

COVID cases drop 25 percent in Tri-county, is another winter surge ahead?

BY HELEN ADAMS

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The number of new infections in the Tri-county area dropped another 24% in the most recent update from MUSC's COVID-19 Epidemiology Intelligence Project. There were 2,561 new cases in Berkeley, Charleston and Dorchester counties combined compared with 3,543 the week before.

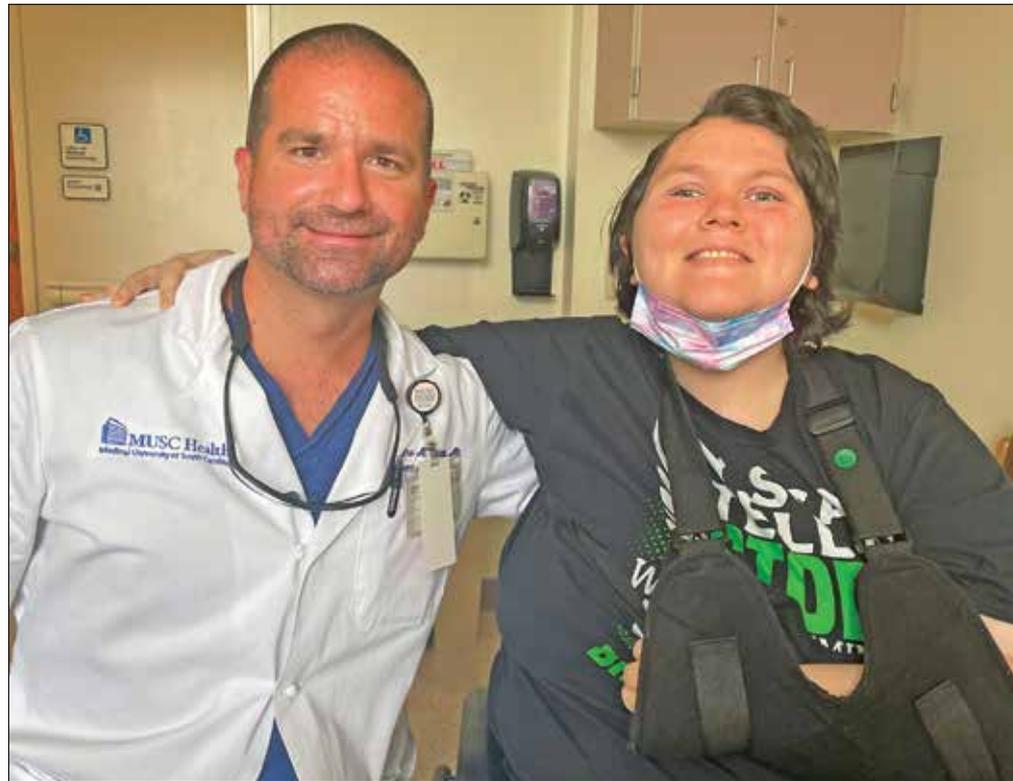
"Numbers are coming down, but don't get too excited because it's still pretty high," said project leader Michael Sweat, Ph.D. "It's not time to put your mask away. We're at a fairly high level. It may stabilize and not go all the way back down."

He described the decline as "flattening," meaning case numbers aren't plunging like they were a few weeks ago. "I think you still have to keep your eye on what's going to happen because it really could go back up again."

That's what happened this summer. In June, the Tri-county area got down to almost no new cases per day. Then Delta showed up, leading to the biggest peak in infections of the pandemic.

But why would there be another surge if more people are getting vaccinated, and many have had COVID? Sweat's own team estimates 74% of the population in the Tri-county area has some immunity to COVID,

See **SURGE** on page 14



MUSC Health neurosurgeon Alejandro Spiotta, left, said it's a joy to see how far Haleigh Rae Startin has come since he first encountered her during emergency surgery.

Photo Provided

MUSC neurosurgeons save mother, unborn child after domestic violence shooting

BY KAT HENDRIX

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For Haleigh Rae Startin, the first serious red flag went up in November 2019, shortly after she found out she was pregnant. "It was the first time he'd really assaulted me. I was a manager at Firehouse Subs, and I was on my way to work. He basically kidnapped me and threw my phone out the window," said Startin. "Then he blacked both my eyes and busted my lip. When he drove off, I went to a gas station and called 911."

The police took her statement and issued a warrant for her boyfriend for first-degree domestic violence. seemed to settle down after that. They spent Christmas with his

family in North Carolina and had a gender-reveal party where friends popped a balloon filled with light-blue confetti. They were excited to welcome a son into the world. Still, the arguments continued to simmer.

In January 2020, four months into her pregnancy, Startin decided that she'd had enough. "It was two months since he beat me up, and I thought it was a safe time to tell him that I was done," she said. "I took the ring off my finger and said I didn't want it anymore, and he got furious."

As they drove through a rural area near Green Sea, South Carolina, he pulled out a gun and shot her in the head, stopping to push her out of the car and leaving her and their unborn child

See **DOMESTIC** on page 6

3

Expert weighs in
Expert wants parents to
know about COVID vaccine.

9

Clinical Trial
Breast cancer survivor
has new lease on life.

2
5
7

Around Campus
Meet Sammy Huynh
Nurse's heroism applauded

AROUND CAMPUS

Marc-Andre Cornier



Marc-Andre Cornier, M.D. has been named as new director of MUSC's Division of Endocrinology, Diabetes and Metabolic Diseases, Department of Medicine, effective Nov. 1.

Cornier comes to MUSC from the University of Colorado where he is professor of medicine and associate division head, Division of Endocrinology, Metabolism and Diabetes. An active clinical and translational investigator, Cornier's research interests focuses on obesity, food intake, regulation, neuroimaging and insulin action. He has published more than 60 papers in scientific journals and has been continuously funded by the NIH for the past 20 years. A graduate of the Medical College of Georgia, Cornier completed his medical internship and residency at Georgetown University Medical Center and fellowship at the University of Colorado Health Sciences Center.

Robert Labadie

Robert Labadie, M.D., Ph.D., has been named chair of MUSC's Department of Otolaryngology-Head and Neck



Surgery. Originally from Pittsburgh, Pennsylvania, Labadie comes to MUSC as professor and vice chair/chief research officer at Vanderbilt University Department of Otolaryngology-Head

and Neck Surgery with a secondary appointment in the Department of Biomedical Engineering. He received his mechanical engineering degree from The University of Notre Dame and his M.D./Ph.D. in bioengineering from the University of Pittsburgh. He completed his residency training in otolaryngology at the University of North Carolina at Chapel Hill. Recognized as a leader in the field of otology, Labadie has authored more than 200 peer-reviewed papers, book chapters and patents.

Daniel T. Lackland



Daniel Lackland, Dr.PH., professor of Epidemiology and Prevention, Department of Public Health Sciences and director of MUSC Stroke Research and Education Center, College of Medicine, has been

selected as the 2021 the American Heart

Association's Council on Epidemiology and Prevention (EPI) Distinguished Achievement Awardee.

Lackland's research focuses on population risk assessment of cardiovascular disease, stroke and hypertension. He is principal investigator for the NIH-funded Black Pooling Project assessing disparities in cardiovascular disease and hypertension.

