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Photos by Sarah Pack

Nurse Yasmine Graham secures a COVID-19 testing specimen during a test run of the prototype pod. Graham said it took some getting used to the gloves, which are thicker than the gloves she usually wears, but the system works well.

Portable pods bring testing to the people

By Leslie Cantu

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There are times when you really need a portable toilet. Like at a music festival, for example.

Other times, what you need is the shell of a portable toilet.

Like when you need to figure out a cost-effective, safe way to test for a highly infectious disease in a manner that brings the testing to where the people are. In other words: When you need to make COVID-19 tests accessible to communities across South Carolina.

Thus was born the mobile specimen collection pod,

affectionately known by its creators and users as the "Port-a-Swabby."

The testing pods got their start when MUSC Health's Erik Modrzynski, Ambulatory environmental health and safety and emergency manager, teamed up with David Pastre, senior lecturer at the Clemson University School of Architecture, to document everything involved in setting up a drive-through testing site. They thought it could be helpful for other hospital systems to understand the thought process behind every stop sign and tent at the testing site that Modrzynski developed in the Epic Center parking lot in West Ashley.

See **Testing** on page 9

COVID cases up 23% in Tri-county over previous week

By Helen Adams

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COVID-19 cases are up 23% in the Charleston Tri-county area, according to the MUSC COVID-19 Epidemiology Intelligence Project's first December report.

The team's weekly update shows there were 971 cases in Berkeley, Charleston and Dorchester counties combined, compared to the previous week's total of 790. For comparison, in mid-November, the total per week was about 600.

And this week's increase does not reflect a possible Thanksgiving bump, which would be unlikely to show up until at least next week. "It takes most people about five days to have symptoms," said project leader Michael Sweat, Ph.D.

"A lot of people, maybe 50 or 60%, will have very mild symptoms and won't get tested. Meanwhile, it

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Graham and certified medical assistant Iletta Norris clean between patients at a testing event at the College of Charleston in September.

Vaccine Trial
Employee volunteers,
chronicles journey.

Stroke care

MUSC Health Florence adds
stroke care capabilities.

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'Not Throwing Away My Shot'

Editor's Note: Kelly Warren is a manager with MUSC's Enterprise Campaigns and University Communications. Warren volunteered to be a participant in the MUSC/Astra Zeneca COVID-19 vaccine trial. She shares her experiences so that others might also feel comfortable receiving the vaccine.

Hi, I'm Kelly. True story — I'm participating in a COVID-19 vaccine trial. I'm 30, work at MUSC, love being outside, can often be found plotting my next adventure, and, as of this week, am a participant in a COVID-19 vaccine trial.

Like everyone, my year and life have been upended by COVID-19. It's funny to look back at my January self with big travel plans, anticipated gatherings and celebrations, concert tickets, assumption of annual getaways and nary a mask in sight. And by funny, I mean I've perfected the laugh–cry.

When COVID-19 became a reality, my rule-following personality had no issue following all the guidelines. I stayed home, wore my mask and used sanitizer by the buckets. Soon, though, true to my nature, I was itching to do more. I'm not a researcher, and you don't want my help in a clinical setting — I took geology in college to get out of the sciences, if that tells you anything. My work in MUSC's Office of Communications and Marketing was fulfilling, as we got important information out to our colleagues and the public, but I wanted to do something that felt more substantial.

A few months ago, I learned MUSC would be participating in a COVID-19 vaccine trial, and I was immediately interested. As I read the information provided and did my own research, I was even more intrigued. And so I signed up to participate.

As I've told people about my participation, I've received a range of responses. Some have voiced their concerns about the vaccines. Others asked if I was worried about getting COVID-19 or shared horror stories about someone they heard about through someone on Facebook who participated in a trial.



Fortunately, others have been more encouraging and framed this as something for the greater good and asked for more information.

For me, this is what it boils down to:

- ☐ I'm young and healthy with no preexisting conditions.
- ☐ I can't help through scientific contributions, patient care, high-level decision-making, teaching kids or anything on the "front lines," but this I can do.
- ☐ The FDA, CDC, DHEC and more are involved to make sure it is safe and risks are low.
- ☐ Like everyone, I'm over COVID-19 and would love to return to normal (whatever that means). That's impossible without a vaccine, which can't be distributed until it's well tested.
- ☐ Since I'm single, without kids, or even pets, if I do have any side effects, I don't have to worry about them affecting anyone else.
- ☐ I've done research about how the trial has gone and feel good about what I've read.
- ☐ I can be part of history!

And so, later this week, I'll return to MUSC's campus for the first time in months to start the COVID-19 vaccine trial!

Part 2: True Story – I'm participating in a COVID-19 vaccine trial

Appointment day

Today's the day (Nov. 5)! I'm headed to campus in a bit for my first appointment and to receive either the COVID-19 trial vaccine or a placebo. For the first time, I'm getting a little nervous. Everything I've read about side effects and percentages is, statistically, very reassuring. However, I seldom get sick and can't remember the last time I had something flu-like, so I'm not certain what to expect. Plus, I'm really not looking forward to the nasal swab. I guess we shall see over the next few days how things go!

A few hours later –

Appointment success! It took about 1-½ hours and was pretty much what I expected. I arrived on campus for the first time in months and headed up to the office. The strangest part of the day was definitely walking through the hospital and Clinical Science Building with the COVID-19 signage, everyone being masked, not just some clinicians, and the decrease in human traffic.

My appointment started with paperwork, nothing too different from a standard check-up. I received a brief physical, then it was on to the next station where we dug into the details of the study. I learned what would be expected of me and what I could expect from the study managers. They explained any risks and what has been learned in other studies.

