the increase in cases in both the adult and children's hospitals in Charleston.

The number of adult gunshot patients treated by the MUSC Trauma Center hovered around 150 in 2017, 2018 and 2019 but jumped up to 194 in 2020 — and those figures don't include adults who were treated and released from the Emergency Department without being admitted.

Last year, the Pediatric Trauma Center at MUSC Shawn Jenkins Children's Hospital treated 19 gunshot wound patients. This year, with two months still to go, the hospital has treated 24 victims.

"The problem isn't going away. It's getting worse," said Christa Green, injury prevention coordinator for pediatric trauma with MUSC Children's Health.

As an institution with a mission to preserve and optimize human lives in South Carolina, MUSC is taking a multi-pronged approach to preventing firearm injuries, rather than simply waiting for people to show up in the Emergency Department.

"A gunshot is a symptom of a larger problem. And with health care systems taking a more population-based approach, this is a population health problem that we need to address," Green said.

To that end, physicians at MUSC Children's Health are working to incorporate firearm safety screening questions into exams, in addition to other health and safety screening questions. Care team members can provide patients and families with gun locks. The American Academy of Pediatrics advises that guns should be stored unloaded and locked and ammunition stored separately; simply hiding a gun or instructing a child not to touch it aren't effective methods of keeping children safe.

And in August, the MUSC College of Medicine Department of Surgery launched a hospital violence intervention program (HVIP) aimed at reducing the chances that gunshot patients will be revictimized and improving their outcomes and recovery after injury.



Photos by Sarah Pack
Pediatric Trauma Injury Prevention coordinator Christa Green, left, talks with intervention advocates Keith Smalls, center, and Donnie Singleton, about a patient at MUSC Shawn Jenkins Children's Hospital. They're part of the Turning the Tide Violence Intervention Program.

"Victims of violence are more likely to be revictimized and reinjured, and they're also more likely to perpetrate violence," Green explained. "If we simply patch them up and discharge them, we're sending them right back to the same environment and the same risk factors that got them shot in the first place. This is a strategy to break the cycle."

Called Turning the Tide Violence Intervention Program (TTVIP), the program is offered to patients between the ages of 12 and 30 who were intentionally shot by someone else. Program director Ronald Dickerson, Ph.D., and two client advocates, Donnie Singleton and Keith Smalls, are on call 24/7 to meet with patients and explain the program. It's modeled after other hospital-based violence intervention

programs that have successfully reduced the number of patients who are repeat victims of violence by providing wraparound services that address the root causes and risks of violence.

Though they can be seen at all hours in the halls of the adult and children's hospitals, it's when a patient is discharged that the advocates' work really begins. They work with patients on whatever each individual needs to be successful, whether that's finishing school, getting job training, getting housing in a different neighborhood or getting mental health treatment for the trauma of being shot or for preexisting trauma.

"So many of our victims of gun

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Singleton, left, and Smalls talks with nurse Madeline Gehrig, Pediatric Trauma Program manager about a patient.

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Cycling for a greater purpose

BY BRYCE DONOVAN

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What do a physician assistant, a living kidney donor and someone who bikes 640 miles in a week have in common?

The answer: They're all the same guy. And his name is Zachary Sutton.

That's right — as far as accumulated lifetime good deeds go, Sutton ranks right up there with the best of them. The PA of 13 years, who now works out of MUSC Health's transplant clinic in Greenville, tends to downplay his altruism. But when you donate a kidney just because "it's the right thing to do," it's hard to stay invisible for too long. Especially when you're the first altruistic living kidney donor in South Carolina.

Back in 2008, with just two exams until graduation from the Master of Science in Physician Assistant Studies program at MUSC, the then 8-year-old

Sutton was about to embark on a new professional career when he learned of an opportunity to do something special. There was a man who had been on dialysis for 15 years. For Michael Cheeks, time was running out. And Sutton, who became interested in organ donation as a kid when a classmate's brother was hit by a car and lapsed into a coma, knew this was his opportunity to put his money where his mouth was. Or, more accurately, his kidney where his heart was.

He told a reporter at the time, "I'm a normal person. I'm not a saint," but that's a tough sell when you give a part of your body to a complete stranger. Sadly, Cheeks died last year, but Sutton's gift gave him 12 extra years and a much improved quality of life. And though he took the passing hard — the two became friends and stayed in touch all of those years after — he decided it was time to



Photo Provided

Zachary Sutton, right, is joined by MUSC Health CEO Dr. Patrick Cawley and Chief Physician Executive Dr. Eugene Hong for a tour of the opening of MUSC Health's Transplant Clinic in Greenville.

kick his altruism into high gear once again.