Besim Ogretmen



Besim Ogretmen, Ph.D., professor, Department of Biochemistry and Molecular Biology and Endowed Chair in Lipidomics and Drug Discovery and director of the Lipidomics Shared Resource at the

MUSC Hollings Cancer Center, has been named associate dean for research in the College of Medicine as of Sept. 1. An expert in lipid signaling, Ogretmen joined MUSC in 1999 and has been a successful and productive member of MUSC's research team for almost 25 years. He will work with Anand Mehta, D.Phil., senior associate dean of research to help implement the college's research mission.

Anita Ramsetty



Anita Ramsetty, M.D., associate professor, Department of Family Medicine, has been named associate dean for community engagement, College of Medicine. Ramsetty currently

serves as the medical director and faculty advisor for the CARES student-run free clinic and director of the Student Service Learning for the College of Medicine. In her new role, she will lead the College of Medicine's strategic efforts to expand civic engagement, service-learning, community service and community-engaged scholarship for students within the college. She will also collaborate with departments and institutional leaders to extend the reach of the medical school with organizations and communities.

Gabrielle Redding

Gabrielle S. Redding has been named assistant dean for student affairs and career advising in the College of Medicine. Redding, who has extensive career advising and academic advising experience, will expand on existing programs and implement new programs for career advising and mentoring of medical students through residency application and the match process.

MUSC CATALYST news

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Editor's note: The MUSC Catalyst News is back on campus. The Office of Public Affairs and Media Relations staff has consulted with MUSC Infectious Disease and Safety and Quality experts and industry studies to confirm that paper products such as newsprint are safe and low-risk in surface-based transmission of the coronavirus.

Copies of the newspaper will be distributed bimonthly to racks around

campus, as well as via the MUSC Mailroom's zoned mailbox system on campus and at various MUSC satellite medical offices and clinics in the Tri-county, and will begin distribution in MUSC's regional hospitals, Upstate.

For information about delivery or advertising in The Catalyst News, contact Cindy Abole, print editor, at catalyst@musc.edu or 792-4107. Remember to recycle!

What an expert wants parents to know about COVID vaccine for younger kids

By HELEN ADAMS

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Some quarantine-weary parents can't wait for the day when children 11 and younger become eligible for a COVID-19 vaccine. Could that happen as soon as Halloween for kids age 5 to 11, as some reports have suggested?

"Hopefully," said Elizabeth Mack, M.D. She's a pediatric critical care doctor at MUSC Children's Health and a spokeswoman for the American Academy of Pediatrics. "But this is the end of September, and there are a lot of steps to come."

On Sept. 20, Pfizer and BioNTech, which worked together to develop what's known as the Pfizer vaccine, announced the vaccine showed "a favorable safety profile and robust neutralizing antibody responses" in 5- to

11-year-olds.

"These trial results provide a strong foundation for seeking authorization of our vaccine for children 5 to 11 years old, and we plan to submit them to the FDA and other regulators with urgency," said Pfizer CEO Albert Bourla.

But Mack said that doesn't mean authorization is a done deal. "That was a press release from Pfizer. There has been no Food and Drug Administration emergency use authorization or a review of the data — we haven't seen the data. So, it is really exciting, but it was a very preliminary step. It was not an approval. It was not an EUA. It was not a sharing of the data."

The press release stated that the research involved 2,268 children from 5 to 11 years old. They got 1/3 of the dose you'd find in the adult vaccine and got two shots, 21 days



Photos by Sarah Pack

Nurse Karen Hawkins prepares a shot in a clinical trial testing the Moderna vaccine in children. Moderna has not been cleared for anyone under 18 yet.



Dr. Elizabeth Mack

apart. The release said the children's antibody responses were similar to those in an earlier study of 16- to 25-year-olds who got adult doses.

The news comes as the number of COVID cases in children rose to more than a quarter of all cases for the most recent week tracked by the American Academy of Pediatrics. The South Carolina Children's Hospital Collaborative reported on Sept. 22 that there were 34 kids hospitalized with COVID-19 statewide. All were unvaccinated.

But just because someone is eligible to get vaccinated doesn't mean they will. "We are still sitting at 25% fully vaccinated of our 12-

to 19-year-olds in South Carolina. So even the older kids have been a challenge," Mack said.

Right now, Pfizer is the only vaccine available to kids 12 and up, but Moderna has been testing its vaccine in children as well. The MUSC Children's Health R. Keith Summey Medical Pavilion in North Charleston is one of the sites involved in the Moderna trial.

Mack said it all adds up. "Vaccination in large numbers is our strategy for our exit from the pandemic."

She hopes younger kids can get vaccinated soon. "Many parents are more than ready, assuming the data look good."



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What is the Role of Science in Eliminating Health Inequities?

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Scientific Retreats or email Sydney Bollinger
sctr@musc.edu

Hollings' online support group aims to connect, help breast cancer patients

BY JOSH BIRCH

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Providers and specialists at MUSC Hollings Cancer Center know there is much more to patient care than treating the cancer itself. They see the mental and emotional toll a cancer diagnosis can take, which is why Hollings is introducing a new online support group for breast cancer patients and survivors.

"It is certainly an unmet need to connect these patients with others who can relate to what they're going through," said Jennifer Wood, R.N., a nurse navigator at Hollings and one of the organizers of the group. "With the pandemic ongoing, feelings of isolation have only grown in some cancer patients who can't see loved ones for fear of contracting COVID-19 with a weakened immune system."

The online support group officially launched in September and will take place the third Wednesday of every month. The virtual meetings provide a resource for patients at any stage of treatment to connect with others, no matter where they live.

Stacey Maurer, Ph.D., assistant professor in the MUSC College of Medicine, will help to lead the meetings. "As the only NCI-designated cancer center in South Carolina, we know that some patients have to drive several hours for care because we do serve the entire state," she said. "Being able to reach breast cancer patients with this online support group is a huge benefit."

The group will discuss topics like how to communicate your diagnosis with family and friends, anxiety surrounding a cancer recurrence and coping with a cancer diagnosis. Maurer said that organizers want to keep topics broad to encourage more participation.

"We don't want this support group to feel like a class. We want the patient-to-patient connection and support to take center stage. That is what this is all about – providing resources and connecting these patients with one another."

Maurer said patients reporting feelings of loneliness, anxiety and depression has increased during the COVID-19 pandemic.

She said between 25% and 50% of breast cancer patients report having significant depression, anxiety and difficulty coping with the diagnosis.

Isolation and depression are growing problems, as there are more breast cancer survivors today than ever before, thanks to advancements in treatment. It's one reason why Hollings' breast cancer specialist Andrea Abbott, M.D., is also involved in the project. Abbott said there are now more than 3 million breast cancer survivors in the U.S., and for many, the most challenging time comes after treatment has ended.