As they explained the very few cases where they'd seen more significant side-effects and the causes they'd discovered, any remaining fears were calmed. Most people only experience mild flu-like symptoms the first day or two, which doesn't sound fun but is certainly manageable. They also discussed the placebo I could receive — a saline shot with no

See VACCINE on page 12

MUSC news

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MUSC Catalyst News on holiday break

Beginning Dec. 21, the MUSC Catalyst News will be on holiday break and will resume its bimonthly digital publication schedule on Friday, January 8, 2021.

To share news, story ideas or information, email Cindy Abole, print editor, at Catalyst@musc.edu.

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MUSC Health Florence expands stroke care options

By Leslie Cantu

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A stroke patient is recovering at MUSC Health Florence Medical Center after being the first to undergo a neuroendovascular procedure at the hospital.

A thrombectomy, one such neuroendovascular procedure, is a brain-saving treatment that removes a blood clot blocking a large blood vessel in the brain, but it must be performed emergently to save the brain. Previously, patients had to be sent to comprehensive stroke centers outside the region for this procedure — and the time involved in transport meant that as many as three-quarters became ineligible for the procedure by the time they arrived.

Christine
Holmstedt,
D.O., medical
director of
Clinical Stroke
Services and codirector of the
Comprehensive
Stroke and
Cerebrovascular
Center at
MUSC Health,
said this moment



Holmstedt

was the result of a lot of behind-thescenes teamwork since March.

That's when the teams got together and decided they needed to find a way to offer this procedure in the Pee Dee region – pandemic or no pandemic.

"Stroke did not stop during the pandemic. Our efforts to provide advanced sophisticated technology to help our patients did not stop either. We are proud to offer this treatment. The patients of the Pee Dee deserve access to cutting-edge care, and we are committed to keep providing it," said Rami Zebian, M.D., chief medical officer, MUSC Health Florence Division.

"The goal is to make sure that every one of those patients gets the procedure

close to home, in a very safe way. We don't want to just do procedures. We want to make sure all the supports are in place. And so, our goal is to really have that presence there to make sure that every stroke patient gets the procedure they need," Holmstedt said.

To prepare for this moment, the team designated four neurocritical care beds, added neurocritical care doctors, provided additional training to nurses and techs so they could prep for the procedure and knew the warning signs to look for in recovering patients, and brought in an experienced neuroradiologist, Andrew Nicholson, M.D., to perform these procedures.

Holmstedt said that this particular patient showed up at a hospital in Hartsville, South Carolina. She consulted via telehealth and saw that his exam was consistent with someone having a stroke in the right side of the brain. He had already passed the window of opportunity to receive clot–busting medication, so he was transferred to MUSC Health Florence for the thrombectomy.

"What's amazing is normally when we transfer patients from that region, it can take three hours to get a patient from a hospital to MUSC Health Charleston for the procedure, and unfortunately, it's usually too late at that point, because the brain tissue has suffered too much.

"But this patient, from the time I saw him to the time they were finished with the procedure, was an hour and 33 minutes," she said.

When the patient arrived at MUSC Health Florence, the time — from the moment he was wheeled through the Emergency Department doors to the moment Nicholson punctured a vessel in the groin to guide a catheter to the blood vessels in the brain — was a mere six minutes.

"It was incredible teamwork. All of the nurses and techs were totally prepared, waiting for the patient in the angio suite. It's an incredible time," she said.



Photo Provided

The Florence thrombectomy team includes people from the Emergency Department, radiology, anesthesia and the neurosciences intensive care unit.

Holmstedt said she's proud of the team for making this happen as well as the administration for supporting the idea. "It takes a lot of resources to do this, and the goal is really to improve patient care in that area, reduce disability and keep patients closer to home."



New unit combines technology, intuitiveness to create contamination-free environment

By Bryce Donovan

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It took nearly six years to become a reality, but the serendipity is not lost on Dustin LeBlanc, M.D.

MUSC Health high risk infectious dise (HRID) unit, the only state-designated Ebola Treatment Center. The clinical are

It was 2014, and a man who had just returned home to Dallas from traveling to West Africa became sick. He checked himself into a local hospital, and after running a barrage of tests on the man, doctors confirmed that he had Ebola. He died eight days later. Two of the health care workers who treated him also contracted the virus but were fortunate to recover. In the end, over the course of 18 months, 11 people were treated for the rare but severe illness, with two of them losing their lives.

It was during this outbreak that MUSC realized the vulnerability of health care in relation to these kinds of illnesses.

"That scare brought a lot of awareness," explained LeBlanc, an MUSC Health emergency physician, who credits his colleague, pediatric emergency physician Kathy Lehman–Huskamp, M.D., with knowing that this wouldn't be the last time the country would deal with a deadly virus. "She knew then how important it was to be prepared next time around," he said.

After discussions with state and federal officials, MUSC Health applied for a grant to build a space for treating highrisk infectious diseases. It took some time, but eventually, they were awarded \$2.9 million to build a state-of-the art unit designed specifically around safely treating patients in need of highly specialized care.

Just about the time the facility was becoming a reality — space in the Clinical Science Building, adjacent to the existing Emergency Room at MUSC, was allotted for the new unit — along came COVID-19.

"The timing of all this surely makes us look smart," LeBlanc said. "And sure, there's a bit of luck involved, but our people, in particular Dr. Lehman-Huskamp, had the foresight to know there's always another Ebola out there."

Earlier this year, the hospital completed the 3,295 square-foot space known as the MUSC Health high risk infectious disease (HRID) unit, the only state-designated Ebola Treatment Center. The clinical area has the capacity to house two isolation patients. And every detail of the space was designed with safety in mind and preventing cross-contamination.