Since donating his kidney those many years ago, Sutton set out to prove that being a living donor doesn't mean you have to slow down.

"Life goes on," he said. "The truth is as we age — even if we have two functioning kidneys — we change the way we do things. I'm no different."

He works out five days a week. He runs. Lifts weights. He cycles — a lot.

So when the 41-year-old learned that the Electric Cooperatives of South Carolina was sponsoring an event in which several CEOs of the state's electric cooperatives would be biking from location to location to promote awareness about heart disease, he knew he wanted in.

During the event, more than 2,000 electric cooperative employees visited all 21 of the state's electric cooperatives, while Healthy Me-Healthy SC, the joint program between MUSC and Clemson aimed at improving health care and lessening health disparities across the state, provided screenings at each location. Sutton's role? Well, he looked after the cyclists — from the seat of his own bicycle.

From Oct. 25 through Nov. 2, Sutton saddled up and cover 640 miles as the team zigzagged across the state,

beginning in the Upstate and ending in the Lowcountry. Sure, the big vehicles carried the bulk of his gear, while a motorcycle escort protected them from traffic. He carried a small first aid kit and an epi pen with him at all times.

"I've done a lot of century rides (100-mile races), but this might be a new record for me," he said.

Sutton knows the stakes are high in South Carolina.

"Heart disease kills 800,000 Americans each year," he explained. "And it has not been good to our cooperative family. We lost Brian Kelley, a 42-year-old CEO, two years ago to heart disease. And just this year, a 32-year-old Blue Ridge Electric Cooperative employee was lucky enough to get early intervention for a stroke that could have ended in tragedy."

It made the event's screenings that much more important. The HMHSC screenings included free physical exams, blood pressure screenings, stroke education, cardiovascular health education and the importance of pre-hospital care to all electric cooperative participants. Meanwhile, Sutton watched his riders for signs of dehydration, allergic reactions, saddle sores, sunburn.

Though it required a lot of mental and physical exertion on his part, Sutton was just thrilled to be a part of something promoting living a healthy life.

MUWC 2021 SCHOLARSHIP RECIPIENTS



Photo Provided

Eight MUSC students were named as recipients of the annual 2021 Medical University Womens Club scholarships. Pictured are front row from left: Erin Dougherty (Pharmacy), Dee Czarnik (Health Professions), Brooklin Trudell (Health Professions), and Colleen Kinslow (Nursing). Back row from left: Cortney Gensemer (Graduate Studies), Brande'a Hardie (Pharmacy), Austin Lewis (Medicine), and Bre Becker (Dental Medicine).

New immunology researcher probes T-cell biology for drug development

By CAROLINE WALLACE

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MUSC Hollings Cancer Center researcher Leonardo Ferreira, Ph.D., well-regarded for his pioneering work with regulatory T-cells, published a paper in *Frontiers in Immunology* that describes his experience using chimeric antigen receptor (CAR) regulatory T-cells to address the challenge of transplant tolerance.

Ferreira, who joined MUSC's Department of Immunology on July 1, is changing the rules of the game by exploiting the unique biology of regulatory T-cells, or Tregs. His overall research goal is to understand Treg biology more thoroughly in order to use the cells to treat a range of autoimmune problems.

"I became passionate about the immune system while getting my Ph.D. at Harvard. My mentor was Dr. Jack Strominger, who crystallized the structure of HLA proteins back in the 1980s. Understanding HLA is so important in immunology because it is one of the main "keys" of how our bodies recognize our own cells from foreign cells, or self versus non-self," explained Ferreira.

In his postdoctoral training at the University of California San Francisco (UCSF), Ferreira turned his focus to engineering the immune system of organ transplant recipients to reduce transplant rejection. "Right now, it is hard to find a match for patients who need organ transplants. This is because matching the HLA proteins is a major barrier. Humans have 18 different types of HLA proteins, which is why there is a huge organ donor database, yet so few patients matched with donors."

Ferreira thinks of the immune system as an army. The Tregs are the "generals," and the other immune cells are the "soldiers." The Tregs guide the other immune cells by suppressing them when they become over-activated, as in autoimmunity, and by letting them fully function when there is a threat, such as infections or cancer.