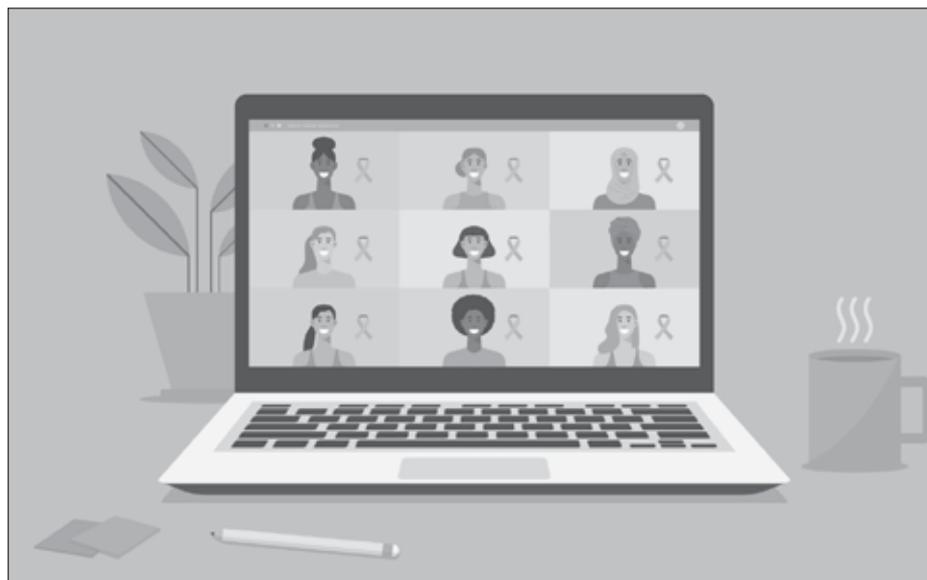
"We've poured so much effort into prevention and detection to catch these cancers early, but we also have to think about how we can support patients after the treatment is over," Abbott said. "It is a scary time to transition from seeing doctors all of the time to then trying to live a normal life as a cancer survivor. Some women feel abandoned during that transition, and we don't want that."

The breast cancer support group not only provides a connection to other patients but also gives patients an opportunity to brainstorm with health professionals about ways to manage the many challenges a cancer diagnosis can bring to help future patients.

One of the goals of the online support group is to show its feasibility – ideally to replicate it for other cancer types as well. In 2020, around 32,000 South Carolinians were diagnosed with cancer, with 33% reporting high levels of depression or anxiety. Seventy-five percent of those patients felt they had unmet needs – needs that Abbott hopes online support groups at Hollings can meet.

"These are real issues that many cancer survivors face on a daily basis," Abbott said. "If we can help current patients and survivors, while at the same time gaining valuable insight of how we as health professionals can better support cancer patients, then this support group is truly a win for everyone."

To register for online support groups visit <https://hollingscancercenter.musc.edu/patient-care/patient-resources/support-groups>.



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The MUSC Hollings Cancer Center breast cancer support group meetings provide a resource for patients at any stage of treatment to connect with others.



Photo by Marquel Coaxum

Dr. Stacey Maurer, assistant professor in the MUSC College of Medicine, will help to lead the breast cancer support group meetings.

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Sammy Huynh

College and Program/Year at MUSC
College of Dental Medicine; D3

How are you changing what's possible at MUSC

MUSC has opened many doors for me to serve my community and take part in national leadership representing our CDM. I look forward to my future as a clinician and am confident in my training to treat patients the best that I can.

Hometown *Aiken, S.C.*

Family and Pets

Mom and dad; Harley, sister; and two dogs, Rocky and Ginger

What inspired you to study at MUSC

I grew up in S.C., love Charleston and want to serve this community.

Favorite sports team *Go Gamecocks!*

Hobby or activity you enjoy *I love working out at the gym and playing guitar.*

Words of advice *Plan the work and work the plan.*

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DOMESTIC *Continued from Page One*

for dead in the middle of the road. “A sweet older woman named Carolyn found her. It’s a miracle she came by because it’s not a highly traveled road. She thought Haleigh had been hit by a car,” said Sue, Haleigh’s mom.

Startin was airlifted to MUSC Health where Alejandro Spiotta, M.D., led the team of neurosurgeons and critical care specialists who worked to save her life. “Based on the gunshot injury alone, a lot of hospitals would have given up on her because her chance of making a meaningful recovery was so low,” Spiotta said. “The CAT scan showed a very deep bullet trajectory that stopped just one centimeter from the center of her brain. If it had gone any further, she’d have been in a coma.”

They rushed her into emergency surgery. “Her odds weren’t good, but it wasn’t impossible. We just saw this young pregnant woman who deserved every chance we could possibly give her,” Spiotta said. “The first thing was to reduce her brain swelling and prevent more damage. We removed a large piece of her skull and parts of her brain that were damaged, but we had to leave multiple bullet fragments because it was too risky to get them out,” he explained.

Fortunately, the swelling did abate and Startin survived. Over the next several months, she underwent two more brain surgeries and multiple complications, including an aneurysm, seizures, preeclampsia and a pulmonary embolism. It has now been a year and a half since the rainy day in January that could have been her last, and she is back home raising her son.

“He made it full term,” she said proudly. “Born at the MUSC Shawn Jenkins Children’s Hospital – a healthy baby boy at 9 pounds and 19 inches long. We worried about all the medications I was on and everything I went through while I was pregnant, but he’s doing great.” Although she still uses a wheelchair, she is determined to regain independent mobility. “I’m working hard at my therapy and doing everything I can to get better, because I won’t let him win. My goal is to get out of this chair and walk again on my own,” she said.

For Spiotta, it’s a joy to see how far she has come. “Considering her injury, she’s made remarkable progress. She still has challenges with left-side weakness and occasional seizures, but I believe she’ll regain her ability to walk with aid. Her syncing is spot on, and she’s young,” Spiotta said. “It’s so rewarding to see her in the clinic; her mom is always by

her side, and her son is thriving.”

He credits Startin’s positive outcome to MUSC Health’s multidisciplinary team approach, which brings multiple areas of expertise together to manage difficult cases. Specialists in trauma, critical care, neuroendovascular surgery, neurology, intensive care, neurology nursing, physical therapy and occupational therapy all collaborated to bring Startin through her ordeal. Spiotta also credits a unique MUSC culture. “Other hospitals call us when they have a scary case. Dozens of feeder hospitals send us their most challenging patients, and we’re very aware that we are often these patients’ last hope. Knowing that makes us push ourselves to do everything we can for them. It’s our culture not to give up on anyone.”

MUSC Health also has specialists who deal exclusively with cases of intimate partner violence. The MUSC Advocacy Program (MAP) features a social work response team available 24 hours a day, seven days a week to respond to calls from any staff member who suspects a patient has been the victim of domestic violence, child abuse or neglect, elder abuse or neglect or human trafficking. Licensed master social worker Abby Steere-Williams is the Map Social Work coordinator.

“We’re a round-the-clock social work response team for any MUSC inpatient or outpatient. We do a safety and danger assessment with them and provide resources for whatever they need – shelter, counseling, medical care, food, clothes – whether they’re ready to leave the situation they’re in or not,” explained Steere-Williams. “We follow up after discharge to make sure they know they’re not alone, and that support is available in their local community to help them.”

Steere-Williams emphasizes that self-determination is one of the program’s core values, and they do not pressure victims to leave before they’re ready.

“When a provider is concerned that something is going on, we meet with the patient one-on-one and talk about the prevalence of intimate partner violence,” Steere-Williams said. “We educate them about domestic violence and the help that’s available. We let them know that this type of violence affects one in four women, so it’s very common, and if they or anyone they know is in this situation, they can call us when they’re ready.”

The MAP team works closely with MUSC Health’s forensic nurse specialists like Karen Hughes, R.N., who is a certified sexual assault nurse examiner. “We see them at the same



Photo by Montez Seabrook

Lt. Layne Thompson with Public Safety helps social worker Abby Steere-Williams put out pinwheels on the Charleston Medical District Greenway.

No one deserves to be hurt by their partner. If you need help, resources are available.

