## MUSC CATALYST News

**JANUARY 14, 2022** 

MEDICAL UNIVERSITY OF SOUTH CAROLINA

VOL. 37, NO. 27

# Charleston sees 'explosion of cases' blowing past COVID growth estimates

#### By Helen Adams

adamshel@musc.edu

As COVID cases hit a new pandemic high of 380 confirmed infections per 100,000 people in the Charleston Tri-county area on Jan. 9, public health scientist Michael Sweat, Ph.D., said even more cases are probably going undetected. "I think a lot of people aren't getting tested. There are difficulties getting tested right now. I just think we're having a massive explosion of cases — even more than I anticipated."

Sweat, a professor in the College of Medicine at MUSC and leader of MUSC's COVID-19 tracking team, described the current spread as out-of-control. "It's just logarithmically growing right now," he said. "We've already gone higher than I thought we might."

But that won't last forever. "I do think based on what we're seeing in other places that it's going to climb to a certain point and then drop, and if it's anything like other places, it will drop quickly. I still think that will happen. The question is when," Sweat said.

"In New York and London and other places up North, they got to 450,500 cases per 100,000 people and peaked.

See Cases on page 2

### Vision to Learn celebrates launch in Charleston County



Photo by Sarah Pack

Vision To Learn founder Austin Beutner grins at Dynasty Witherspoon as she tries on her glasses.

#### By Leslie Cantu

cantul@musc.edu

By the time Charleston Mayor John Tecklenburg reached seventh grade, he was coming home from school every day complaining of horrible headaches. Eventually, his parents took him for an eye exam, and Tecklenburg got his first pair of glasses.

"I could not believe that from my normal position in the back row of the classroom that I could actually clearly see what was on the blackboard for the very first time in my life! And my headaches immediately went away," Tecklenburg said Monday to a group of Stono Park Elementary students gathered to receive their first pairs of glasses from national nonprofit Vision To Learn.

Supporters of the nonprofit's mission to ensure that

students, especially those from low-income families with less access to eye care, get the glasses they need to see clearly were gathered to cheer on the children.

"Your future will be brighter as you are able to put on the glasses you need to see your homework, to see the board and to do the things that will make you the most amazing leaders," U.S. Sen. Tim Scott told the children. "You can do anything you want to do in life. I hope you remember just one thing — dream really big dreams, and your glasses will help you see a better future."

Scott, too, showed the children the glasses that he wears to do his work.

Vision To Learn was started in 2012. Founder Austin Beutner realized that one in four children needs assistance to see. He figured that providing children with an eye exam and,

See Vision on page 12

4

Shortages, silver linings Q&A provides COVID insights.



MRI in an ambulance? Team tests concept to improve stroke care.

- 5 Meet Keith Tormey
- 7 OurDay update
- **10** Well-Being

CASES Continued from Page One

But we may go higher. Miami right now is at 581 cases per 100,000 people. Maybe it'll go to 600 here. I hope not."

Sweat said South Carolina's relatively low vaccination rate - just over half of all eligible residents are fully vaccinated may be a key factor. "I actually think we will have a peak relatively soon



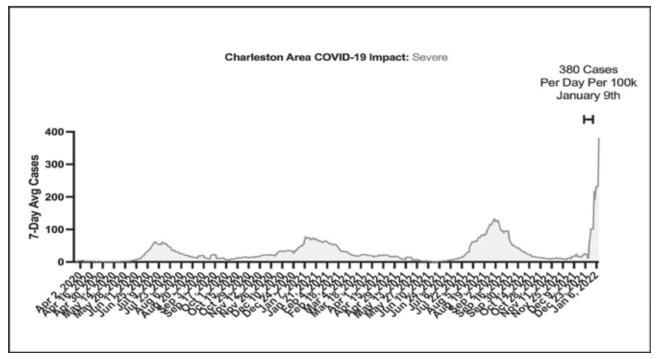
**Sweat** 

 if I had to guess, in the next couple of weeks. When you have this kind of growth, it's spreading like wildfire and it will burn itself out. It'll infect so many people all at once that it won't have anywhere else to go."

While Omicron doesn't cause as high a percentage of infected people to be hospitalized as the Delta variant did, Omicron is reaching so many people that it's still driving the number of hospitalized people close to the previous pandemic peak at MUSC Health.

The Centers for Disease Control and Prevention says vaccines are highly effective at keeping people from getting severely ill and recommends boosters for people who are fully vaccinated. He said some people are missing that message.

"People keep saying, 'This is mild,' or, 'This is milder than Delta.' That's creating some misperceptions. I don't want to be an alarmist, but I don't think people are interpreting this right. Some



Graphic Provided

The MUSC COVID-19 tracking team is following the Omicron-driven wave, the highest of the pandemic. The team's leader predicts it could peak in a few weeks.

people get really sick. At the societal level, it's leading to huge numbers of people being absent, which is going to disrupt our economy and services. And it's really creating a problem in the hospitals. And it's going to get worse," Sweat said.

Sweat, who's also an adjunct professor at the Johns Hopkins Bloomberg School of Public Health and a former research scientist with the Centers for Disease Control and Prevention, called the situation serious. "There are a lot of unknowns. How much long COVID will we see from this? We know from other variants that a lot of people get long

"You get variants when you have high transmission rates – and we've never seen such high transmission rates. So we could have another variant. The more we can suppress the virus, the better it is for everybody."

Michael Sweat, Ph.D.

COVID. We also don't know what the mortality is going look like. It's happening so fast; we don't know these impacts. So I just don't think people ought to assume it's this benign thing. And also, we don't know whether this will lead to herd immunity. It may not," Sweat said.

"And history is showing us that other variants are likely. You get variants when you have high transmission rates – and we've never seen such high transmission rates. So we could have another variant. The more we can suppress the virus, the better it is for everybody."

