

ALL HEART — RECOGNIZING NATIONAL WEAR RED DAY



MUSC Health employees from the Heart & Vascular Center gathered at Ashley River Tower.



Photos Provided

Care team members from the pediatric heart center at the MUSC Shawn Jenkins Children's Hospital and Pearl Tourville Women's Pavilion linked hands on Feb. 5 to commemorate National Wear Red Day to support women's heart health throughout February.

Latest from MUSC COVID tracking team shows Tri-county dip, some increases

By HELEN ADAMS

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As the United States records a stunning 43% decrease in new COVID cases over the two-week period that ended Feb. 16, the Charleston Tri-county area is showing a decline as well — although a less dramatic one.

The latest update from the MUSC COVID-19 Epidemiology Intelligence Project shows that Berkeley, Charleston and Dorchester counties combined saw a 5% decrease in new COVID-19 cases during the week that ended Feb. 15, compared with the week before.

And the number of new cases was 2,958, compared with 3,100 the previous week.

"That's great," said Michael Sweat, Ph.D., the leader of the tracking team at MUSC. "But keep in mind, we're still at a very high rate of daily infections."

You don't have to look far to see that the threat of COVID-19 is still very real. Two other parts of South



Sweat

Carolina that Sweat's team monitors closely, Florence and Lancaster, saw increases in new cases in the tracking team's latest update. Florence was up 17%, Lancaster 4%.

Lancaster also continues to be a source of worry when it comes to its hospital's ability to treat critically ill patients without resorting to crisis standards. The MUSC team's update shows that about 97% of intensive care unit beds in the Lancaster area are full.

But Sweat said that number is less troubling than it sounds because there are so few intensive care unit beds in Lancaster to begin with, and the hospital is able to

See **TRACKING** on page 2

6

Values in Action

Awards underscore commitment to excellence.

7

Vaccine update

Latest column sheds light on supplies, distribution.

3 Health and Well-Being

5 Meet Brandie Reynolds, M.D.

10 BOT Update

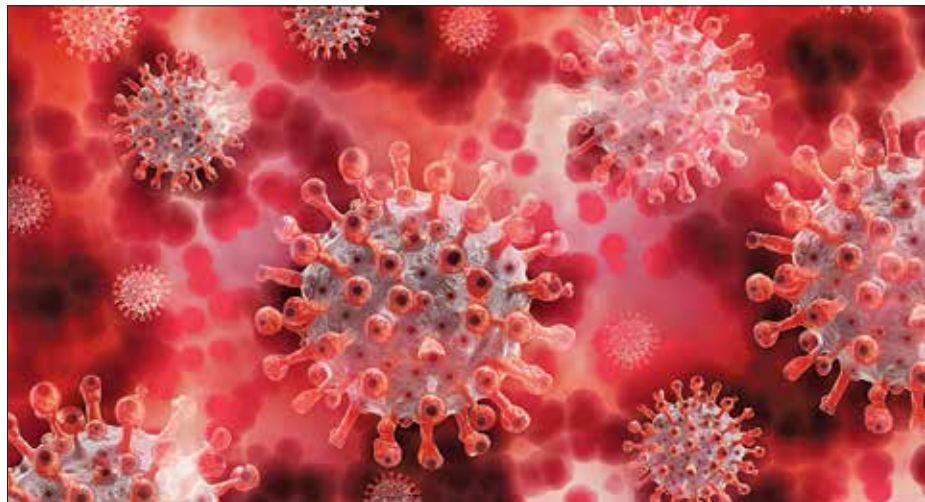


Image by Pixabay

Illustration of the coronavirus that causes the illness COVID-19.

TRACKING *Continued from Page One*

work with the MUSC Health hospital in Florence to shift patients there if needed.

Meanwhile, the big picture for hospitals is looking better and better. At the start of the pandemic, almost 98% of the people who tested positive for COVID ended up in the hospital, Sweat said. Hospital systems, including MUSC Health, got ready to turn nonclinical areas, such as the Wellness Center, into hospital bed space.

They're still prepared to do that if needed. But Sweat said the odds of that happening are way down. "Our medical system is very adept at figuring things out, and they're managing better without getting people in the hospital. Around the middle of our summer surge, only about 15% of the people who were diagnosed in the area ended up at the hospital. And if you keep going forward

in time, as we got into our winter surge, this number has declined to close to 10%."