- ❑ MUSC Advocacy Program: 843-792-2123
- ❑ MUSC Women’s Health has ❑ My Sisters House: 843-744-3242
- ❑ SC Legal Services: 888-346-5592
- ❑ Charleston Area Consolidated Dispatch (Non-Emergency): 843-743-7200
- ❑ MUSC National Crime Victim Center (NCVC): 843-792-8209
- ❑ National Domestic Violence Hotline: 1-800-799-7233

time as MAP so the person doesn’t have to retell their story, which is traumatizing,” Hughes said. “Our job as nurses is to examine them from head to toe and ask questions about their medical history. We do a body map where we measure, describe and document their injuries with photographs so they have those if they need them later in a legal case.”

While many victims do not initiate legal action for quite some time after an assault, they know that there is forensic documentation in their MUSC medical file should they ever need it. In cases of severe injuries, like those suffered by Startin, the police can step in and start criminal proceedings based on the medical record alone.

Hughes and Steere-Williams work with both male and female victims of intimate

partner violence and said most victims return to their abusers after discharge. Their goal is to ensure that victims know how they can reach out and where to go for help and understand the level of danger they face in choosing to stay or leave. “Victims don’t always understand how much danger they’re in,” Steere-Williams said.

In fact, that is what motivated Startin to tell her story. “Honestly, I thought we were OK when he shot me – until he did,” she said, offering the following advice to others: “Please leave before it’s too late. You might not be as lucky as I was. I wouldn’t wish what I’ve been through on anyone. If he verbally abuses you, he will physically abuse you, and he will try to kill you. That’s what I’ve learned. At the first sign of disrespect, just go ahead and leave because it’s not worth it at the end of the day. I know what it feels like to love someone so much that you feel like you can fix them, but you can’t fix people.”

She also hopes that sharing her story will help to create more open conversations about intimate partner violence. “Domestic violence is so hush-hush and taboo. But it should be talked about more openly. I feel like that would help people who are feeling alone and trapped.”

For now, she’s happy to be at home, working to reach her goal of walking again and raising her son in a home filled with love and gratitude. “He’s doing so well! I just want all good things for him. I want him to always be kind and to look up to me the same way I look up to my mom. So, I’m going to be the best that I can be for him.”

Nurse's heroism earns her prestigious award

BY BRYCE DONOVAN

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Angie Powers, DNP, was known as a front-line health care worker long before the term was a part of our everyday lexicon. As a medic and nurse in the U.S. Army Reserve for nearly three decades, Powers has had the unenviable task of fighting to save lives while simultaneously trying to keep hers. Now an instructor at MUSC's College of Nursing, though she still serves in the Reserve, Powers was recently awarded the National Infantry Association Order of Saint Maurice – Legionnaire for her heroism, courage and character in the face of life-threatening adversity.

"I was completely surprised by this," Powers said during a rare moment of calm between classes. "To receive this award is such an honor."

Notable past recipients include former Navy Lt. and U.S. presidential candidate H. Ross Perot as well as former U.S. Secretary of State Colin Powell. Rarefied air.

The stretch of service that most likely contributed to her receiving the award was during a tour she served in Iraq in 2004 and 2005. Just shy of her 30th birthday, Powers was deployed to the war-torn country with the task of protecting her team as well as the Iraqi military police on the front lines.



Photo Provided

MUSC College of Nursing instructor Angie Powers, DNP, is no stranger to dangerous situations.

See **NURSE** on page 15



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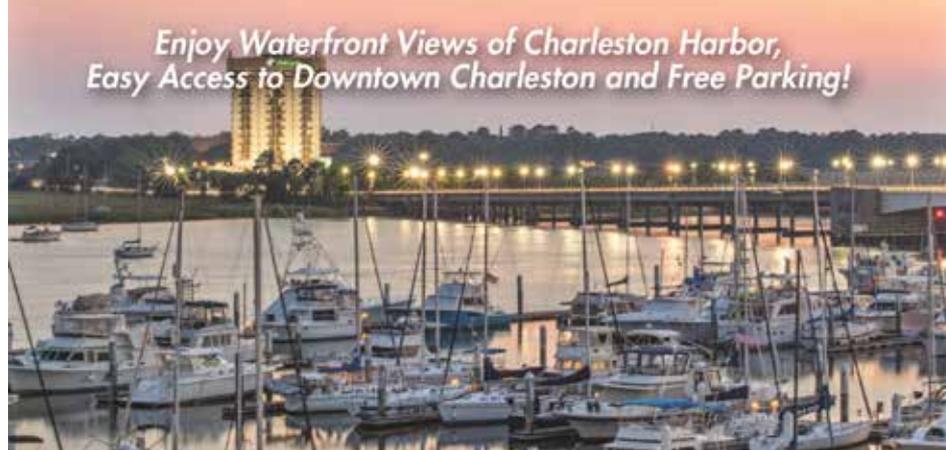
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ECMO keeps 10-year-old girl with severe COVID alive.

What is it?

By HELEN ADAMS

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It was two hours of terror. While an ambulance rushed Delisha Bellamy's 10-year-old daughter from a Myrtle Beach hospital to the MUSC Shawn Jenkins Children's Hospital in Charleston, Bellamy drove the 100-plus miles on her own. "I was so scared."

Her mind raced. How had COVID-19, which another of her children caught and quickly recovered from, taken such a toll on Tiera? The fifth grader was now so sick, unable to breathe on her own, that she needed a life-support machine called ECMO.

But at least she had that option. There are only a few hospitals in South Carolina that offer ECMO, which stands for extra corporeal membrane oxygenation. MUSC is the only one in the Charleston area.

"ECMO is for patients that otherwise wouldn't survive because it is risky," said Laura Hollinger, M.D. She serves as medical director of the pediatric ECMO program in the MUSC Shawn Jenkins Children's Hospital.

"It can be used to bypass the lungs. It helps the patients oxygenate and ventilate while the rest of their body is healing."

She said it's become a hot topic during the pandemic because it can be used to treat patients suffering from primary respiratory failure from COVID-19. Their lungs are so damaged they can't breathe.

"I would say nearly every day, physicians across the institution are getting requests for transfers for patients who are either already on ECMO or look like they need ECMO," Hollinger said.

"It's a challenging time, because we are the pediatric ECMO center for South Carolinians for many medical conditions, in addition to COVID-19. But it's an extremely risky resource, so we have to be judicious and selective about providing a therapy to the patients who are most likely to benefit."

Tiera is one of those patients. Her doctors believed that if ECMO could give her lungs time to heal by doing their work for them, she would have a chance at recovery.

So Tiera's mother stayed in her hospital

room, letting the girl who loves to read, listen to music and spend time with family know she wasn't alone. "I talk to her; she'll cry, whatnot, start to get fidgety and start moving," Bellamy said.

Seeing her daughter in that condition also helped her make a decision. "I went and got vaccinated. I was just scared before. I was so skeptical about it. But when she got sick, I said, 'I'm just going to get it.'"

At times during the pandemic, many of the ECMO machines in the children's hospital and in the adult hospital have been busy keeping patients alive. All of those patients were unvaccinated. Some, like Tiera, are too young to get a COVID vaccine.

"In the past, it was thought that children didn't get so sick with COVID. We're finding that not to be the case. In this third wave, we started seeing very severe respiratory failure," Hollinger said. "Many patients who end up needing ECMO therapy need it for weeks in order for their lungs to recover."

So how does ECMO work? "It requires an operation to place them on ECMO, meaning attach them to the ECMO machine surgically. We have to put in these really large IVs called cannulas," Hollinger said.

ECMO coordinator and registered nurse Lucy Linkowski described what those IVs do. "They drain blood out of the right side of her heart, and it comes through all this tubing," she said, pointing to tubes behind Tiera's head.