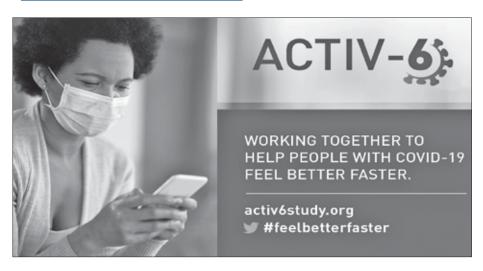
**Editorial Office** MUSC Office of Public Affairs

& Media Relations, 135 Cannon Street, Suite 403C, Charleston, S.C., 29425

843-792-4107 Fax: 843-792-6723

Editor: Cindy Abole catalyst@musc.edu

The MUSC Catalyst News is published bimonthly. Paid advertisements, which do not represent an endorsement by MUSC or the state of South Carolina, are handled by Island Publications Inc., Moultrie News, 134 Columbus St., Charleston, S.C., 843-958-7480, 958-7384, 958-7488 or 937-7489. E-mail: advertising@ moultrienews.com.



## New treatments, clinical trials at Hollings offer hope to cervical cancer patients

By Josh Birch

birchj@musc.edu

It's a new era for cervical cancer treatment.

That's the message Brian Orr, M.D., an MUSC Hollings Cancer Center gynecologic oncologist and researcher, spreads to patients and fellow doctors, especially as a new year kicks off. January is National Cervical Cancer Awareness Month, and Orr is encouraged about the progress being made in treating cervical cancer.

Over the last few decades there had been very few advances in new treatment options for cervical cancer — but now, this is an area of rapid change. "For the past couple of years, it seems like at every national meeting I attend, there is a new cervical cancer treatment that has promising potential in improving patient care and outcome," Orr said. "With so many new treatments and clinical trials ongoing, it's important to come to a place like Hollings where we can provide patients access to these cutting-edge therapies and trials."

The first major change to treatment in cervical cancer was the incorporation of immunotherapy in 2018 and 2019. "The response to immunotherapy is different than chemotherapy," he said. "It can be quite dramatic and long-lasting when patients respond well."

Though these early immunotherapy studies provided hope for some patients, only around 13% of patients had responses. "The challenge we now face is how can we convert the majority of patients to also have good responses?"

One avenue that has yielded positive results in patients is the combining of immunotherapy with existing chemotherapy regiments. In October of 2021, the highly anticipated KEYNOTE-826 trial confirmed that there was a survival benefit of adding

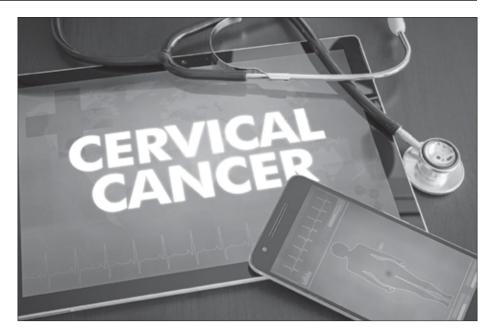
immunotherapy in the form of a drug called Pembrolizumab to chemotherapy for patients with persistent, recurrent or metastatic cancer. The discovery completely changed how doctors could initially treat these patients.

Orr said that while the findings are encouraging, they don't necessarily apply to the subset of cervical cancer patients who are diagnosed with early-stage disease who don't require chemotherapy.

That is one of the reasons Hollings is enrolling patients in an ongoing trial that seeks to answer the question of whether adding immunotherapy to the radiation also improves outcomes for patients. "A significant number of patients who need radiation but not chemotherapy fall into this treatment scenario," Orr said. "We are excited to offer this trial to our patients, given the recent success of immunotherapy for patients with advanced cervical cancer."

Orr said new research is also providing hope to cervical cancer patients who have a recurrence after chemotherapy. Recently, research published in the Journal of Clinical Oncology described the benefits found in combining the dual checkpoint immunotherapy drugs balstilimab and zalifrelimab for patients with recurrent or metastatic cancer who progressed after chemotherapy. "This provides yet another advancement that will be an option for patients who did not get immunotherapy with their initial chemotherapy."

Orr said advancements have also been made in targeted therapies for cervical cancer. In the fall of 2021, the FDA approved a more targeted treatment approach using a drug called tisotumab in adults with recurring or metastatic cervical cancer who are on, or completed, chemotherapy treatments. Since being approved by the FDA in September, two patients at Hollings have



Adobe Stock Image

#### January is National Cervical Cancer Awareness Month.

received treatment using tisotumab.

"Tisotumab, otherwise known as Tivdak, is an antibody drug conjugant that targets specific proteins on the surface of cervical cancer cells," Orr said. "Put simply, the drug targets the receptor on the cell, and once that drug binds, the drug is taken into the tumor cell where it will release toxic particles, killing it. It is a very targeted therapy that is a new approach to cervical cancer that only kills the cancerous cells while leaving healthy cells around it alone."

Orr said results of clinical trials testing immunotherapies and targeted therapies to treat cervical cancer are extremely promising and will likely result in a new wave of treatments being approved in the coming years. As a part of this wave of new clinical trials, Orr said Hollings will begin enrolling patients in several new promising trials in the coming months.

He also explained that advancements in research and treatment don't negate the benefit of the already approved human papillomavirus (HPV) vaccine. "The HPV vaccine is one of the best plans we have to prevent a number of cancers, not just cervical cancer but also other types, including head and neck cancer; cancer of the vagina, vulva and penis; esophageal cancer; and anal cancer."

As the only National Cancer Institutedesignated cancer center in South Carolina, Hollings is on a mission to improve HPV vaccination rates around the state. In 2021, Hollings launched its new mini-mobile HPV vaccination van that travels to rural and medically underserved communities to provide the HPV vaccine.

Orr said cervical cancer is the only form of HPV-related cancer that has an available prevention screening. Pap smears are used to detect precancer and early cancer, making the prevention of the other HPV-related cancers that much more important.