"The immune system is involved in every body function; it is not static. T-cells have 'X-ray' vision with blinders to see only the intracellular proteins in other cells that they are supposed to attack," said Ferreira.

For the past five years, he has been optimizing CARs to direct T-cells to certain targets. A CAR replaces a T-cell's normal surface receptor, the T-cell receptor, or TCR, which assigns the T-cell to a single surface HLA protein complex. Ferreira's research involves taking immune cells from people and studying them, with the goal of using Tregs as "living drugs."

Type 1 diabetes is a useful model for determining if the CAR Tregs are functioning therapeutically. The CAR Tregs are designed to go to the pancreas and put out the autoimmune fire. Insulin has been used as a

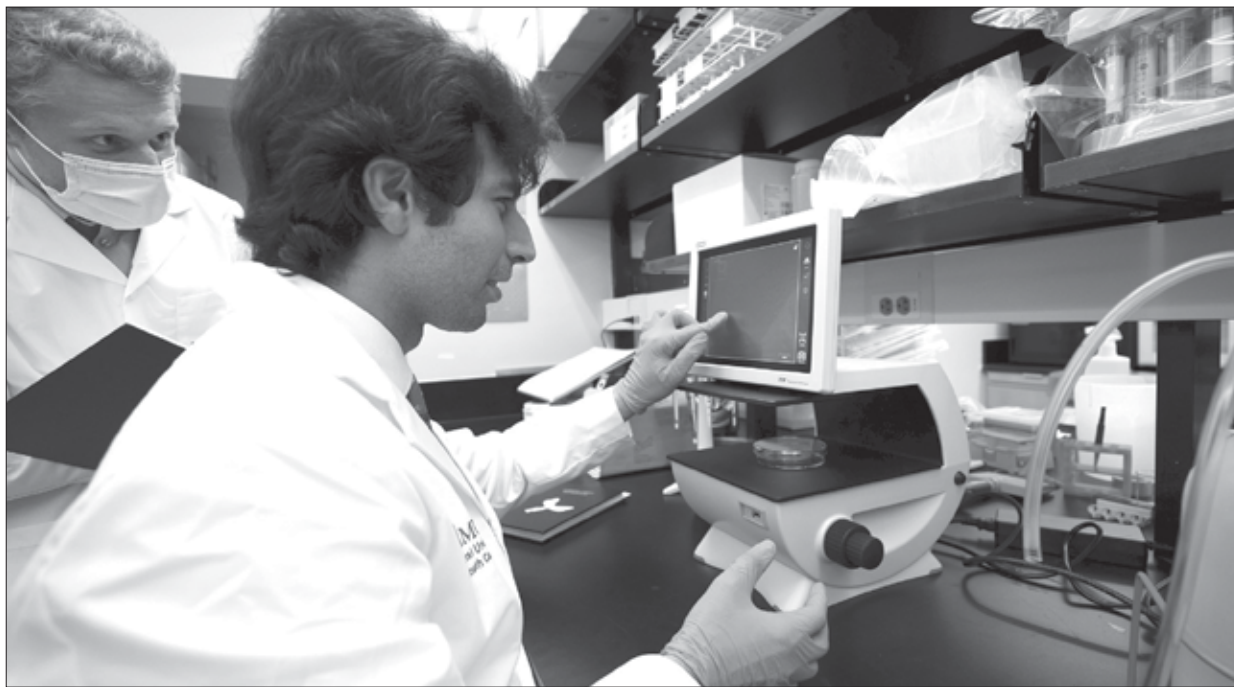


Photo by Marquel Coaxum

Dr. Leonardo Ferreira (right), shown with first-year Ph.D. student Lucas Bialousow, is working to optimize chimeric antigen receptors on T-cells to direct the T-cells to certain targets.

"The immune system is involved in every body function; it is not static. T-cells have 'X-ray' vision with blinders to see only the intracellular proteins in other cells that they are supposed to attack."

Leonardo Ferreira, Ph.D.

Type 1 diabetes treatment for 100 years as of this year, but it does not treat the source of the problem, he said. Immunology can get to the root of the problem by stopping the chronic inflammation that is causing the disease.

Ferreira said that the research, described in the *Frontiers in Immunology* article, is one of the first to precision engineer CAR Tregs using a gene-editing method called CRISPR-Cas9. This process is like using a scalpel to remove the original Treg TCR precisely and then insert the CAR in its place. This method is safer because it ensures that only one copy of the CAR is present and that the CAR is regulated in the same way as the original TCR.