"You can see the colors are different. So this blood without oxygen in it is from the right side of the heart." The blood had a bluish tinge.

"Then, a pump head spins the blood really fast and pushes it forward. It pushes it through an oxygenator, which gives it oxygen and clears carbon dioxide, just like her lungs would. And there's positive pressure, and it pushes that blood, which is now bright red, right back to the patient. So now that blood goes into the right side of the heart and can go through its normal blood flow path through the lungs, and it doesn't have to do oxygenation or anything."

Donated blood is used as well because when red blood cells go through the machine, they get damaged over time. "We're



Photos by Sarah Pack

A teddy bear keeps Tiera company while the fifth grader from Conway, South Carolina, is kept alive by an ECMO machine.



The extracorporeal membrane oxygenation machine that did what Tiera's lungs couldn't. It pulled blood from her heart, added oxygen and removed carbon dioxide, then pumped it back in.

constantly having to replenish the pool," Hollinger said.

But ECMO isn't just for COVID patients. The American Thoracic Society notes that it can sub in for the heart as well as lungs in people with severe life-threatening illness that stops those organs from doing their jobs.

MUSC Children's Health has been using ECMO in babies and children since the early '90s. Hollinger said it's a huge commitment.

"ECMO is truly intensive care; it requires the highest level of time at the bedside, equipment and staffing. It's an hour-to-hour, minute-to-minute therapy that these patients require. It's equipment. It's critical care. It's blood transfusions. It's a highly trained multidisciplinary team. All of these things add up to ECMO really being one of the more complex treatments available," Hollinger said. "It is truly a situation where it takes a village."

She said MUSC Health's ECMO teams have received national recognition. "Our adult and pediatric ECMO centers have been individually honored by the Extracorporeal Life Support Organization as Centers of Excellence in Life Support. And we have been awarded the highest level of recognition in that regard; we've both achieved the Platinum Level Center of Excellence Awards."

But what Hollinger said is most important

See ECMO on page 14

Hollings clinical trial gives breast cancer survivor new lease on life

BY JOSH BIRCH

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Vernesta Major, 62, has a lot of reasons to live – 21 in fact – four children, 13 grandchildren, and four great-grandchildren, not to mention her extended church family. The Charleston native is already looking forward to celebrating the upcoming holidays with family one year after being diagnosed with stage 2A breast cancer. Major completed treatment and is officially in remission, thanks in part to a clinical trial at MUSC Hollings Cancer Center.

Major, who was diagnosed with breast cancer in early 2020, noticed something wasn't right after she discovered a lump on her breast during a routine self-examination. She got a mammogram through South Carolina's Best Chance Network, which eventually led her to Hollings.

"When I found out it was cancer, I was told that I was going to lose the breast. That was devastating. But I tried not to show it and didn't cry," Major said. "I made up my mind that I was going to do whatever I needed to because I wanted to live."

Major's tumor measured 5.5 centimeters and was hormone positive and human epidermal growth factor receptor 2 (HER2) negative. The diagnosis got the attention of Frank Brescia, M.D., a Hollings' oncologist and breast cancer specialist. "People think of breast cancer as one disease, and it's really not," Brescia said. "The biology is quite different from one patient to the next, which makes more targeted treatment needed as we move forward."

Brescia is leading a clinical trial at Hollings for hormone positive, HER2 negative breast cancer, testing the effectiveness of pembrolizumab in combination with eight cycles of chemotherapy treatment before surgery and another nine cycles of chemotherapy after surgery. "Doxorubicin, cyclophosphamide and paclitaxel are our core chemotherapy drugs," he said. "In this study, we're asking the question if we give the pembrolizumab, which enhances T-cells in patients who have a high risk of cancer, will we make a difference?"

Major said taking part in the clinical study at Hollings was a no-brainer. "I wanted to come to MUSC because I trust them. It is a school of learning, and I felt that if I could help someone else along the way by participating in this clinical trial, then that was my purpose."

Setting the course for more effective breast cancer treatment

Brescia said pembrolizumab, a type of immunotherapy, is a newer approach to treating breast cancer. Traditionally, immunotherapy had been used to treat diseases like malignant melanoma and lung cancer. But results in some breast cancer patients can't be ignored, he said. Brescia remembers the first breast cancer patient he treated with pembrolizumab years ago.

"I had a patient with triple negative breast cancer who had tried every treatment possible and had a local recurrence in the breast that was becoming unbearable. It was growing, ulcerating and was very painful. Out of desperation, I used pembrolizumab, and within two to three months, the cancer had gone away."

Patients taking part in this clinical trial receive either pembrolizumab or a placebo during chemotherapy. Brescia said previous research has allowed them to predict which patients may respond best to pembrolizumab.

"We look for proteins called PDL1 on the T-cells, which play a role in preventing proper immune responses. If the PDL1 receptor markers are on the T-cells, then we have a better prediction of whether this drug is going to work and can enhance the immune response. We are essentially trying to get the body's T-cells to fight the cancer," Brescia said.

Brescia said he has been pleased with how well this treatment has been tolerated by patients in the trial. He said the main side effects include colitis, dysfunction of the thyroid and skin rashes.

"You don't have to make patients terribly sick to get good responses," Brescia said. "The drugs are becoming so much better and nuanced. Years ago, patients had all kinds of medicine and treatment options thrown at them. Now, there is much more interest



Photo by Marquel Coaxum

Vernesta Major will celebrate the upcoming holidays with family one year after being diagnosed with stage 2A breast cancer.

in side effects and long-term effects on the patients."

For Major, the worst side effect of treatment was exhaustion, and in late April 2020, she developed a case of shingles, which forced her to stop the trial for two months.

The bumpy journey was worth it, though, when prior to her surgery in September 2020, doctors gave Major the news she wanted to hear. "They told me the tumor had shrunk a lot," she said. "To me, that meant the something in this trial was working."

Brescia said Major's response to the treatment was the best-case scenario, with her pathological results after surgery showing a complete response. "She had some noninvasive ductal carcinoma in situ, but she is without evidence of disease. That doesn't mean she is cured, but at this point, we've seen no recurrence."

SERVING AS AN EXAMPLE

Major admits there is hesitancy in the African American community to open up about health care issues and participate in clinical trials. That's why sharing about her cancer journey is so personal.

Major watched as her father died from lung cancer in the early 1990s. She hopes the information researchers gained through her

participation in the clinical trial can prevent more lives from being lost to the disease.

"In the African American culture, we don't want to feel like we are guinea pigs for science," she said. "But I don't see it like that. I hope my story changes the conversation in the community because medicine has come such a long way, and a big reason for that is because of clinical trials."

Brescia said he understands the hesitancy for some to participate in clinical trials and believes that the medical community has an obligation to show communities they will get something in return from their participation. "I see my role as trying to be an advocate for the individual patient, whether they are white, black, green or pink. It makes no difference to me. You need time to earn underserved communities' trust and prove that you are on their side and want to make a positive difference."

Major is thankful for the doctors and researchers at Hollings. She finished treatment in May and said she looks forward to spending a lot more time with her biological and religious families. "This clinical trial gave me a second chance at life. I can do things that I otherwise may not have been able to do. I'm excited to live."

Seeing is learning

BY LESLIE CANTU

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Imagine that your eyesight is so poor that even the big “E” on the eye chart is fuzzy – not to mention the other, smaller letters.