"Even the existing screening for cervical cancer isn't perfect. It is rare, but I still see young women with advanced cervical cancer who have seemingly done everything right and went to their doctors for routine screening. That is why I think it is so important to get the HPV vaccine to bring that risk of cancer as close to zero as possible."

Orr said it is also important for women to pay attention to their bodies and seek medical attention for anything they may be worried about. Symptoms of cervical cancer to be aware of include abnormal bleeding, bleeding after intercourse, changes in discharge and pelvic pain. "The big takeaway is to pay attention to new or different changes in your health. It's better to be certain than to ignore signals your body is trying to send to you."

### Supply shortages, silver linings and other things you need to know about COVID

By Bryce Donovan

donovanb@musc.edu

Sure, we all hated them in elementary school, but it turns out that percentages might just be our friend when it comes to gauging the severity of COVID.

How so? Well, currently the benchmark for measuring the health of our nation comes from looking at total number of cases of virus — namely, how many people at any given time have COVID. Slowly, however, there is a shift toward focusing on hospitalization numbers since it appears that Omicron might not be as severe as previous variants. The only problem with this metric is that Omicron is so much more transmissible than Delta that the total number of infections is approaching record highs, which, in turn, is then reflected in the number of patients who are being hospitalized.

"I think our peak number for COVID inpatients across our system was upward of 260 back in July of last year," said Danielle Scheurer, M.D., MUSC Health

System chief quality officer, who oversees all things COVID for the hospital system. "But even though we are approaching those numbers right now, it doesn't feel as catastrophic because there are fewer of those people in the ICU. And on average, patients are a lot less sick."

So here's where that fourth grade math finally goes to good use: If the number of cases is going up but the severity is down, looking at the percentage of people who contract COVID — and get really sick — is as low as it's ever been.

"Right now, I suspect that the volume of hospitalizations will continue to be on par with some of our highest numbers, but the percentage of who is truly sick is going to be far lower," Scheurer said.

With the ever-changing COVID landscape, we are periodically checking in with Scheurer to ask her the most pertinent questions that are hanging in the balance.

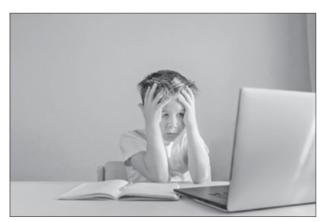


Photo by iStock

Yes, the 10-year-old in all of us cringes when it comes to having to talk about percentages, but these days, it's probably the best way to measure our nation's health.

### What you need to know about COVID-19 - Part 11

Danielle Scheurer, M.D., MUSC Health System's chief quality officer, weighs in on issues related to COVID-19 and vaccinations.

## Q. What are your feelings on the new Centers for Disease Control and Prevention (CDC) guidelines that reduced quarantine time for health care providers?

A. So far, there are pluses and minuses. Now that they've given us a little more flexibility around when our employees can return to work after a positive test, it's going to be less disruptive than it used to be, but we do have to make sure our team members are not working or returning sick. And if they're just close contact — assuming they've received their boosters — there is no disruption to work at all since they don't need to quarantine or test. So what we used to think of as a major disruption is now — assuming there are no symptoms or the symptoms are mild — at most, a five-day inconvenience. It's a very different mindset now.

## Q. I'm reading about how lots of health care providers are running low on supplies — monoclonal antibodies and antiviral pills in particular. Is that true for MUSC Health, and how does that affect how we handle cases?

A. Most of the monoclonal antibody treatments that worked great for Delta don't seem to be working for Omicron. In fact, the only one that really works is sotrovimab, and it's in limited supply. It's hard to get anywhere, including here. Because of that, the National Institutes of Health (NIH) has come up with tiers of who should receive it. We follow those guidelines. Right now, we are only treating the top tier of COVID patients, people who are very susceptible to progressing to serious illness, with sotrovimab. As for the oral antivirals, there are two kinds, and Paxlovid is the really effective one. Not just effective — pretty incredible. I've read that it reduces the likelihood of hospitalization or death by as much as 90%. The problem is it's in very short supply. As an example, the first distribution to South Carolina was 800 courses. For the whole state. Just for perspective, at that same time, South Carolina had 50,000 new COVID diagnoses last week.

## Q. Let's say that you're lucky enough to have access to one of the antiviral pills. What's the process?

A. In an ideal world, you get tested. You get results. If you're positive, and in the high-risk category, your doctor writes you a prescription for the drug. But the problem is there are only eight Walgreens in the state that are getting the drug. So in this volume and with this limited distribution, getting your hands on it right now is a near impossibility.

#### Q. Could Omicron be the catalyst that gets us to herd immunity?

A. It's possible. That is the hope and the potential silver lining here. The only thing that could thwart that is another significant variant. That's really what it always gets back to. The whole vaccine campaign is on a race with the variants. It's just a matter of who's going to win.

#### Q. What do you see in our future as far as boosters go?

A. I think it's going to end up being periodic boosters for the unforeseeable future. We just don't know the frequency.

## Q. I know this is basic, but let's say you feel a little off. You take an at-home test, and it's positive. The rest of your family seems fine. What do you do? Separate? Wear masks? Just be careful? Do your kids have to stay home from school?

A. Actually, that's a really good question. If you're positive, you're supposed to quarantine. But the time is shorter now. For some people, they're going to feel normal at five days. Some are not. And yes, if you're positive, you really should keep your kids home from school. It's hard; I know, but it's the safest move.

Q. If somebody still hasn't gotten the vaccine, is there any reason to think that's going to change at this point?

#### MEET KEITH



**Keith Tormey** 

College and Years at MUSC James B. Edwards College of Dental Medicine; fourth year

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

I believe the only limitation as a student is yourself. Being passionate about your patients, as well as dentistry, really shows that they can make a change in their oral hygiene habits for the better.