Using a "humanized" mouse model of diabetes with human islet cells and human immune cells, Ferreira and his colleagues at UCSF found that the CAR Tregs could delay or reduce the damaging inflammation.

He said that the rich biology of the Tregs is just now being explored, and the use of CARs may provide artificial tolerance with specificity. Ferreira is now conducting studies in his lab at Hollings to optimize and understand the CAR Treg biology more fully.

There are translational challenges that must be overcome before CAR Tregs can become living drugs, such as cost and approval. One biological hurdle is that Tregs only make up approximately 1% to 2% of the white blood cells, so getting enough cells for therapies is a challenge.

Ferreira believes that it is important to have a mix of basic science and translational research projects ongoing, since the results inform both areas of research.

"I am excited about using the clean cell facility here at MUSC. I have a garage full of different CARs and am eager to study how they work. There is the potential that some of the CAR Tregs can be used in cancer, and Hollings is the perfect place to collaborate with cancer researchers," said Ferreira.

His vision for the immunology program at Hollings is to help the cancer center continue to expand its cellular therapies and be a part of making this therapy more accessible to patients. "There is a powerful interactive dynamic between the research faculty here. The smaller faculty size combined with the collaborative atmosphere, translational resources and cGMP clean cell facility make this an exciting time to be a part of this great research community at MUSC," he said.

MEET NICOLE



Nicole Young

Department; Years at MUSC MUHA onboarding team, Department of Human Resources; four months

How are you changing what's possible at MUSC

By making the employee onboarding process for new hires a great experience

Pets and their names

Two dogs, Koal, a black lab, and Shadow, a border collie mix

Music currently playing in your player

Country music by Morgan Wallen

Hobbies or interests

Horseback riding and exploring Charleston

Food that's a must have on my Thanksgiving table

Pumpkin pie!

Favorite fall sports team

New England Patriots

Favorite restaurant

Mex 1 and Oscars in Summerville

Favorite TV or cable series to binge watch

Grey's Anatomy

What I'm thankful for this Thanksgiving

Being able to travel back to New York to see family

Words of advice

"Live life to the fullest."

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*2-3 gifts/toys of your choice that are age appropriate.

*Consider using the Angels wish/need list items located on the Angel tag.

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*Use the provided clear bags for your donations.

*DO NOT wrap gifts for security measures.

*Separate bags should be used for each Angel adopted.

*Be sure to place the Angel tag with the Angels unique numeric code inside the bag provided, facing outwards.

*Items too large to fit into the provided bag (ex. bike) please label it with the unique Angel code found on the Angel tag.

*Return the Angel donations by the due date listed on the tag. Donations can be brought to the MUSC Lobbies (12/1-12/7), the MUSC Horseshoe Drive-thru (open on December 7th (10 AM - 1 PM)), or dropped off any time at the Salvation Army North Charleston, or N. Charleston Convention Center - Hall C (after Dec. 7th).

FOR ADDITIONAL INFORMATION CONTACT:
Melissa Kubu 843-985-1020 fullerme@musc.edu



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Researchers test practical applications of new CT technology developed by Siemens Healthineers

By LESLIE CANTU

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Computed tomography scanning – generally known as a CT scan or CAT scan – revolutionized medicine when it was introduced 50 years ago in October 1971. Suddenly, doctors could see images of organs and tissue inside the body in a way that just wasn't possible with conventional X-rays – and still isn't even today.

Over the years, as the technology improved, CT scans have enabled doctors to peer inside vital organs and vessels like the heart, brain and arteries.

Now, CT scanning is making another leap forward, and researchers at the Medical University of South Carolina have a hand in the process.

Siemens Healthineers will officially unveil its NAEOTOM Alpha photon-counting CT system during a virtual event on Nov. 18, but MUSC researchers and technicians have been working with the new device since July as part of a hallmark project in the MUSC-Siemens

strategic value partnership. MUSC has a decades-long relationship with Siemens Healthineers, which was further solidified in 2018 when the two entities announced a strategic partnership aimed at transforming the way that health care is delivered.

Until now, the photon-counting CT system has been used solely for research, but with the Food and Drug Administration's recent clearance of the new technology, it will soon be available for patient care as well.

"These are exciting times for MUSC. It's another first," said U. Joseph Schoepf, M.D., director of the Division of Cardiovascular Imaging and assistant dean for clinical research in the College of Medicine at MUSC.

This isn't simply an update to existing technology, according to Siemens Healthineers. It's a new way of detecting the photons that make up X-rays.