Now imagine that you’re a child. With no other frame of reference, you don’t even realize that the “E” should have sharp, crisp lines. You can’t decipher anything the teacher puts on the board, and you can’t understand why the other kids can. School might start to seem like it’s just not for you.

In 2012, the nonprofit group Vision To Learn set out to provide eyeglasses to children in underserved schools with the expectation that improving their vision would help them to improve their grades.

Now, with the encouragement and support of the local community, led by Henry J. Blackford III, the group is embarking upon a pilot program in Title I Charleston County elementary schools.

MUSC is providing support during this pilot year by funding a mobile exam van – essentially, an eye doctor’s office on wheels.

The process begins when the Vision To Learn program manager or optician screens all children at a school, unless their parents have opted out. Then, students referred by the initial screening are scheduled to visit the Vision To Learn eye care team when it comes to the school with its mobile clinic. Inside the mobile clinic, an optometrist conducts eye exams to determine if each child needs glasses – if so, students get to choose their frames on the spot.

A few weeks later, the team returns to fit each child, and the children leave with brand-new, free glasses. The optometrist also provides referrals to multiple providers around town for children in need of follow-up care. The team can examine 15 to 18 students each day.

Getting glasses for a child who can’t see might seem like an obvious fix, but many children from low-income communities haven’t seen an eye doctor. In California, for example, two-thirds of the Medi-Cal (California’s version of Medicaid) students that Vision To Learn helped hadn’t gotten any eye care for the previous four years.

Plus, said Vision To Learn optician Joe Venzie, parents tend to keep their kids closer to home nowadays and use more tablets and phones, so they don’t necessarily notice as quickly that their kids can’t see far away. He and optometrist Catherine Kirby, O.D., recently examined a child whose vision was so poor that the big “E” was fuzzy.

“They don’t know what they’re missing,” Venzie said.

Many of the children are nervous when they get into the van because they don’t know what to expect, they said. One recent child seemed apprehensive about reading the eye chart for her, Kirby said. But as she clicked through the lenses to correct his vision, he suddenly came to life. Turns out, he wasn’t nervous about reading the chart. He just couldn’t see it.

Most of the children Kirby has seen so far have either never had glasses or had older, broken glasses, and so they haven’t



Photos by Sarah Pack

Optometrist Catherine Kirby finds satisfaction in offering vision care to kids who might not otherwise get their eyes checked.

Since launch of program in Charleston County:

- ❑ Children screened: 1,778
- ❑ Did not pass screening: 647 (36%)
- ❑ Children examined to date: 116
- ❑ Glasses prescribed: 91

worn them for two or three years, she said. She likes that she can intervene in these children’s lives and possibly change the trajectory of their school careers.

“It’s going to set them up for success long term,” she said.

That is precisely MUSC’s interest in assisting the pilot project, said Andrew Eiseman, M.D., chairman of the MUSC Storm Eye Institute.

“Our primary interest is to help kids see so they can learn,” he said.

Researchers from the University of California Los Angeles and Johns Hopkins University have separately looked at the effect of receiving eyeglasses on children’s grades and standardized tests and found that students’ scores improved after they got their glasses.

“The idea is to reach out to children who otherwise most likely would not receive any eye care to provide them with a screening examination and a pair of glasses free of charge to enhance their ability to learn. The mantra is, ‘If you can’t see, you can’t learn,’” Eiseman said. “MUSC, including our senior leadership, our children’s hospital and the Storm Eye Institute, all 100% agree with that philosophy.”

Caroline Brown, chief external affairs officer at MUSC, said MUSC’s support during the pilot year is all about addressing health disparities. Patrick Cawley, M.D., MUSC



A selection of colorful frames are available for the children to choose from.

Health system CEO and vice president for Health Affairs, University, agreed.

“This is a tremendous opportunity to help students who have, for years, gone without basic eye care – to the detriment of their academic achievement. Every child deserves

See VISION on page 14

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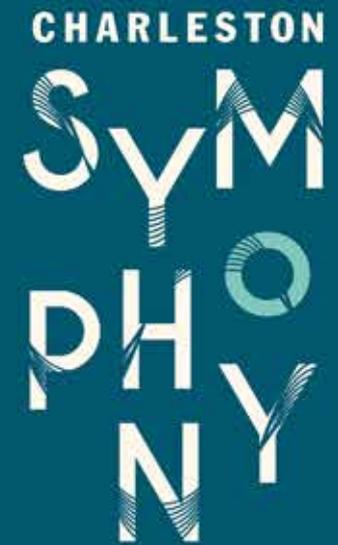
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Trial of outpatient drugs for COVID-19 opens up

BY LESLIE CANTU

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A new clinical trial open to all South Carolinians is testing three common drugs in the fight against COVID-19.

"It is such a cool trial. You don't even have to go to a doctor's office to be part of this trial. It's completely remote," said Leslie Lenert, M.D., director of the Biomedical Informatics Center at MUSC. That means that people don't have to live within easy access of an MUSC hospital to participate and potentially benefit from the treatment.

"It's just perfect for our new MUSC sites and the rural populations. It's really great to be able to offer these kinds of things," Lenert said.

Called ACTIV-6, the trial is led by the Duke Clinical Research Institute in North Carolina and covers several states. Lenert is the principal investigator for MUSC. Rami Zebian, M.D., chief medical officer of MUSC Health-Florence Division, serves as clinical co-investigator for the Florence and Marion hospitals. Zebian said he's thrilled to be able to offer clinical trials to people in the Pee Dee region.

"Currently, there are limited treatment options that are FDA-approved that doctors can offer to patients with COVID-19 who aren't sick enough to be in the hospital. Monoclonal antibody infusions are available on an outpatient basis for high-risk patients, but mainly patients are told to stay home, rest, drink plenty of fluids and possibly take acetaminophen or ibuprofen for fever. This trial will allow us to determine possible treatment options for patients to benefit from. We have seen a lot of misinformation out there, and unfortunately, some patients have received non-FDA approved medications outside of a clinical trial. That is not a safe practice, and we have seen many reports of toxicity - and we have many unanswered questions.

"I strongly believe that a clinical trial helps us answer those questions and offers possible treatment options in a safe and controlled manner," Zebian said.

The trial is testing three drugs that could help people with mild to moderate illness who are recovering at home. The study drugs are fluticasone, a corticosteroid often used for asthma or chronic obstructive pulmonary disease that is delivered via inhaler;

"I strongly believe that a clinical trial helps us answer those questions and offers possible treatment options in a safe and controlled manner."

Rami Zebian, M.D.

fluvoxamine, an antidepressant in pill form; and ivermectin, a drug that is used to treat parasitic infections and that has been in the news quite a lot lately.

"Everybody's heard about ivermectin," said Elizabeth Szwast, the study coordinator. "It's a really hot topic right now, and this is a safe environment to see whether it's effective to reduce COVID-19 symptoms."

Lenert said that volunteering for the study can help to settle the question of ivermectin's effectiveness.

"If you believe in it - get into a clinical trial. If you don't believe in it - get into a clinical trial. Let's get the answer out, and let's stop fighting each other over it," he said.

People interested in the trial will have the option to choose which study arm they would like to be a part of. For example, someone could say she is willing to participate in any of the three study arms - fluticasone, fluvoxamine or ivermectin. She would then be randomly assigned to one of the three arms and from there randomly assigned to receive either the study drug or a placebo. Or, someone could say he wants to only participate in the fluvoxamine arm because he's read about good results the drug has had in small trials. He would be assigned to the fluvoxamine group and from there would be randomly assigned to receive either the drug or a placebo.