#### **Favorite memory**

Attending Clemson football games each week and tailgating with family and friends

#### What inspired you to study at MUSC

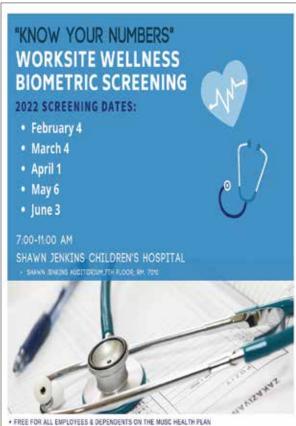
I love the clinical opportunities and experiences MUSC provides.

#### Favorite place in the world

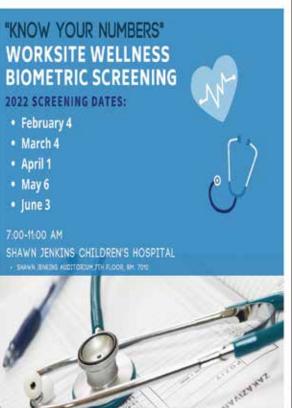
Drogheda, Ireland – it's where my family lives.

#### A 2022 resolution you'll work on

To continue the resolution I made a few years ago: To do one thing each day that challenges me both physically and mentally to become a better, stronger person.



- · QUICK, CONFIDENTIAL & CONVENIENT
- ADDITIONAL LARS & SCREENINGS AVAILABLE
- . EMAIL MUSC-EMPWELL/SMUSC.EDU FOR MORE INFORMATION
- PLEASE NOTE THAT YOU WUST PRE-REGISTER FOR YOUR SCREEN





Hosted By: MUSC Health **Blood Bank Department** 

Scan to make

## "You're Somebody's Type So

171 Ashley Ave (Horseshoe) Charleston, SC 29425

Donate Blood!"

#### 01/18/2022 I 09:00 AM-02:00 PM

To make an appointment, please scan the QR Code and search for the Sponsor Code 7514.

All donors will receive a \$20 eGift card!







The Waring Historical Library presents:

#### 2022 Black History Month Lecture

Featuring Dr. Cherisse Jones-Branch

Dr. Cherisse Jones-Branch, from the Arkansas State University-Jonesboro. Dr. Jones-Branch will present on the topic, "For the Future of Our Race: African Americans and Healthcare in 20th Century South Carolina.\*

Feb. 16 at 6 PM Registration Required More info at: bit.ly/2022BHML



**ABOUT THE COURSE** Orientation The Value Institute is offering a project-based course for MUSC tinical professionals to gain ctice principles in their daily work

learn to develop a PICO question stakeholders to implement recommended practice changes.

plementation of evidence-based

practice in a clinical setting

course is available to both

PROFESSIONALS

REACH US AT: davisam@musc.edu

#### IMPORTANT DATES Registration deadline

February 23, 2022

March 2, 2022 Final Presentation June 22, 2022 OR June 30, 2022

This course includes a project participants will work on throughout the course. MUSC fealth care team members are



## MUSC team demonstrates MRI scan in ambulance

By Leslie Cantu

cantul@musc.edu

Minutes matter when the brain is being deprived of oxygen.

Doctors at MUSC Health's Comprehensive Stroke Center constantly work with their community hospital colleagues on initiatives to cut down the steps that need to happen between the time a stroke patient is wheeled through the ambulance bay until treatment can begin — for example, by developing a TeleEMS program so emergency medical technicians can consult with stroke specialists while inside a patient's home or the back of the ambulance.

Some things still need to happen at the hospital before treatment can begin, though, like scans of the brain to confirm a stroke and determine what type it is.

But a neuroradiologist with her eyes on the stars wondered if a new portable MRI that she hopes to use in space might also be of use to patients in rural areas of South Carolina.

"I realized that if you have a scanner that can be used in extreme environments such as space, it can also be very useful for patients here on Earth," said Donna Roberts, M.D., who studies how zero gravity and microgravity affect astronauts' brains.

To that end, she got together with Christine Holmstedt, D.O., medical director of the Comprehensive Stroke Center; Sami Al Kasab, M.D., associate medical director of the MUSC Health Teleneuroscience Program; and Michael Haschker, manager of telehealth technologies in the MUSC Health Center for Telehealth, to test the idea.

If it were possible to do an MRI scan in the ambulance, then not only would doctors be better prepared when the ambulance arrived, but the stroke specialists could determine whether the patient could be treated at a community hospital or would need to go directly to a specialized stroke center.

Haschker then recruited Lt. Dale Hewitt of Georgetown County Fire/ EMS to help with the demonstration. Hewitt and his wife, Jessica Hewitt, R.N., a nurse leader in the Emergency Department at Tidelands Georgetown Memorial Hospital, were the catalyst for the development of the TeleEMS program, and Dale Hewitt jumped at the chance to volunteer his time driving an ambulance around Charleston while the MUSC team tested whether an MRI scan could be successfully completed in the back of a moving ambulance.

Spoiler alert: It can.

The team used a portable MRI developed by Hyperfine. "Portable" in this case is a relative term. The machine is 1,400 pounds and roughly the size of an office printer turned on its side. But that still makes it smaller than the average MRI machine. It's designed to be wheeled around a hospital to conduct brain scans at the bedside for patients who can't be moved.

"What I was completely impressed by is that it has automatic motion correction," Roberts said. "And so, as we're driving along in the ambulance, we could see that as we bounced over the roads you could see the scanner actually move.

"So the question was, would it still be able to function and acquire diagnostic images? That was the biggest thing that this demonstration showed, that the scanner itself was able to sense the motion and correct that in real time and so the pictures came out crystal clear. We were amazed by how nice the pictures were," she said.

Some areas have started deploying mobile stroke units, which are ambulances with CT scanners, a critical care nurse and a CT technician in addition to a paramedic. While these units have been shown to improve patients' outcomes by decreasing the time to treatment, according to a recent report in the New England Journal of Medicine, they are expensive at \$600,000 to \$1 million per unit, Holmstedt said.

A portable MRI machine would be a fraction of that cost, the team said, and would bring the advantages of MRI scanning.