"Literally everything in here is handsfree," explained Kimberly Bailey, inpatient emergency manager for MUSC Health. Lights come on, room doors and closets open — all with the simple wave of a hand. Even the decontamination chemical shower can be operated hands-free, by one person, preventing anyone from having to touch contaminated gear.

The floors in the unit are colored green, yellow and red to allow staff to identify easily what area of the unit they are in and what PPE should be used.

"It's so intuitive. You can simply look down at the floor and know what gear to use," Bailey said.

Color-coded floors and blacklit bathrooms are just a few of the many safety precautions in the new unit.

Both yellow and red areas have negative pressure space to prevent the spread of airborne particles. The unit even contains five separate HVAC systems that can be enabled or disabled as needed.

The patient rooms have more comforting blue and brown color schemes, and each includes a nurse call system, telehealth capability and lighting that dynamically shifts throughout the day, mimicking the outdoors to help patients to maintain natural circadian rhythms.

Contained within the green or "clean" space is a nurses' station with space for three clinicians, clean and soiled utility rooms, a nourishment alcove, a medication room, a storage area for PPE, a chemical shower/decontamination room as well as a classroom space that can accommodate up to 14 students.



Photos by Sarah Pack

MUSC Health's 3,295 square-foot high-risk infectious disease unit – a space designed to prevent cross-contamination at every turn – is the only state-designated Ebola Treatment Center in South Carolina.



Color-coded floors and blacklit bathrooms are just a few of the many safety precautions in the new unit.

"We're hoping we never have to put a patient in it," Bailey said. "Right now, it's going to be used for clinical training for staff."

In addition to training, the space is also being used to administer chemotherapy to COVID-positive cancer patients, LeBlanc said.

Additionally, the space can be used for the treatment of VIPs — think dignitaries or high-profile people — who might require additional privacy, away from the rest of the hospital.

According to Bailey, the high-risk team is made up of about 45 MUSC Health care team members — ranging from technicians to physicians and respiratory therapists — who train quarterly.

"Having a unit like this helps us stand out," LeBlanc said. "No one in the state has this degree of setup for infectious diseases. It gives us an ability to take care of high-risk patients while maintaining a high level of safety. So whatever the next form of disease is that comes along, we'll be ready."

MEET LORI



Lori Gauld

Department; Years at MUSC

MUSCH Pathology & Laboratory; 5-1/2 years

How are you changing what's possible at **MUSC**

I lead an incredible group of laboratorians. Over the last six months, our team has worked tirelessly on standing up a new COVID laboratory to support local and state COVID testing initiatives.

Family, pets and their names

Children, Zach and Kalli; and two labradoodles, Abbi and Suri. My kids think I like the dogs better than them... sometimes I do.

Hometown Flagstaff, Arizona

Food that reminds you of the holidays Tamales

Best thing about living in Charleston

The people and the weather

Favorite way to relax during COVID

Running helps me manage all types of stress. I especially love being in the woods on a trail.

Words of advice

"Let go or be dragged." — Zen Proverb

ANGEL TREE DONATIONS



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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 (11/30-12/4), the MUSC Horseshoe Drive-thru on December 4th (10 AM - 1 PM), or dropped off any time at the Salvation Army, or N. Charleston Convention Center - Hall C (after Dec. 14th)

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

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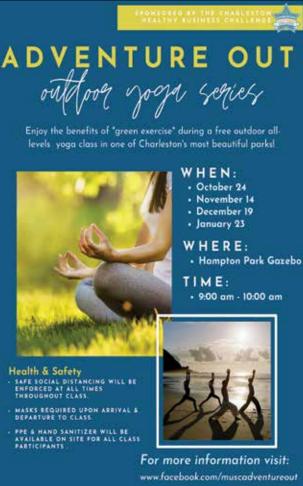






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Transplant patient survives COVID, asks public to wear masks

By Leslie Cantu

cantul@musc.edu

Standing before her mother's grave, thinking about her sister in a COVID-19 intensive care unit 170 miles from home and how she feared the doctors and nurses were keeping the worst from her, Roshanda Anderson made a promise to God. She knew how much her sister, Lisa White, had already sacrificed through the years to try to stay healthy after a lupus diagnosis and a kidney transplant. Anderson decided she needed to sacrifice something she enjoyed.

"I enjoyed smoking. I just knew it wasn't good for my health. So I said, 'Lord, I promise if you bring my sister back and keep her here with us, I will stop smoking," Anderson said. "So I gave it up July 29 and never looked back."

White did return to her family, but it was touch and go for a while. She was on a ventilator at MUSC Health in Charleston for more than a week and in the hospital for close to a month.

Now, she's grateful to be home in Ninety Six, South Carolina, and proud of her sister, who she's nagged for years to quit smoking, especially after their mom died of throat cancer.

"I'm grateful both ways, for her to do it for me and for herself, because she needed to," she said.

Born 11 months and three weeks apart, the sisters had their own social circles growing up but grew closer as they entered their teens and 20s and then began having children of their own. "We hung together every day, argued at least once a day, but we were still together. We've always had a pretty close relationship," White said.

At 23, White was diagnosed with lupus. Lupus is an autoimmune disease that most commonly develops in women of childbearing age and is more often found in women of color. The disease can cause muscle and joint pain, fatigue, anemia, rashes, blood clots, eye disease and kidney problems.