Once someone is accepted into the trial, the central pharmacies mail the study drug and a pulse oximeter to the patient. The patient takes the study medication as directed, fills out daily surveys online and responds to phone call questionnaires from Szwast on days 14 and 28. After 90 days, the participants each receive a \$100 Amazon gift card as a thank-you gesture for time and participation in the clinical trial.

The ACTIV-6 trial is part of a larger



Photo by Sarah Pack

Dr. Leslie Lenert is part of a trial testing how well existing drugs work against COVID-19.

To be eligible for the study, patients must:

- Be over 30 years old.
- Have had a positive COVID-19 test within the past 10 days.
- Be experiencing at least two of the following symptoms: feeling tired, trouble breathing, fever, cough, upset stomach, vomiting, diarrhea, body aches or chills, headache, sore throat, stuffy nose or new loss of taste or smell.

public-private partnership that is investigating treatments for COVID-19 from a variety of angles, including immune modulators, monoclonal antibodies, anticoagulants, inpatient treatments and repurposed drugs for outpatient treatment.

ACTIV-6 is set up as a platform trial, allowing it to adapt as evidence develops and add or remove drugs. The trial leaders could easily add a fourth or fifth study drug, Lenert explained, if the public-private

scientific advisory board coordinated by the Foundation for the National Institutes of Health determines other promising candidates.

"It's really a very flexible tool to allow science to reign," he said.

MUSC's participation came about because of its participation in the National Patient-Centered Clinical Research Network (PCORnet) and the Stakeholder, Technology, and Research Clinical Research Network (STAR CRN) which provides a pathway for researchers to conduct multisite trials. Lenert urged MUSC faculty members who are conducting research, regardless of whether it is COVID-19 related, to look into using PCORnet as a way to obtain large amounts of data and collaborate with MUSC PCORnet partners at the Mayo Clinic, Vanderbilt University, Duke Health, the University of North Carolina at Chapel Hill, Wake Forest Baptist Health, Meharry Medical College and beyond.

Anyone interested in participating in the ACTIV-6 study can call 843-792-4675 or visit activ6study.org.

Living with spinal cord injury: Resilience leads to better health outcomes

By MATTHEW GRESETH, PH.D.

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September was Spinal Cord Injury (SCI) Awareness month. According to the National Spinal Cord Injury Statistical Center, approximately 296,000 Americans are currently living with SCI, with around 17,900 new cases occurring each year.

Those who don't personally know someone with SCI have almost certainly heard the stories of people such as Teddy Pendergrass, an R&B singer who was injured in a car crash, or Roy "Campy" Campanella, the Hall of Fame catcher for the Brooklyn Dodgers who also was injured in a car crash. Likely one of the most famous stories is that of Christopher Reeve, the actor who played the Superman during the '70s and '80s and suffered an SCI after he fell off his horse during an equestrian competition.

Following an injury, people often experience neuropathic pain – pain that arises if the nervous system is damaged – and feelings of isolation, among many other symptoms. So how do survivors overcome these hurdles? In a word: resilience.

"For someone with a cord injury, your margin for surviving even small mistakes when it comes to your health is really thin," said James S. Krause, Ph.D., professor and associate dean for research in the College of Health Professions. "So we see people die early. But those who survive tend to be



Photo by Jessica Yurinko

Dr. James Krause (center) and his team of spinal cord injury researchers.

people who are more likely to take better care of themselves, to be employed, to have good relationships, and they become resilient. It's surprising how resilient people are."

Resilience is a character trait that allows people to adapt and thrive in the face of difficult circumstances. It is the inner fortitude that enables people to cope with stress, handle adversity and rebuild their lives following a traumatic event.

Krause is a shining example of a resilient survivor.

Originally from Minnesota, Krause, who also serves as the scientific director of the South Carolina Spinal Cord Injury Research Fund and director of the MUSC Center for Rehabilitation Research in Neurological Conditions (CRRNC), was injured while diving into shallow water as a teenager, which left him paralyzed. Before the injury, he was not really interested in school but liked to be outside and play baseball. After the injury, however, with the help of his sister, he changed his focus, becoming a better student and ultimately dedicating his life to researching spinal cord injuries.

"I just passed 50 years post-injury," said Krause, who held a celebration in July for his long survival. "At the time, we would have never dreamt that I would have lived this long. It was beyond comprehension, but nowadays many people reach that milestone."

This increase in survival following an injury is largely due to ongoing high-quality research. Krause and his team have worked hard to develop tools for people – information to make them more aware of dangerous behaviors and activities in the hope of preventing emergency department visits – and influence policy makers.

See SPINAL on page 15



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SURGE *Continued from Page One*

either through vaccination or infection.

The answer is multipronged. As we've seen with breakthrough infections, vaccine immunity may wane. And a lot of people still aren't vaccinated. The South Carolina Department of Health and Environmental Control reports that just 52% of the people eligible to get vaccinated have completed that process. Nobody under 12 can get a shot yet. It's also unclear how long immunity from a COVID infection lasts. One study suggests at least a year.

The good news is that the hospitalization rate has gone down when you compare this wave to previous surges. During the first wave of COVID in the summer of 2020, about a quarter of the people diagnosed with an infection ended up in the hospital. During the next wave in early 2021, about 15% were hospitalized. And during the current wave, the rate dropped to about 8%.

"I have a theory. I don't know what else to make of it, but I think immunity is working," Sweat said. "That could be keeping a lot of people from getting really sick."

But make no mistake, people are still ending up in the hospital. There were 78 COVID patients in MUSC Health-Charleston in the most recent update. Almost 30 are on ventilators, including two children. Almost 80% of the hospitalized patients were

unvaccinated when they arrived at the hospital.

Sweat said vaccination is the way for most people to avoid hospitalization.

So what's next? Sweat, a professor in the College of Medicine at MUSC who is also affiliated with the Johns Hopkins Bloomberg School of Public Health and is a former research scientist for the Centers for Disease Control and Prevention, said he's seeing some early signals. "History seems to be repeating itself."

He points to current Delta-driven COVID hotspots in Northern Michigan, Wisconsin, Minnesota and Iowa. "If you look at last year, the winter wave started in that exact area. What it's telling me is that this is an area of concern. It's just starting to look remarkably similar to last year. I'm worried that we're going to have another big wave in the winter."

If we do, though, it could be under more promising circumstances. Many more people will be vaccinated or have natural immunity from a COVID infection than last year at this time.

And more treatments may be on the way. "I think the technologies are going to improve. There's a lot of promising therapeutics being worked on, antivirals that can be taken orally. I think breakthroughs are going to happen. I think the vaccine work is going to really start to evolve, with vaccines administered nasally that can give mucosal immunity. There's a lot of things in the works," Sweat said.



Photo by Sarah Pack

During the pandemic, there have been times when multiple patients needed ECMO. MUSC Health is one of the few hospital systems in South Carolina to offer this form of life support.

ECMO *Continued from Page Eight*

is ECMO's impact on people's lives. During the pandemic, global research by ELSO has helped doctors figure out which COVID patients have the best chance of survival.

Tiera's mother was grateful her daughter was

one of them. Tiera is no longer on ECMO, a welcome development for her family. But the 10-year-old girl still has a long recovery ahead.

Her mother had a message for other families. "COVID is serious. Some people think that, I guess, just older people are getting it. But actually, it's attacking the kids more now than it is the older people."