See MRI on page 10



Photos Provided

Michael Haschker, manager of telehealth technologies, posing in the back of an ambulance, says his job is to use technology to help realize doctors' plans for improving care for patients.



Members of the Facilities and Logistics support teams pitched in to load the MRI, using the lift gate of a supply truck when the researchers realized that the ambulance wasn't level with the loading dock.

## Let's get real about change

Staff Report

An update on the adoption of OurDay, the new cloud-based platform that will improve and integrate MUSC's operational systems.

OurDay is a Workday enterprise resource planning tool, or ERP, that will go live for MUSC in fall of 2022 and has been years in the making. It is designed to bring systems and technology together into a single platform for HR, finance and supply chain activities.

"So," you might ask, "what does this mean for me?" When the system goes live in the fall of this year, it is likely that you will see and experience changes with important foundational work, such as entering time, submitting invoices and running reports. Our Day will connect systems and people in ways they've never

been connected before and improve how we complete daily tasks. Think: I can now do things faster and more efficiently.

"The functionality at the users' fingertips on their phones or laptops will streamline human resource,

payroll, expense reimbursement and financial performance awareness. Like most things good, change is hard. I am excited about this new offering in the making and am very

proud of the three entities collaborating as OneMUSC," said Lisa Goodlett, OurDay executive sponsor and chief financial officer of MUSC Health.

OurDay is one of the first significant outcomes of the OneMUSC strategic plan and marks one of the largest operational changes for our organization.



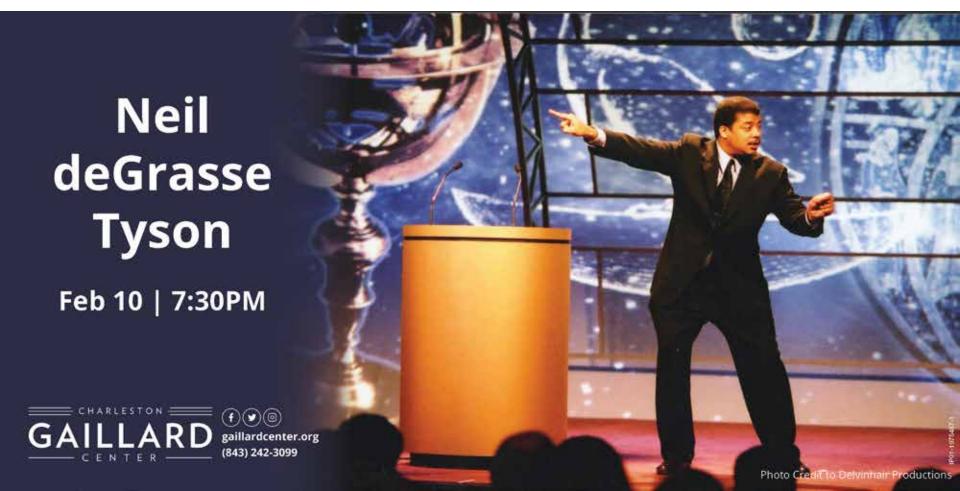
Photo Provided

More than 100 MUSC OurDay project team members came together during summer 2021 to mark the project's kick off. Participants outlined a path and strategy for the multi-year project.

"For me, the toughest part of this project journey is navigating the different stages of change. In my mind, the first stage is the most difficult; the middle can feel chaotic, and the end is what makes it all worth it. We are somewhere between the first two stages," said Shannon

Ravenel, OurDay training, organizational readiness and communications (TORC) team lead and executive director for Innovation and Optimization, MUSC Health Finance.

See OurDay on page 11



## Record year for annual MUSC fundraising event

By Bryce Donovan

donovanb@musc.edu

The pandemic might be testing this country's patience, but it certainly isn't affecting its philanthropy. Over the holidays, a record \$1,863,144 was raised for MUSC as a part of Giving Tuesday.

Created in 2012, Giving Tuesday started with a modest goal: do something good in the world. Since then, the Tuesday following Thanksgiving has grown into a global giving movement and the biggest giving day of the year in the world. In 2017, MUSC got in on the action, and in that year and the subsequent four years, raised nearly \$800,000. This year alone exceeded that cumulative total by more than \$1 million.

"We are humbled by the generosity of this community," said Kate Azizi, vice president for Institutional Advancement.

Even though MUSC is considered a state-funded organization, in reality, less than 4% of its annual budget comes from the government. That's why donations are so critical. All the money raised on Giving Tuesday goes to the MUSC Foundation, a 501(c)(3) nonprofit that has supported MUSC in its lifesaving mission since 1966. This time around, gifts ranged from \$5 up to nearly \$500,000.

More than half a million dollars of the donated money will go to scholarships for MUSC students. The MUSC Alumni Association donated \$450,000, with a portion dedicated to enhancing diversity across MUSC's entire student body. Donors inspired by the generosity of MUSC's alumni gave an additional \$80,000 to a variety of scholarships at MUSC's six colleges.

"Diversity and inclusion are central to our mission and pursuit of excellence," said MUSC President David J. Cole, M.D., FACS, "and increasing scholarship support is critical to reaching this goal. We are grateful to the Alumni Association, our alumni and the

community for making scholarships a priority on Giving Tuesday."

In addition to scholarships, money raised on Giving Tuesday will advance research, enhance patient care and help to meet MUSC's other greatest needs across the enterprise.

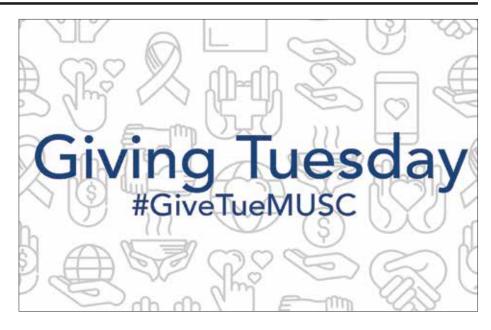
The single largest gift from an individual came from Pam Harrington. The nearly \$500,000 she gave will help to provide emergency care and other medical services to residents of Johns, Kiawah and Seabrook islands. More specifically, it will support the building of the new Sea Islands Medical Pavilion, which will serve those island communities.