Eventually, White's kidney problems meant that she would have to undergo

dialysis for four years, relying on a machine to remove waste products, like toxins or excess water, from her blood, as her kidneys were no longer able to perform these functions naturally. That last year, she was also put on a kidney transplant list at three hospitals in the hope that a kidney would come through.

This spring, a kidney nearly did come through. She got the call to head to a hospital in North Carolina after a deceased-donor kidney became available. Once there, though, further tests revealed the kidney couldn't be used.

White wasn't disappointed. In fact, she was relieved. Her soul wasn't calm, she said — she could feel there was something not quite right. So she went home, and a month later, in May, she got a call from MUSC Health that there was a match for her from a living donor.

"When I came to Charleston to get my kidney, I was calm. My soul was calm. I just knew everything was going to be all right. I felt like that was the kidney that God had ordered; that it was meant for me," she said.

Her kids, on the other hand – they were terrified, she said. At that point, MUSC Health had relaxed its visitor ban somewhat, so one support person was allowed in the hospital with each patient. White said she was texting with them, even as she was prepping for surgery, letting them know she would be OK.

And she was OK. The surgery went well, and White was able to return home and start working at her home health job again.

But the pandemic was ramping up in South Carolina, and White was particularly vulnerable. The drugs she must take to prevent her body from rejecting the kidney also mean she is immunocompromised. The Centers for Disease Control and Prevention says that people who are immunocompromised because of organ transplant are at increased risk of severe illness if they contract COVID-19.

White isn't sure where she contracted COVID-19. She just knows that when she started feeling sick, her doctor advised her to get tested.





Photos Provided

At left, Lisa White and her son QuaTravious and on the right, her sister Roshanda Anderson.

She went to the local hospital, where a test confirmed she had COVID-19. Because she was a recent transplant patient, she was transferred to MUSC Health so the doctors here could keep an eye on her and the kidney.

White said she remembers the ride to Charleston, and she remembers being wheeled through the hospital to get to her room, but she doesn't remember anything after that until she woke up in the COVID ICU.

She didn't know how her son QuaTravious, 23, struggled as doctors called, asking him to make decisions about his mother's care, or how he handed the phone off to Anderson. She didn't know how Anderson struggled to present a hopeful front for White's children, when even the nurse whom Anderson loved the most would tell her she couldn't make promises, and they needed to keep praying. She didn't know that everyone in her home and her sister's home would also come down with COVID, or that her eldest daughter would have lingering problems. And she didn't know how many people were praying for her.

"I had a lot of people praying for me.

My children, family, friends," she said.

When White finally awoke, she wasn't instantly better. She wasn't allowed to eat on her own for several days, until she could pass a swallow test. She found that she couldn't control her hands, and she had to learn how to walk again.

"I have had lupus since I was 23 years old, and it has not been a walk in the park, but COVID was 10 times worse," she said.

White said she's grateful she could get care at MUSC Health, though there was nothing about her COVID experience that was easy. When she returned home in August, she wrote a long post on Facebook, telling people how difficult it had been. She urges everyone to do their part by listening to the advice of public health professionals.

"Please take it seriously and wear your mask. Use your hand sanitizer. Wash your hands. It's very important because COVID's taking lives every day. It's not a joke at all," she said.

And through it all, she gives thanks to God for her life.

"God has brought me through so much. I believe that he walks with me. He is there. He has not failed me yet."

At 29, lung cancer survivor advocates for 'listening to your body'

By Kelsey Hudnall

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Kelly Bulak has always had an eye for architecture and interior design. So when she saw an opportunity to head back to school to earn a Master of Science in Historic Preservation through Clemson University and the College of Charleston, she quit her job and jumped at the chance to begin a dream career of researching and potentially restoring old homes.

Her excitement over returning to school was cut short, however, by an unexpected phone call on the Friday before classes began.

Bulak, 29, had just pulled into the parking lot of her apartment complex after a leisurely drive home from a CT scan — one that was recommended by her primary care doctor at MUSC Health as a precaution after several months of a persistent cough and wheeze. She thought the call would mean a confirmed diagnosis of pneumonia, and that she'd be back to feeling better in no time.

"My doctor said, 'I hate to tell you this, but you have a mass," Bulak recalled. "I started breathing really heavy. I pulled the phone away from my face, hoping he wouldn't be able to hear me. To me, him telling me that meant I had cancer."

The next week brought a lot of anxiety about what the future might hold as Bulak and her family waited for results of a biopsy. She was diagnosed with stage 4 lung cancer, and further scans at MUSC Hollings Cancer Center revealed an additional mass in her thyroid, which was identified as Hurthle cell thyroid cancer. Then began myriad conversations and decisions she never expected to be making as she approached her 30th birthday.

"The first few nights, everything was just racing through my head. I was thinking, 'Who's going to take care of my cat? When is my hair going to fall out?' Every bad scenario you can think of, I thought through all of it," said Bulak. "Honestly, up until the diagnosis was probably the worst part. What can you do besides keep going to the doctor?"

NAVIGATING UNEXPECTED DECISIONS

Prior to when her symptoms began in the spring of 2020, Bulak described herself as "super healthy." Like many young adults, she enjoyed regular trips to the gym,



Photos by Kelsey Hudnall

Kelly Bulak thought her persistent cough and wheezing were due to pneumonia, but she received a stage 4 lung cancer diagnosis instead. She encourages others to be proactive about their health if anything seems off.

and her only medical concern was the occasional sinus infection. When she developed a cough, she assumed it was just a different variety of infection.

Because of the pandemic, she wasn't able to visit her doctor in person. A few telehealth visits left her with prescriptions for a respiratory infection and an anti-inflammatory drug to open her lungs and improve her wheeze. It wasn't until a few months later that she realized she still wasn't feeling back to normal, but her busy schedule kept her from regularly checking in with her doctor.