Traditional CT scanners use X-rays, but instead of scanning the body from one side, the scanner circles around the



Photos by Sarah Pack

MUSC CT supervisor Elyse Wertis, right, and CT tech Jaclyn Wilson get John Deasley hooked up to the new Siemens Healthineers Photon Counting CT Scanner at Ashley River Tower. Deasley was the first patient to use the machine.



S&S Rigging employees help to get the new Siemens Healthineers Photon Counting CT Scanner through a window that was removed on the side of Ashley River Tower in June. The machine was too big to be brought through any doors and too heavy for any of the elevators.



MUSC CT supervisor Elyse Wertis, from left, Siemens representative Pete Peoples, MUSC CT tech Jaclyn Wilson and Siemens product manager Matthew Fuld look at details of the scan coming through on the new Siemens Healthineers Photon Counting CT Scanner at Ashley River Tower.

patient's body, sending X-rays through as it moves. Computer algorithms assemble the results into images, allowing radiologists to see "slices" of the body, much like the slices of a loaf of bread.

However, the X-rays are registered and form an image only if they are of a certain strength and exceed a certain level.

The photon-counting CT uses a new kind of detector that enables it to register, or "count," every photon, resulting in an image that displays the full spectrum of photons, Schoepf said.

Jim O'Doherty, Ph.D., a research scientist and R&D collaborations manager with Siemens Healthineers who is stationed full time at MUSC, explained that each X-ray has its own energy.

"On the old scanner, we had no idea what the energy was. On this new photon-counting CT, we can now detect the energy of the X-rays, which means we can make better images at each specific energy," he said. Better images mean doctors and patients have better

See **TECHNOLOGY** on page 9

Little tree lighters get holidays off to cheerful start

BY HELEN ADAMS
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This was it. The big moment had finally arrived. The children were gathered in front of the Angel Tree outside the MUSC Shawn Jenkins Children's Hospital, ready to flip a switch and light it before a crowd of smiling faces. They were dressed in their holiday finest, a basket of candy canes beside them.

Chief Medical Officer Mark Scheurer, M.D., told the children he'd be counting from one to three, then they'd light the tree. But things didn't quite go as planned. "One," he started – and the kids turned on the lights.

The crowd laughed and applauded. Angel Tree season at MUSC was off to a cheerful start.

The Angel Tree program is run by the Salvation Army. It takes applications from parents who need help getting gifts

for their children. Then people "adopt" those angels and buy toys, clothing and other items for the parents to give their kids during the holidays. There will be tags with those children's first names and wish lists across campus for employees, students and anyone else who wants to take one. While MUSC is the largest source of donations in the Charleston area, other organizations take part as well, so you may see Angel tags in other locations.

This year's kickoff ceremony featured Charles Darby, M.D., and his family – including the little tree lighters. Darby is the former chair of the Department of Pediatrics who helped create the first MUSC Children's Hospital and played a key role in developing its replacement, the MUSC Shawn Jenkins Children's Hospital.

Melissa Kubu, leader of the Angel Tree effort at MUSC, said the family wasn't just there to celebrate. They were also



Photo by Sarah Pack

Young relatives of Dr. Charles Darby join Mike and Cathy Michels, captains with the Salvation Army, to light the Angel Tree at the MUSC Shawn Jenkins Children's Hospital.

honoring the memory of Darby's wife, Joyce.

"She passed away this year, and in memory of her, much of the family – children, grandchildren and great-

grandchildren – all came to light the tree. Ms. Darby used to come to the Children's Hospital and decorate

See **TREE** on page 10

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TECHNOLOGY *Continued from Page Six*

information to make critical decisions with.

Radiologists can see how tissue is composed, Schoepf said. And, because the scanner doesn't waste radiation on X-rays that can't be read, less radiation is required.

Schoepf and his group have been scanning patients in a study, comparing the images they get with the photon-counting CT to a regular CT, to test whether the theory behind the photon-counting CT holds up in a real-world setting. So far, they've scanned about 70 patients, out of a goal of 130 patients.

Tilman Emrich, M.D., director of photon counting CT research at MUSC, said they've been able to demonstrate the theoretical advantages, including sharper images, less radiation used on the patient and an improvement upon some of the limitations of existing CT scanners.

One of those drawbacks – Schoepf called it the Achilles' heel of CT – is imaging of coronary artery calcium.

"Calcium looks much larger in a CT image than it is in real life," he said.