Hank and Laurel Greer, who made the largest single gift on Giving Tuesday last year, generously gave again to the MUSC Health Heart and Vascular Center. Their gift of \$250,000 will support the Hank and Laurel Greer Endowed Chair in Electrophysiology. An endowed chair is a prestigious honor and a powerful tool for recruiting and retaining world-renowned leaders in patient care, education and research.

Gifts of all sizes have the power to change what's possible at MUSC. Of the more than 300 gifts the MUSC Foundation received on Giving Tuesday, approximately 95% were less than \$10,000, and 86% were less than \$1,000.

Dozens shared why they gave, on the MUSC Foundation's Giving Tuesday activity page. Here are a few of the highlights:

- ☐ Rodny Chisholm gave in memory of his nephew, Camden Scott Meyer. "Camden will always be in our hearts and prayers, and it's the legacy of his name that helps provide support and services through the College of Health Professions."
- ☐ Heather Mallard, MUSC director of strategic transactions, was happy to contribute on Giving Tuesday. "I'm proud to work at MUSC Health and humbled to be able to support in a small way the work of our front-line heroes in



Donations to MUSC on Giving Tuesday 2021 were nearly \$1.1 million more than in all the previous years combined.

mental health!"

☐ Another donor gave to the Norris lab because of the research they are doing for Ehlers-Danlos Syndrome (EDS), a rare connective tissue disorder that can take years to diagnose. In July of last year, then-Miss America Camille Schrier,

who has EDS herself, brought national attention to the work Russell "Chip" Norris, Ph.D., and his team were doing in the lab. "Thank you and please keep it up!" the donor wrote. "You help us feel

See **GIVING** on page 11



PINE STRAW • ROCK

ID03-1010637-1

## Quarterly MUSC Innovator Awards recognize excellence

Staff Report

The Office of Innovation is proud to recognize the following individuals and teams as the December 2021 recipients of the "I am an MUSC Innovator" award.

**Dusti Annan Coultas, Ed.D.,** associate professor, Office of Interprofessional Initiatives, and **Kimberly Kascak**, assistant professor, Office of Interprofessional Initiatives

Problem — Every January at MUSC, over 1,600 students, faculty and staff members come together to participate in an annual event for all first and second-year students. The event is called Interprofessional Day and is designed to develop further a culture of collaborative teamwork and improve patient care and safety. Due to meeting protocols during the pandemic, Interprofessional Day in January 2021 needed to be completely revised for a virtual format.

Impact – A new curriculum was developed in a virtual format to include 80 small–group sessions, led by trained facilitators, occurring simultaneously via web conferencing systems. In January of 2022, Interprofessional Day will also occur virtually. The curriculum continues to evolve to meet the interests of students as we learn how best to teach teamwork in an online format.

Acknowledgements — Interprofessional Day could not occur without MUSC faculty and staff members volunteering their time to help with the event. Almost 100 volunteer facilitators are needed to lead sessions. In addition to leading the sessions, volunteer facilitators are required to attend orientations and become comfortable with the technology. This event is true teamwork in action, and we wish to recognize all of the individuals who volunteered in the past and will do so again this coming January.

Katherine S. Haltiwanger, Legislative and Board of Trustees liaison – Government Affairs Department Problem — Being based in Columbia, I saw the need for MUSC to have a first–ever presence in the Midlands to help our state battle the challenges of COVID-19. With the support and encouragement of Patrick Cawley, M.D., I began looking for clinical space that could be easily adapted into a vaccine facility. Impact — We established the MUSC Health Henderson Street Vaccine Clinic in January 2021, a site that was handicap accessible and conveniently located for citizens who sought the vaccine and testing. Over 11 months, this location has vaccinated more than 6,000 people.

Acknowledgements — The development of this clinic involved numerous MUSC Health team members who contributed on many fronts and continue to do so today. This undertaking has been very timely, since MUSC Health acquired two hospitals in Columbia in August. For many people, this accessibility to COVID-19 vaccines was their first introduction to MUSC Health. I know that they will be forever grateful that MUSC came to Columbia to help to fight the pandemic.

**Justin Roselli,** licensed practical nurse - Department of Neurology

Problem — Our clinic uses Microsoft Teams to communicate effectively with one another. The most important aspect of this application comes in handy when we have any emergency issues regarding a patient, such as when rapid response is needed. If we are in the middle of an emergency and need assistance, we can easily send a message to our peers asking for help. This is an important aspect because this is one way we can ensure that our patients get the proper and timely care they deserve.

Impact — My current innovation is to provide the proper care to our patients and our clinic as it is

needed. As a new grad, I am eager to learn new things daily and help my peers, patients and doctors in the best way I can. Finding innovative ways to employ all of the tools and applications available ensures the best care for our patients.

Acknowledgements — Noelle Teague, R.N. Noelle and I work the stroke, neuromuscular, general and dementia in-basket messages. As a new nurse, I have many questions and Noelle is very helpful and knowledgeable with the questions I have.

## Save the date: 2022 Innovation Week set for April 25 through 29

Innovation Week provides the opportunity to learn from colleagues at MUSC and external experts, get inspired and find out how anyone can innovate. All MUSC employees are eligible to submit ideas for the Innovation Week poster session.

The deadline to submit was Dec. 3 for MUSC Health and MUSCP employees who took the Innovation pillar goal. Those who did not take this goal should submit their ideas by Feb. 11. Upon review by leadership, the top ideas will receive funding of up to \$15,000.



## Healthy habits to boost

## your immune system

MUSC Health & Well-Being

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



The Centers for Disease Control and Prevention provides guidance on the best ways to protect ourselves, and others, against the flu and colds. Practicing daily healthy habits is one of the CDC's recommendations and may help to boost your immune system to possibly prevent, shorten the duration and/or lessen the severity of viruses.