When August came, sudden pain in her chest one weekend led her to seek urgent care. An X-ray revealed what was suspected to be pneumonia, but a second opinion from a pulmonologist through a mutual friend led her doctor to order a CT scan, revealing the large mass in her chest.

"It was obviously a shock," said Bulak, who considers herself fortunate to have never been close with anyone who has been affected by cancer. "I haven't closely encountered cancer before. The doctors were saying that I'm not even at an age where I should be thinking about being tested for a gene that runs in my family for a cancer."

Other unexpected conversations she had to face included where to have a port inserted and whether to freeze her eggs.

"I'm not dating anyone right now, so it already feels weird to think about having a baby, let alone to combine that thought with cancer," said Bulak. "That was a tough decision, and something I was totally blindsided by."

Though the news of her cancer was sudden, Bulak

"My cough hasn't gone away, but it's way better, and I'm sleeping through the night. My laugh used to be interrupted by a cough, which was terrible, but now I can laugh again. There has been improvement."

Kelly Bulak

was bold and decided to face her diagnosis head on by pursuing an aggressive combination of chemotherapy and immunotherapy, preceded by four rounds of radiation.

"I told my doctors I wanted to be as aggressive as possible," said Bulak. "I want to survive."

While it can take weeks for the effects of treatment to become fully present, Bulak's first progress scan on Nov. 2, which followed her third round of chemo, revealed the mass in her chest already had drastically reduced in size and begun to break up — a sign that the radiation was working. The nodules in her lungs also have shrunk, and some have even disappeared, meaning her chemotherapy is also working.

She hasn't had any major side effects from her treatment, and she's already experiencing improvement in her symptoms. The news was a welcome relief after months of what felt like total uncertainty about her prognosis.

"We are all so excited. My Hollings care team said

See **ADVOCATE** on page 11

Inclusion to Innovation Summit focuses on forging new path

By Leslie Cantu

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The year 2020 has been marked by the COVID-19 pandemic, the massive outcry after the deaths of George Floyd and other Black people at the hands of police and a drawn-out election. It all left people to wonder what the future holds.

Speakers at MUSC's fourth annual Inclusion to Innovation Summit offered motivation and hope to the assembled virtual audience and said that, if we act with courage, we can come through this time of crisis to reshape our nation into

a more just and equitable land.

The summit is held every year as a place where people working to improve the diversity and inclusion of their institutions can gather to discuss shared goals and challenges. This



Burnham-Williams

year, the COVID-19 pandemic forced the summit into a virtual format, but planning committee co-chair Willette Burnham-Williams, Ph.D., chief equity officer for MUSC, said the events of the year made the summit more important than ever.

Anton
Gunn, chief
diversity officer
for MUSC
Charleston
and executive
director of
community
health
innovation,
opened the
summit by
noting the



Gunn

effects of the COVID-19 pandemic on minority communities, which have been disproportionately represented among cases, hospitalizations and deaths.

"This pandemic was showing us how race, equity and the lack of inclusion in our society was showing up in health care. Now, we knew this all along. We have years of history to know disparities are real, that inequities are real in health care, but they got put on 'front street,' if you will, in front of the entire country in the middle of this pandemic. It was really hard to watch for a lot of people. It was hard to watch for many people at MUSC who live and breathe the kind of opportunity to make health care equitable and affordable and accessible for every person we have the privilege to serve," Gunn said.

Speaker John Register urged attendees to not allow things to go back to the old normal. "The 'new normal' is not a destination at all. The new normal is only a plateau by which we can grow," he said.

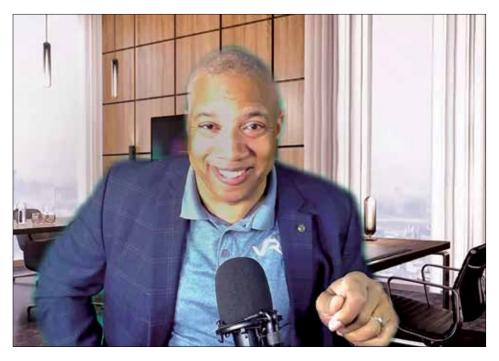
Register spoke from personal experience. He was an Olympic hopeful when a horrific injury forced the amputation of his leg. He eventually went on to become a silver medalist in the Paralympics, but it took years for him to get to a place where he was ready to run and compete again. Even after he made the Paralympic team, he still viewed himself and his teammates as "less than" the able-bodied Olympians.

Eventually, talking to a friend, he came to a realization. It wasn't about "overcoming" his injury, but seeing the humanity in everyone, himself and his teammates included. "I said, you know, had I overcome the amputation of my left leg, I'd have my leg back.

"The thing I thought I was rebuilding I really wasn't rebuilding. We don't rebuild. We think we're rebuilding. But that stage is gone. How do you rebuild post-COVID? We've had too much water under the bridge. We're not going back to that place."

But redefining ourselves takes courage, he said. "When we have the courage, we will make a decision of faith. If we don't, we go back to the fears we have."

Speaker Rev. Nontombi Naomi Tutu, associate rector at All Saints Episcopal Church in Beverly Hills, California, and



John Register, a Paralympic Games silver medalist, spoke at the summit about getting beyond external and internal biases.



Rev. Nontombi Naomi Tutu spoke about reconciling our past in order to create a future.

daughter of the Archbishop Desmond Tutu, also spoke of the past and the future, beginning with her experience in South Africa. She said that once Nelson Mandela became president, "we glowed in the reflected glory of a President Mandela."