Photo by Sarah Pack

The mobile clinic visits an elementary school in September.

VISION *Continued from Page Ten*

the opportunity to reach their full academic and wellness potential," Cawley said. "This program is a great fit with our mission to improve continuity of care for children in need throughout the region, and we look forward to working with other community eye care providers to fill this important need for our community's children."

During its decade in operation across the country, Vision To Learn has found that 87% of its students are children of color and 89% live in poverty. Most of them have not seen an eye doctor. A solution as simple as eyeglasses, provided early in a child's school career, can help to change how the child performs in school, which then has a ripple effect on everything from the child's self-esteem to the possibilities that open up after school.

"We are thrilled to be bringing service to students in the Charleston region," said Vision To Learn president Ann Hollister. "By providing free eye exams at school, Vision To Learn helps students get the glasses they need to succeed in school and in life."

The Storm Eye Institute has in the past provided screening services in schools on a small scale. The Lions Club also focuses on vision and provides some in-school screenings. But Eiseman said the needs far outweigh what local groups have been able to provide.

"There's so much need that even with

Vision To Learn and Lions and Storm Eye continuing their programs, there are still more children who need this service," he said.

Vision To Learn has finished exams at Sanders-Clyde Elementary on the Charleston peninsula and was at North Charleston Elementary on Sept. 27. One by one, children climbed into the van and went through the typical eye exam – with the addition of some awesome kid jokes – and then got to pick the frames they liked best. The van will return in about a month with the finished glasses, and Venzie will ensure a proper fit for each child.

At Sanders-Clyde, more than 30 students were given referrals to a list of potential providers around town to get more comprehensive exams.

Seventy-eight Sanders-Clyde students will be getting new glasses in a couple of weeks. That's 78 kids who will realize that, yes, you can see individual leaves on trees. You can see the ball across the field. You can see the letters on the eye chart. And yes, you can see what the teacher is writing on the board.

Judges needed for 2021 Perry V. Halushka Research Day, Nov. 5

Judges are still needed to participate in the annual campuswide MUSC Perry V. Halushka Research Day. The event is open to students, postdoctoral fellows, clinical fellows and technical staff across campus to present their clinical and basic science research in poster and oral formats. Contact Victoria Findlay, findlay@musc.edu or Shelly Drake, drakm@musc.edu.

SPINAL *Continued from Page Thirteen*

While he hopes that these tools will lengthen SCI patients' survival, several challenges remain. According to the World Health Organization, people with SCI are 2 to 5 times more likely to die prematurely than people without SCI. Furthermore, many of the consequences associated with SCI do not arise from the injury but rather hurdles to treatment, such as inadequate medical care and rehabilitation services as well as physical, social and policy barriers.

To address some of these concerns, Krause and his team have a long track record of investigating three major life domains: health and function, including opioid use and abuse among people with SCI; community engagement, such as a longitudinal study initiated in 1973, in which participants provide self-assessments about their quality of life as they age; and employment.

"I'm excited to look at the intersection of these three domains because people's lives don't occur in a vacuum," said Krause. "Disability research requires multiple approaches in multiple life domains. That's how we work. That's what we strive for."

Earlier this month, Krause received a \$2.5 million grant from the National Institute for Disability, Independent Living and Rehabilitation Research to study the third

life domain: employment. Importantly, this study focuses not only on raw percentages of employment among individuals with SCI but also the quality of that employment. For the first time, Krause's team will compare salaries, benefits and promotions for individuals with and without SCI.

"What is really exciting about this project is that it looks at employment among people with spinal cord injury, MS and stroke," said Krause. "It's much broader than just spinal cord injury."

Researching cord injuries while having one himself, Krause often finds the spotlight directed at him. Having this type of injury gives him credibility that someone else might not have. People immediately recognize that he understands their situations; that it is also personal for him. But, he insists that the incredible work that he has done over the past decades is the culmination of work performed by a wonderful team of people who have dedicated their lives to working in the field of SCI or other disabilities. This work was also made possible with the help of a strong personal support network, particularly his wife of 28 years, Laura, who put her career goals aside so they could come to MUSC in 2002.

"My reason to go into this field is obvious – it's natural to go into an area where you've been personally affected," said Krause. "So I'm always really grateful to others who have chosen to work in this field."

President's 2021 Values in Actions awards taking nominations until Oct. 15

The annual MUSC President's Values in Action awards recognize five deserving individuals who demonstrate MUSC's

five values – compassion, respect, innovation, collaboration and integrity. MUSC's commitment to these values has never been more important as the institution navigates our way through a global pandemic.



Cole

So many people at MUSC go above and beyond each day, and President Cole needs your help in recognizing the diverse, creative, heroic and best efforts of these outstanding individuals in 2021. The nomination process is simple, and there is time before the Oct. 15 deadline to submit nominations.

Nominees can be submitted from any department across the MUSC enterprise, including the MUSC Regional Health Network. Visit <https://web.musc.edu/about/leadership/president/values> to nominate someone in your sphere.



Photo Provided

Powers, center, received the award during her most recent reunion of her colleagues in Las Vegas.

NURSE *Continued from Page Seven*

Though she volunteered for the position – the person previously in the role had stepped down because he felt it was too dangerous – the truth was she was one of the rare medics who also had a great deal of experience with weapons, due to her job at her home unit as a drill sergeant teaching basic combat training.

She remembers many a pitch-dark night, usually around 2 a.m., getting the call that a person of interest was going to be apprehended. A group of five U.S. soldiers would accompany the Iraqi MPs in case anything went wrong – and it often did.

Powers remembers taking constant mortar fire, car bombs exploding, threats coming from any- and everywhere. It was an extremely dangerous, high-intensity job, but she tried not to think about that and, instead, focused on taking care of her team. If somebody was injured, she'd treat them as best she could until they could be transported out to a combat support hospital. In a way, it helped to keep her mind off the imminent danger.

"It was my job. It was just what I was trained to do," she said modestly.

Powers' path to the military isn't much different than others you might have heard. She grew up in a poor, small town in Maine – and she wanted the quickest way out. The Army was that way. Never in a million years did she think at 46 she'd still be serving. During this time, Powers has steadily risen in the ranks – she's currently a major – while taking part in dangerous missions like the one in the Middle East as well as humanitarian deployments to El Salvador after Hurricane Mitch and most recently, Texas, a state hit

particularly hard by COVID.

"I miss a lot of holidays, birthdays, you name it," she said. "Because when you get called up, you go where you're told. Sometimes we don't get a lot of notice."

Powers joined MUSC in 2019, her first foray into academia. It's a job that provides a nice balance to the chaotic nature of the military. In addition to receiving the Order of St. Maurice, Powers was recently honored by the Charleston RiverDogs, becoming the first female on the club's Wall of Honor.

"Out of all my accomplishments, being honored at a baseball game is probably the thing that impressed my son the most," she said with a laugh.

2021 Advancement of Women Faculty Awards due Oct. 8

A call for nominations for the 2021 MUSC Advancement, Recruitment and Retention of Women (ARROW) Award for the Advancement of Women Faculty continues until Friday, Oct. 8.

The award recognizes a MUSC faculty member who best demonstrates excellence in his/her commitment to the advancement and promotion of women faculty at MUSC. Deadline for submission is 5 p.m., Friday, Oct. 8. Nominations will require a mentoring table. For more information, contact ARROW program coordinator Rachel Simmons at arrows@muscd.edu or visit <https://education.musc.edu/leadership/provost/reporting-units/arrow/awards>.

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