- ☐ Managing your stress shouldn't be put into an "all or none" category; stress is a part of life and should be viewed as something you can manage instead of avoid. Any techniques you can put into your routine to lessen or help to manage your stressors can be beneficial. Some examples might include taking a five-minute walk break, listening to your favorite calming melody, practicing a breathing technique or writing your thoughts or to-do's down for the day. Techniques can be simple or more intricate finding what works for you is key.
- ☐ Sleep has always been part of a healthy package, but studies also suggest that adequate sleep helps to form healthy, well-functioning T-cells, which help your body to fight against viruses. Adults should aim for seven to nine hours each night. If you're struggling with adequate sleep, talk with your doctor for suggestions.
- ☐ Staying adequately hydrated helps your body to transport nutrients to your organs and cells, adding to nourishment. Adequate hydration also helps your body's natural detoxification processes take place.
- ☐ Eating regularly and balanced is part of the healthy immune system package. Aim for three meals and one to two snacks to nourish your body throughout the day and try to include several food groups at each sitting. Unlike messages you may have heard, evidence tells us

that specific nutrients won't prevent viruses, but they may shorten durations and lessen your symptoms. Antioxidants like vitamins A and C protect your cells from free radicals and also play a role in the prevention of chronic diseases like heart disease and cancers. Vitamin A is found in carrots, sweet potatoes, spinach, mangoes and tomatoes. Vitamin C is found in citrus fruits, berries, melons, bell peppers, broccoli and tomatoes. Vitamin D is also important for a healthy immune system but sparse in foods other than milk, eggs and fatty fish; you may need to seek out vitamin D fortified foods like orange juice. Zinc is a beneficial mineral found in most of your protein foods, but if you're focused on plant-based eating, you'll also find it in beans, nuts and tofu. So, what's on tonight's immune-boosting dinner plate? A seared salmon filet served with farro; a side spinach salad with carrot shreds, sunflower seeds and your favorite oil-based dressing; followed by a nice bowl of fresh fruit for dessert.

Laura Nance is a registered and licensed dietitian nutritionist with the MUSC Office of Health Promotion and contributed to this column.

#### 2022 Black History Intercollegiate Consortium (BHIC) MLK Celebration slated for Jan. 18

An MUSC team member who embodies the ideals of Martin Luther King Jr. will receive the MUSC MLK Humanitarian Award in mid-January. That person will be recognized at the 2022 BHIC MLK Celebration at Charleston Southern University on Jan. 18. Email diversity@musc.edu for details.



Neurology resident Dr. Mark Rosenberg at the loading dock with the Hyperfine MRI.

MRI Continued from Page Six

MRI, unlike CT, doesn't use radiation, so there would be no radiation exposure to the patient or the first responders, Al Kasab said. An MRI is also a more accurate diagnostic tool for stroke, he said. It can show smaller blockages, and, in the case of strokes caused by blood clots, it would allow doctors to determine whether a patient needed the clot-busting drug tPA, which can be administered at community hospitals, or a thrombectomy, a surgical procedure to remove the clot.

Al Kasab said that the current triage system calls for patients to first go to a tPA-capable center and receive tPA. But although tPA works well for small blood clots, it's much less likely to work on large clots.

"So, if you can imagine, if a patient has a large clot in the brain, they go to the tPA center and get tPA and then transfer here. By the time they get here, there is a very good chance that those patients will no longer be eligible for thrombectomy because there's already so much damage," he said.

Reducing the time before treatment begins isn't simply a matter of reducing the number of stroke deaths in South Carolina. It's also about reducing the severity of disabilities for those who survive.

"We know for every 15-minute reduction in 'door-to-needle time'

there's significant improvement in patient outcomes, including reduction in disabilities and reduction in mortality," Holmstedt said.

Haschker said that reducing the time to treatment is especially important for those who live in rural areas.

"South Carolina is a leader in stroke, but we're also a leader in stroke care. We want to have one of the most advanced stroke care programs in the United States, and we have a lot of data, so we know that a lot of care can be delivered when the patient is in the ambulance," he said.

The MUSC team will be writing up a report of their practical demonstration. They think it's the first MRI scan performed in an ambulance.

"We think we're the first — but we know we're the first to ever do an MRI scan on the Cooper River Bridge," Haschker joked.

The team is also grateful to staff members of the facilities and supply teams who helped to load the machine into the ambulance. Haschker envisions that if this idea were to become a reality, there would be ambulances equipped with MRI scanners strategically situated so that they could respond to potential stroke calls.

In fact, Holmstedt hopes to run a pilot program in Charleston County to determine the feasibility and potential lifetime cost savings per patient.

#### OURDAY Continued from Page Seven

The project is halfway through its two-year implementation schedule and will "go live" in October of 2022. The OurDay project team, which comprises more than 300 team members, has recently completed the "Imagine" phase, where MUSC subject matter experts discussed how to design the OurDay system, simplify and improve operational processes and identify areas of change.

Mike McGinnis, OurDay steering committee chair and assistant provost for Finance and Administration, is proud of the work that has been done to date. "We have done great work so far, and there is a lot of hard work still to come. We have an outstanding team that is dedicated to the project's success. It has been exciting to see how the MUSC enterprise has come together to work collaboratively to ensure its success."

Some employees have embraced the role of change champions —

communicators and advocates who will serve as conduits to share information across departments and areas.

Jennifer Nall, associate dean and chief of staff, College of Medicine, is one of nearly 50 change champions that meets monthly to troubleshoot any issues around messaging, roadblocks or anticipated areas that need attention.

"I'm excited that MUSC has chosen to invest in the future of our organization in a meaningful way with the implementation of OurDay across the enterprise. Change on this scale can seem overwhelming at times, but I am encouraged by the high level of engagement to ensure OurDay meets the needs of the organization and our employees," said Nall.

Now through the fall, the project will continue to move through the "Deliver" phase. During this time, the system will be configured, tested, refined and shared with the enterprise via communications and training.