But, she said, Mandela noted that South Africans couldn't pick and choose their history. "As South Africans, we cannot claim to be the country of Nelson Mandela unless we also claim to be the country of Eugene de Kock." De Kock was a death squad leader who tortured and killed anti-apartheid activists.

"Both of those are part of our story as South Africans, and both of those stories are part of the story that took us to 1994, to our democratic elections.

See **Summit** on page 10

TESTING Continued from Page One

But they also realized that a drivethrough site doesn't help people who don't have cars. Further, people in low-income communities are more vulnerable to COVID-19, due to longstanding disparities in health and because they're more likely to work at jobs that don't allow for working from home or social distancing.

So Modrzynski and Pastre began experimenting with the plastic shells that usually house toilets. They sought to create a walk-up testing shelter that includes a barrier between the health care worker performing the test and the potentially infected people seeking tests.

Now, after several months of design and testing, MUSC Health is preparing to deploy 30 of these pods at its clinical locations throughout the state.

"I'm super proud of the team, super proud of MUSC Health and the Clemson collaboration that brought this to fruition," said MUSC Health chief



Photo By Sarah Pack

Nurse Yasmine Graham conducts COVID-19 testing in a test of the prototype pod. The pod protects her from the elements as well as potentially infectious patients.

operating officer Tom Crawford, Ph.D.

The most important feature of the pods had to be that it was safe for health care workers. The design team accomplished this by creating positive pressure within the pod. Because the air pressure within the pod is higher than the air pressure outside, germs floating about in the air outside won't be sucked into the pod.

To allow for interaction with patients, the team replaced one wall of the pod

with clear plastic. Built-in gloves allow the health care worker to reach outside the pod, swab the patient's nose and deposit the sample into a drop box.

The pods are also more comfortable for workers. The teams working at the drive-through site and pop-up testing sites have to wear full-body personal protective equipment. Even with cooling vests, PPE quickly becomes unbearably hot in a South Carolina summer. Modrzynski said they recorded temperatures radiating off the blacktop of 151 degrees this summer. At times, they've had to rotate teams every 20 to 30 minutes to give them breaks from the

"They've been absolute soldiers out there. They just get it done because it needs to be done," he said of the nurses and technicians who have worked in the heat and rain.

There are other benefits to the pods. They're light enough that two people can lift one unit, so they can easily be moved from one location to another.

Crawford said this will give the testing team flexibility to redeploy if they realize that a particular testing location isn't attracting as many people as expected. The design team has so far used the prototype pod at scheduled mobile testing days at The Citadel and the College of Charleston and, in conjunction with the S.C. Department of Health and Environmental Control, at an unannounced testing day at a Sam's Club outside Columbia.

"Instead of thinking people are going to drive to a centralized location, we decided to take the testing to where the patients are, and I think it was received very warmly," he said.

Modrzynski envisions use for these pods even beyond the COVID-19 pandemic. Situated at doctors' offices and clinics, they could be used for flu tests and other tests for airborne diseases. he said.

Crawford said the pods are another example of how MUSC has responded to the pandemic with ingenuity.

"I am thrilled we continue to innovate in the midst of the pandemic. A lot of people are reacting, and yet, we're trying to find a way to be innovative, and I think that really underscores the spirit of MUSC and MUSC Health," he said.

MUWC awards \$17K in scholarships in 2020

Staff Report

The Medical University of South Carolina Women's Club presented a total of \$17,000 in scholarships to seven MUSC students at the group's virtual fall scholarship event held Sept. 30. The seven scholarship winners were selected from a pool of 45 student applicants, representing all six of MUSC colleges.

- Vanessa Fry, College of Health Professions
- Nour Hijazi, College of Graduate Studies
- Ana Montoya, College of Medicine
- Jansen Nash, College of Dental Medicine
- Drew Sauck, College of Pharmacy
- Tatianna Timor, College of Pharmacy
- Crystal Wood, College of Nursing

Eligibility for these awards included full-time students in their second or subsequent years and previous applicants. Year round, the MUWC conducts various fundraising projects to fund this scholarship. The MUWC scholarship committee includes Chairwoman Kathy Harrison-Rockey, M.E. Canaday, Pam Carroll, Catherine Cummins, Faye Griffin, Sarah Imam, Susan Lewis, Grace Patee and Lia Sisson.



"Given the importance to MUWC of our annual scholarship awards and the desire to maintain security of each applicant's information, the board made the decision to gather together to review applications," said Harrison-Rockey. "These ladies were present for two sessions so that we could spread out all over my house with fewer individuals, be safely distant, wear masks and have gloves and hand sanitizer readily available. I believe that we got the review process done well and also completed safely. The committee, as always, enjoyed reviewing the many impressive applications from each college."

Staying active while remaining socially distant

Adventure Out Yoga Series provides green exercise all year

As we approach the holiday season and a potential second wave of the COVID-19 pandemic, it is more important than ever that we prioritize the health and well-being of all of our community members by maintaining safe social distancing and significantly limiting indoor gatherings in order to slow and stop the spread of the coronavirus, particularly during the colder winter months ahead.

While these steps are necessary to protect our community against the spread of COVID-19, they often affect the ways in which individuals can engage in activities that support their physical and mental wellbeing. Prolonged periods of isolation have many feeling disconnected, not just from their friends and colleagues but also from a sense of normalcy and routine that so many of us crave during these unprecedented times.