That means CT images are more likely to indicate a stenosis, or narrowing of the artery. Whenever the CT scan indicates a possible stenosis, the patient is sent to the cath lab for additional tests, which requires a tube inserted in the groin, the use of contrast media and more radiation – not to mention additional anxiety and expense for the patient.

"The better spatial resolution allows us to better read through that calcium, which means we send fewer patients to the cath lab unnecessarily," Schoepf said.

The reverse is true as well – the photon-counting CT can pick up irregularities that a regular CT could not. Because Schoepf's group was using the photon-counting CT as part of the trial, they did not provide less than the existing standard of care for any trial volunteer. They could, however, provide additional care – for example, in one patient in which the photon-counting CT showed a myocardial perfusion defect that wasn't visible on the traditional CT. The patient was given a referral for additional MRI tests.

As part of the study, information flows back and forth between Siemens

Healthineers and MUSC to continually improve the scanner. Anonymized data from MUSC allows the engineering team to improve the reconstruction algorithm.

"We want them to be able, if they're post-processing scans, to make sure that they're happy with the results," O'Doherty said. "We want to be sure that what the software is doing is actually scientifically correct – but also medically correct. So a lot of it is to-and-fro between our developers in Germany and the clinical team here; that's essentially my link."

The MUSC team is excited by what they've seen so far.

"We are impressed by the image quality and sharpness that we see, but we know it will go a step further," Emrich said.

The expectation is that this scanner can improve imaging of the heart, which Akos Varga-Szemes, M.D., Ph.D., director of cardiovascular imaging research at MUSC, described as the most difficult organ to image because it is always moving. It takes more time to generate data as resolution is increased, he said, making ultra-high resolution scans of the heart a technical challenge.


Emrich explained further.

"If you want to image a hand, you can say, 'Don't move your hand.' If you want to image the lung, you can say, 'Don't move and stop your breathing for a second' and then we rush over it. But for the heart, it's constantly moving," he said.

Schoepf said the researchers are also investigating whether the traditional two-scan protocol can be consolidated into a single scan, further reducing radiation exposure. Heart CT scans usually involve one scan to capture calcification and a second scan with contrast dye injected to highlight blood vessels; the photon-counting CT could potentially capture all of this information during a single scan.

While the MUSC team is focusing on cardiac imaging, Siemens Healthineers is working with other institutions around the world that are focused on brain, chest and cancer scanning. Schoepf expects the scanner to improve images for a variety of conditions, such as interstitial lung disease; procedures, like tumor imaging before and after cancer treatment; and areas of the body, including the inner ear.

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- *Separate bags should be used for each Angel adopted.
- *Be sure to place the Angels wish/need list items located on the Angel tag provided, facing outwards.
- *Items too large to fit into the provided bag (ex. bike) please label it with the unique Angel code found on the Angel tag.
- *Return the Angel donations by the due date listed on the tag. Donations can be brought to the MUSC Lobbies (12/1-12/7), the MUSC Horseshoe Drive-thru (open Monday December 7th (10 AM - 1 PM), or dropped off any time at the Salvation Army North Charleston, or N. Charleston Convention Center - Hall C (after Dec. 7th).

FOR ADDITIONAL INFORMATION CONTACT:
Melissa Kubu 843-985-1020 fullerme@musc.edu



Changing What's Possible

MUSC OFFICE OF HEALTH PROMOTION

The MUSC Office of Health Promotion strives to encourage and support a healthy lifestyle for our employees by making the healthy choice the easy choice.

We integrate activities into our daily work, allocate resources toward healthy initiatives, and re-work policies with the intention of enhancing the health and well-being of the MUSC community from the inside out. By developing programs geared towards the health of our employees, we are helping to change what's possible within our community.



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TREE *Continued from Page Seven*

the atrium. She would pay for all the decorations and would bring her children to help decorate, to help them understand the importance of doing that for the families and the children who are staying here during the holidays.”

That spirit of giving moves others, each year, to buy presents for children they'll never meet. David Zaas, M.D., chief executive officer for MUSC Health's Charleston Division and chief clinical officer for MUSC Health, said the partnership with the Salvation Army started in 2003.

“It's based on the foundation of our values. This event represents the compassion that we know our team members show and that Salvation Army in our community does. It couldn't be more important,” Zaas said. “Over 20,000 children have been impacted.”