Another OurDay steering committee member, Stewart Mixon, chief operating officer, MUSC, sees light at the end of a very long tunnel, "I have been working toward a new enterprise resource planning (ERP) platform my entire career at MUSC — almost 20 years. It is something that we have needed for a very long time, but due to many factors, we just couldn't make it happen. Given the OneMUSC strategic initiative, and the support of executive leaders throughout the enterprise, the timing is right to see this endeavor come to fruition."

OurDay will replace nearly 40 disparate systems and improve technology in the areas of finance, human resources and supply chain. To that end, MUSC has partnered with Deloitte, which has worked with numerous peer institutions to implement a similar platform. Deloitte is integrated seamlessly with the MUSC OurDay project team, providing necessary counsel and best practices along the way.

Project team members recognize that changes to our processes and systems will have a big impact on care team members, faculty and staff alike. These changes will be shared in more detail with the MUSC community as they are finalized, beginning this spring. You can expect regular newsletters, meetings, intranet updates and more to learn about OurDay and share questions or feedback as we move forward.

"The key to OurDay's success is collaboration. It is up to each of us to work together and embrace the change in order to realize the end result. The implementation of OurDay is our pathway to transform the way we work, collaborate with one another and connect to MUSC's mission," said Ravenel.

For information, visit https:// horseshoe.musc.edu/everyone/ ourday or send questions via email to ourdayquestions@musc.edu.

#### COVID Continued from Page Four

A. I think everyone's experience is different. People who have been directly affected, maybe a loved one got really sick, maybe they change their minds. But for most people who haven't by now, this wave isn't going to change their minds.

Q. This is a sticky topic, but do you think closing schools is a good idea, or is it potentially more damaging? A. I think it used to be more controversial. Honestly, I think we've gotten to the point where we all need just to learn to coexist with COVID. Now we don't want to be reckless; we just need to be smart about it. Limit the numbers in the classrooms - stuff like that. We've had two years to figure out how to handle this, so we should be able to keep our schools open at this point. And this can be applied to the broader world. For instance, I'm not sure lockdowns achieve anything in the long-run. They might bring numbers down in the short term, but I feel like you're just putting off the problem.

## Q. Do you feel like we're finally kind of figuring out COVID?

A. For the most part, yes. But on the other hand — and I know people really don't want to hear this — we do have cases of very severe COVID that we still can't explain. For instance, I'm taking care of a patient who has been at MUSC since October. He was a perfectly healthy young guy with no underlying health conditions. He wasn't vaccinated, but why it has hit him so hard is a total mystery. His life is devastated. He'll never be functionally independent again. And we can't understand why.

\*\*Have a question you'd like answered? Email it to donovanb@musc.edu with the subject line "Vaccine Q."

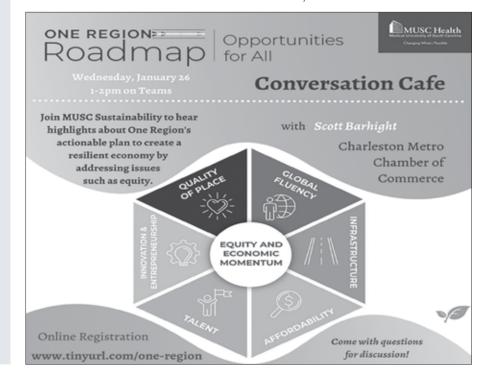
### GIVING Continued from Page Eight

seen and heard."

Azizi wants donors to know just how meaningful their gifts are. "Your incredible support of MUSC's mission will make a profound impact on countless lives," she said. "We can't thank you enough."

## Virtual MLK Jr. Noon Day Lecture scheduled for Jan. 18

The 2022 annual Martin Luther King Jr. Noon Day Lecture will be virtual and will feature Zachary Brewster from 12 to 1 p.m. via Microsoft Teams. Participants can register via MUSC MyQuest or email diversity@musc.edu.



#### VISION Continued from Page One

if necessary, glasses, both at no charge, would help them with their schoolwork and, in turn, with their self-esteem.

Johns Hopkins researchers recently published a study looking at the results of the program in Baltimore between 2016 and 2019. They concluded that students gained the equivalent of two to four months of additional education when they received glasses. The lowest-performing students and students in special education classes gained four to six months of learning — simply by being able to see.

That, Beutner said, is the "miracle" of glasses.

It was that miracle that moved Charlestonian Henry Blackford III to pursue bringing the program to South Carolina. After three years of behind-the-scenes work, the program launched last fall in Title I schools in the Charleston County School District.

MUSC Health, through MUSC Children's Health and the MUSC Health Storm Eye Institute, provided funds to help to outfit a mobile exam van.

Children at participating schools first go through a screening process. From there, children who are flagged for follow-up get an eye exam in the van, and those who need glasses can choose their frames. Children in need of additional eye care receive referrals to multiple providers around town so that their parents can choose a doctor.



Photo by Sarah Pack

## Charleston Mayor John Tecklenburg reads a proclamation announcing Jan. 10 as Vision To Learn Day.

So far, Vision To Learn has screened 5,739 children and anticipates providing 1,700 pairs of glasses this school year.

CCSD chief operating officer Jeff Borowy particularly commended the district's nursing staff, who have coordinated the program during the pandemic while also taking on the tasks of contract tracing and vaccination.

Monday's event wasn't the first distribution of glasses in the district. Children at other schools have already received their glasses and had that same revelation that Tecklenburg did when he got his first pair.

"I cannot believe I have been living my whole life in this blur!" exclaimed one Pinehurst Elementary third grader upon receiving her new glasses.

## **BUY SMARTER - KNOW FOR SURE**



## Experience Matters Our Company Never Represents

The Seller - We're Always On The Side Of The Buyer.

David Kent 26 years 843.606.0824 David@BuyersAgent.Net www.DavidKent.Net Charlotte Lemon 23 years 843.900.1322 Charlotte@BuyersAgent.Net www.CharlotteLemon.Net