With the support of our sponsor the Charleston Healthy Business Challenge, the MUSC Office of Health Promotion is proud to provide an opportunity for safe and socially distant community-based physical activity through the Adventure Out Yoga Series. Adventure Out was founded in 2013 as a year-long

outdoor fitness campaign to encourage residents to visit city parks for exercise. Since that time, the program has continued to evolve and expand to today, where free alllevels yoga classes are offered monthly to all community

In addition to the benefits that outdoor exercise has, as it relates to reducing and eliminating the risk of viral spreading, "green exercise" has additional benefits compared to indoor fitness activities, including stress management, improved self-esteem and mood, increased frequency of exercise and improved sense of well-being.

Furthermore, outdoor yoga brings the mind, body and spirit into harmony in such a way that you can feel your own natural rhythm. The focus is on warming up, stretching, breathing and posture learning so that you can trust your body's wisdom. It brings a sense of peace and renewed vitality during a time when we need it

The yoga classes are led by MUSC Wellness Center's master voga instructor, Gail Corvette, and are hosted at the Hampton Park Gazebo. This venue is not

MUSC Health & Well-Being

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



only one of Charleston's most beautiful parks, but it also provides ample space for participants to socially distance while practicing yoga and connecting in a safe manner. Additionally, individual yoga mats and personal protective equipment, including face masks and hand sanitizer, are provided to attendees to ensure the safety of all participants.

The classes are free and available to all community members and ages and serve as the perfect way to connect with family, friends and colleagues while supporting your physical and mental well-being through the holiday season and beyond.

Learn more about the Adventure Out Yoga Series at https://www.facebook.com/muscadventureout/.

SUMMIT Continued from Page Eight

So, for me, that is such a central part in talking about healing and inclusion and diversity. It is not so much about reconciling with one another, though that can be an aim and a goal, partly it is about reconciling with who we are, reconciling with our history, reconciling with what has brought us to the place that we are today," Tutu said.

She also noted that forgiveness is not a unilateral act but is relational.

"Forgiveness comes when somebody asks for forgiveness. Then we are injuncted by Christ to offer forgiveness. But this willy-nilly thing we do, particularly to people of color in this country when they have gone through a traumatic experience, to say, 'Are you ready to forgive the person who killed your son?' – 'Have you asked the person who killed my son if he or she is ready to come and ask for my forgiveness?" she

To close the event, speaker Joy DeGruy, Ph.D., talked about developing an organizational "green book." The

best known green book was a guide for Black travelers of safe spots to eat, fill up the tank and sleep. DeGruy said an institutional green book lets employees or students know the safe spaces in the organization.

"Where can I go and vent, and not get in trouble? Where can I go and get support and assistance and tutoring, without humiliation?" she said.

"You don't have to be Black to be in the green book, by the way," she said. Further, she added, "You can't lobby your way into the green book."

But the green book creates a sort of professional peer pressure that says, "Why aren't you in the green book? Why is it the people here didn't see you as safe?"

Burnham-Williams, who heads a newly established office to oversee equity efforts across the MUSC enterprise, said her team is working to create safe spaces.

"In the midst of your loved ones and the communities that you have around you in your personal day-today, protected space, we are creating that same kind of space for you every day at the Medical University of South Carolina. We know there's still many, many imperfect places," she said.

"But what I will promise you," Burnham-Williams continued, "What Anton promises you, what our teams promise you, is that we work diligently

every day to identity those places, to work with other leaders across our campus to stop the disparity, to stop the disrespect, and to stay committed to the values we espouse and that we live by every single day."





Bulak, who
is pursuing a
master's degree
in historic
preservation,
sits outside
the AikenRhett House,
her favorite
historic home in
Charleston.

Photo by Kelsey Hudnall

ADVOCATE Continued from Page Seven

they were all texting the night when my scan notes were posted and the images came up and talking about how excited they were for the news," said Bulak. "My cough hasn't gone away, but it's way better, and I'm sleeping through the night. My laugh used to be interrupted by a cough, which was terrible, but now I can laugh again. There has been improvement."

FAITH, TRUST AND SUPPORT

Even with the excitement over her positive results so far, Bulak knows she has a long road ahead as her treatment continues to break down her cancer bit by bit.

While the timing of her diagnosis wasn't great, she's thankful to have graduate school as a distraction and to keep her busy. She's enjoying touring many of the beautiful old homes for which Charleston is known and learning about their histories — an activity she hopes her classes will help to translate from a hobby into a well-established career.

"Before I even knew what historic preservation was, one of my favorite things to do was house tours and just wandering around Charleston. Going to a new city and seeing a cool, big, old house, I would immediately dream up what happened there, how many people lived there and how many stories they'd tell if those walls could talk," said Bulak, a native of Columbia, South Carolina.

"I love the idea of researching and then telling the story of a building. And once you do a certain amount of research, sometimes it can help qualify a house to be put on a national registry, which can permanently save the structure. There are certain styles of building that just aren't used anymore and craft and artisanry that we can still learn from."

Her favorite historic home in town is the Aiken-Rhett House, which uses a preservation technique that has left the home in the condition in which it was found, including holes in the ceiling and wallpaper that's peeling off. "It's a really interesting state to find it in because it's easy to go to a house that's pristinely restored and forget where you are. It's like a fantasyland," she said.

Aside from her studies, Bulak leans on her parents and friends for support. She has received many gift baskets since her treatment started as well as calls and texts just to check in and catch up on life. She also keeps a journal detailing her treatment journey, which she has found helpful to look back on throughout the process.

She's thankful for the quick and caring minds she has found in her Hollings care team, which includes medical oncologist John Wrangle, M.D.; physician assistant Michele Taffaro-Neskey; and nurse navigator Claudia Miller, R.N.