Mike and Cathy Michels, captains with the Salvation Army, were on hand for the tree lighting, too. “Thank you for the ongoing partnership with MUSC for adopting almost over half of our children this year so far,” Mike Michels said. “We want to remind you that hope marches

MUSC Angel Tree gift returns

Angel donations can be dropped off at the MUSC Horseshoe drive-through event, 10 a.m. to 1 p.m., Tuesday, Dec. 7 or dropped off at the Salvation Army. Contact 843-985-1020 or fullerme@musc.edu.

on. There's still a pandemic. There are still health impacts. There are still economic effects. But that doesn't mean that we, as a community, can't reach out and help each other. Thank you for leading the charge in that.”

Kubu encouraged people to take part in the program. The day to deliver Angel gifts at MUSC is Dec. 7, from 10 a.m. to 1 p.m., in the Horseshoe. “We are doing the drive-through drop-off again this year, encouraging people to decorate their cars, decorate themselves and come in their best holiday attire. This is in lieu of the parade because we just felt like with COVID, we don't want to encourage large gatherings. And we're just trying to be respectful that we are still in a pandemic.”

Kubu is looking for volunteers to help once all of those gifts have been dropped off. “On Dec. 7, we will take all of our



Photo by Sarah Pack

Mike and Cathy Michels, captains with the Salvation Army, thank MUSC for its leading role in the Angel Tree program as Drs. David Zaas and Mark Scheurer listen.

gifts up to the Convention Center. Distribution days to the families are Dec. 15 and 16. So up until that time, we have to go through every single bag to make sure the gifts are appropriate. That there are enough gifts that every single child receives a gift, even if the Angel wasn't taken. We will make sure they receive gifts.”

She's also looking for people to

assemble donated bikes and get the gifts into families' cars on pickup day. “We want to give back to our community. It's not something that's expected, it's just something that's done. It brings everyone together,” Kubu said. “MUSC is so big, and yet somehow, we all come together to do it for the greater good of our community.”

Email fullerme@musc.edu for info.

PREVENTION *Continued from Page Two*

violence have had a lot of trauma in their lives,” said trauma surgeon Ashley Hink, M.D., who spearheaded the creation of Turning the Tide and now serves as medical director.

As the program has gotten off the ground in these first few months, part of the process has been educating other staff members about how HVIPs work and about trauma-informed care.

Arriving at the Emergency Department via ambulance can be traumatic for any patient: You're strapped to a gurney, often in pain, with strangers looking at you while taking off your clothes and yelling orders you don't necessarily understand. For victims of violence, the trauma of being hurt by someone and, sometimes, the presence of police or detectives can add another layer of stress, Hink said. Perceived bias can also play a role in increasing the trauma, and victims sometimes feel like they are blamed or treated like they did something wrong.

Hink said this is why it is so important for all staff that work in healthcare settings to understand and practice trauma-informed care, which considers the totality of a patient's experiences and seeks to provide aid in a collaborative manner so that the patient feels

empowered rather than retraumatized.

Part of being thoughtful about providing care is having the client advocates come from the community they serve. Both Singleton and Smalls have been active in violence prevention since long before they were hired by MUSC – Smalls since his 17-year-old son was shot and killed in 2016.

Not every gunshot patient is ready to accept help and make changes, program leaders said. So far about 40% to 50% of those offered the program have signed up. The Health Alliance for Violence Intervention, which is providing guidance to MUSC's program, said that's typical for new programs, Green said.

But those who do sign up for the program do so with “arms wide open,” Hink said. She will be assessing program outcomes quantitatively, but at least anecdotally so far, the program is seeing success. Patients have taken steps forward in areas like getting a driver's license, safer housing, mental health treatment and jobs.

“Six months ago, we didn't have anyone doing this with these patients,” Hink said.

“We've had some patients say, ‘You made me feel like a human being,’” she added.

The advocates believe that is what the program is all about.



For all routine maintenance requests, such as lights out, temperature control, plumbing issues, painting, recycling, etc., please go to the Facilities customer request portal at fixit.musc.edu.

Call 843-792-5600 or 843-792-4119 in case of a facility related emergency.



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FRIENDS *Continued from Page One*

moments.”

The bond formed between Meiklejohn and Gary is renewed twice a year when he makes the eight-hour round trip to Hollings for follow-up MRIs from his home in Statesboro, Georgia. The Citadel graduate and civil engineer doesn't mind the drive – to him, Hollings feels like home.

“Every time I go back, it reminds me just how important the nurses and doctors at Hollings Cancer Center have been in assisting me to live my life with purpose today,” Gary said.