"Dr. Wrangle is so proactive. When he's in the room with you, you can just see that he's pulling on his hair already thinking of a new strategy," said Bulak. "Everyone is really willing to sit and take time and listen to you and be responsive. I'd recommend MUSC to anyone."

While lung cancer affects less than one person per 100,000 in her age group in the U.S., Bulak hopes her story will serve as a stark reminder that cancer can affect anyone at any time. She encourages other





young adults to be proactive in their health and to speak up when something seems "off."

"It's certainly important to raise awareness. I'm stage 4, and I didn't even feel that bad. I kind of ignored my symptoms. I had a cough for four months. I let the antibiotics go through my system, and then I would wait a couple of weeks. Then I would get busy rather than realizing things hadn't improved and that I should call my doctor. It takes one second. I wish I was a little more aggressive about checking in

with him," said Bulak. "My advice would be to go to the doctor if you have any symptoms. Don't feel stupid. Listen to your body, and take time for yourself."

Trusting her care team with the things that are outside of her control has also brought her comfort.

"Finding a way to accept what's happening has been helpful," said Bulak. "I understand that I'm sick and that there's nothing I can personally do better than what the Hollings Cancer Center can do for me."

PANDEMIC Continued from Page One

can continue to spread. Three or four days pass, and they're really infectious but they're not feeling bad, so they accidentally spread it to others, and the pattern continues. It takes about two

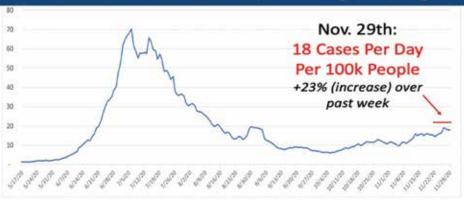


Sweat

weeks to start showing up in the data. We'll be watching what will happen next week."

However, Sweat said to keep in mind that while Tri-county totals have gone up, the overall number is still relatively low at 18 cases per day per 100,000 people in Berkeley, Charleston and Dorchester counties combined. To put that in perspective, the national average was almost 50 daily cases per 100,000

Daily new cases per 100,000 population: Charleston area 7-day rolling average



While the Tri-county area is nowhere near its July COVID-19 peak, the number of cases is on the rise.

people as of Dec. 3. "We're at the bottom of the heap — in a good way. It's kind of remarkable."

Mother Nature may be a key factor. While the Tri-county area has had a few chilly days lately, overall it hasn't gotten

very cold yet. That means people have been able to spend time outside, which is considered safer, and open windows when they're inside. But as the weather cools, we'll head indoors and turn on heaters, which dry out the air and may

Photo by Sarah Pack

Kelly Warren receives the first of a two-part COVID-19 trial vaccine.

VACCINE Continued from Page Two

side effects or risks. I'm really hoping I receive the real shot, but we will see.

My next stop was the most dreaded part – the nasal swab. We went to the drive-up testing location outside of the CSB, where I took a seat and clinched my hands. Once my brain was finished being scraped, and I dried my watering eyes, it was back upstairs for the next

After spending more time on paperwork, one of the nurses began taking several blood samples. Fortunately, I donate blood frequently and have never been too scared of needles, so this part was a breeze. They gave me the option of opting in to the genomics project, so I figured, sure!

Why not? If I'm going to be a guinea pig and try to help further research, I might as well go all in! After all the blood collections were done, it was time for the final step — the shot.

We went to the last stop, where I was met by two nurses in full PPE. They again reviewed some final information, like what I should expect from the vaccine versus the placebo, then it was time for the stick. I immediately felt it, similar to the flu

After receiving the injection, I had to wait around for 15 minutes to see if I would have an adverse reaction. I didn't, so I was soon out the door to return home and to work.

Over the next two weeks, I'll complete a daily digital diary, tracking my reaction. At the end of two weeks, I return for a follow-up appointment. I return at 45 days for another injection and follow-up. The whole trial is scheduled to last two years, but if there's anything 2020 has taught us it's flexibility!

And so, now we wait and see what happens.

help coronavirus particles evaporate quickly and become aerosolized - not a good combination.

Meanwhile, Sweat's team is tracking two COVID clusters in other parts of the country. "One is the West Coast - California, Oregon and Washington state are all having increases. The second one is in the Northeast - Virginia, Pennsylvania, Delaware, West Virginia, New York and DC are seeing an uptick."

That's leading to big national numbers. "Yesterday, for the first time, there were over 200,000 people diagnosed. That's really bad. I remember when it passed a 100,000, and it wasn't even that long ago," Sweat said.

"It's creating real stresses on the health care delivery system. I don't think space and beds are necessarily the problem, because there can fairly easily expand into other places and even make field hospitals. But there's a massive shortage of staff and a lot of burnout among nurses and respiratory therapists and the ambulance drivers. Across the board, it's taken a toll."

But a surge is not inevitable in the Tricounty area, Sweat said. "If people would wear a mask, keep their distance and avoid indoor gatherings, this could all go away. But I think people are developing an overly simplistic view of what will protect them."

For example: "I'm inside, but we're not going to be close to one another, therefore it's okay. And I definitely have witnessed that with people. Um, so that doesn't work," Sweat has heard people

He also worries the general public is mixed up about testing. Testing is important in terms of identifying sick people and tracking the virus' spread, but it's not a free pass.

"I've heard people I know say, 'My grandkids are coming for the holidays, but they all tested negative' - and think they're safe," Sweat said.

"It's not the kind of protection that people think it is. Somebody could get infected on the way, or they could have been infected at the time they got the test, but they hadn't had the virus long enough to test positive."

And keep in mind that the coronavirus spreads easily, Sweat said. "Our numbers could change really quickly."