In 2009, Gary was diagnosed with stage 3 anaplastic astrocytoma, a rare form of brain cancer. He had a craniotomy and one year of oral chemotherapy at Duke Cancer Center before transferring his care to Hollings

**Meiklejohn**

Cancer Center for radiation, infusion chemotherapy and immunotherapy. This past summer, he celebrated 12 years without any further growth of a tumor or cancer.

“After the treatment was over, I went through PTSD and found some relief by going to counseling,” he said. “Eventually, I learned how to deal with everything through faith and relationships in my life. That was one of the wonderful things about the infusion nurses at Hollings. Every time I went there the nurses would greet me with a smile and wanted to know how I have been since my last visit. It was obvious that they care about each and every patient.”

To this day, Gary still describes the nurses in Hollings' infusion suite as members of his family.

“They mean the world to me. They have huge hearts. I really knew I

**Heath**

was in great hands because of how they treated me with unconditional love.”

These unique bonds formed during difficult treatments in the infusion suite at Hollings are meaningful to patients and nurses alike. Hollings infusion nurse Dorothy Heath, R.N., specifically chose to be an oncology nurse because of the patients.

“We see people at some of their lowest moments who may be scared about what they are going through,” Heath said. “Being able to be there for these patients and guide them through it is a big driving factor in why I do what I do.”

Unlike Meiklejohn, Heath didn't always know she wanted to be a nurse. However, ever since joining the infusion team at Hollings earlier this year, Heath said co-workers and patients have become like family. She said the moments she shares with patients stick with her.

“I think about our patients who get to ring the bell at the end of their treatment,” she said. “That moment never gets old. We all get excited, and other patients in the suite also celebrate. It can definitely be emotional but being able to celebrate with a patient is what it is all about.”

Gary calls the infusion nurses he had unsung heroes. He said going back to visit them is the least he can do for all they did for him during his cancer journey. Again, this Thanksgiving, he knows that he has a lot to be thankful for – his life, health and these friendships.

“I don't know how I would have gotten through my treatment emotionally and spiritually without my nurses and doctors,” Gary said. “They always reminded me not to lose hope and faith. They don't always get the recognition they deserve, but I'll never forget what they have given to me.”

Holiday Basket Drive benefits MUSC STAR Children's Day Treatment Program

A holiday basket food drive is being held to support families of children participating in the MUSC STAR Children's Day Treatment Program. Grocery items and produce are being collected. Drop off food items by Monday, Nov. 22. Contact Noni Langford, 843-323-5451 or email langford@musc.edu.

HOLIDAYS *Continued from Page One*

really took off massively around Jan. 1. Our summer wave also came later, so we need to be vigilant.”

But we're in a different position this year thanks to vaccinations, people who have some immunity because they've had COVID and new treatments. More than 55% of South Carolinians 12 and older are fully vaccinated, and kids as young as 5 are now eligible to get their shots. An estimated 29% of people in the Tri-county area had COVID infections within the past seven months, which Sweat said should give them some protection against reinfection.

And new medications to fight COVID are in the pipeline. “More therapeutics are really likely to be a massive game changer, but we've got to engineer ourselves to take advantage of them,” Sweat said.

That means quickly connecting people who test

**Sweat**

positive for COVID with treatment to keep the virus from making them really sick and infecting others. “Maybe in the months ahead when we get these antivirals online and that system is in place, I think we're going to go way closer to normal.”

For now, we're still in a pandemic – but one that we're getting better at dealing with. “We're in a different space than we were before. And we know a lot more about it,” Sweat said.

Submissions for MUSC's Humanitas accepted until Dec. 1

There's still time to submit your creative works for MUSC's 26th issue of the literary journal *Humanitas*. Anyone with an MUSC badge may submit original works of art, poetry, photography, music and prose. All entries will be considered for inclusion. Submissions will be accepted until 11:59 p.m., Wednesday, Dec. 1.

For general information or details on submissions, visit <https://education.musc.edu/students/cae-and-writing/office-of-humanities/humanitas>.

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The new and improved MUSC Brand Boutique is the one-stop shop for everything MUSC branded. This easy-to-use online store is opened to all MUSC students, staff and the public for personal or gift orders and offers a wide variety of merchandise and apparel with the MUSC, MUSC Health, MUSC Children's Health and MUSC Shawn Jenkins Hospital brands. You can select items for yourself, family, friends or teammates. Faculty, students and staff can also purchase branded white coats and scrubs.

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