Sweat said the people who do end up in the hospital are much more likely to be in the intensive care unit. "There are fewer people, but they're much sicker."

Looking ahead, he worries about the possible impact of variants of the coronavirus — mutations that can help it spread more easily. "Doctors now believe the British one has a higher mortality rate — between 8 and 27%, depending on the age of the patient. Older people are at the higher end. And the big worry with the South African variant is that people are being reinfected," Sweat said.

"People really do need to be careful. But with more and more people getting vaccinated and the vaccine makers adapting to the variants, I actually am pretty optimistic that we're going to get our hands around this over the summer."



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What a report on 'toxic heavy metals' in some baby foods means for families

By HELEN ADAMS

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A congressional report that found "dangerous levels of arsenic, lead, cadmium and mercury" in some baby foods has a lot of parents worried. And they should be paying attention to it, says Elizabeth Mack, M.D., a pediatric critical care physician at MUSC Children's Health and a spokeswoman for the American Academy of Pediatrics. But they shouldn't panic.

"This is an issue that has come up every couple of years," she said. "One thing for people to remember is that many of these are naturally occurring metals that we should expect to be in some of our food. So, it's a matter of how much."

How much is a key part of the report. It found that baby foods can contain many times more metals than the Food and Drug Administration allows in bottled water, for example, about 90 times more arsenic, about 170 times more lead, about 70 times more cadmium and up to five times more mercury.

That's obviously troubling, Mack said. Like the group behind the report, she'd like to see the metals in baby food more strongly regulated. Too much can cause behavioral problems, kidney damage, respiratory and cardiac problems, brain damage and can even be deadly. "The concern is chronic ingestion of low levels of metals, leading to high accumulation of metals in the body."

The congressional Subcommittee on Economic and Consumer Policy started investigating allegations of heavy metals in baby foods in late 2019. It asked for internal documents and test results from seven of the big baby food makers:

- Nurture, which sells Happy Family

Organics, including HappyBABY.

- Beech-Nut.
- Haim, which sells Earth's Best Organic.
- Gerber.
- Campbell Soup Company, which sells Plum Organics.
- Walmart, which sells Parents' Choice.
- Sprout Foods.

The first four cooperated.

Campbell, Walmart and Sprout did not, according to the report, which included this statement: "The Subcommittee is greatly concerned that their lack of cooperation might be obscuring the presence of even higher levels of toxic heavy metals in their baby food products than their competitors' products."

As Mack noted, concerns about metals in baby foods have been around for a while. The American Academy of Pediatrics already has a lot of information about metals in baby foods on its website.

She wants parents to focus on what they can control. "The best we can do for right now is breastfeed, if you can. If not, then keep a quite varied diet. Making your own baby food is an option as well."

Don't rely on a single grain such as rice as the baby's main food source, Mack said. Rice can absorb more arsenic when it's growing than a lot of other crops.

And remember — baby food isn't the only source of metals. "Cadmium and lead are found in second-hand smoke and can lead to metal absorption in kids. And if you have well water, get it checked out. Metals can be there, too."

Mack hopes the congressional report will give new energy to efforts to regulate baby food to make it as safe as possible for everyone. "I'm glad that people still have their finger on the pulse of this, but it's sort of concerning that it continues to be an issue."

Boost your resilience, connect to purpose through Kumanu app

Resilience refers to our ability to take on obstacles, perform under difficult circumstances and bounce back from struggle – even stronger than before. Resilient habits are all about building your capacity to thrive, even in the face of obstacles. And they're vital to helping you to handle stress. Evidence tells us that most individuals enter the health care workforce more resilient than peers in other professions. However, multifactorial contributors to stress and burnout that are unique to the health care system, particularly during a global pandemic, wear on us over time. As part of the South Carolina Hospital Association's Thriving Workforce initiative, all MUSC faculty, staff and students are eligible to participate in a pilot program that includes access to resources to re-energize their resilience, connect to their purpose and improve their overall well-being.

Through this collaboration, all MUSC care team members have been provided access to the Purposeful app created by award-winning health technology company Kumanu.

Kumanu was founded by Victor Strecher, a professor of health behavior and health education at the



University of Michigan. Strecher founded Kumanu in 2015 after having served as a founder and leader in tech-based health intervention space for decades.

Simply put, Kumanu's Purposeful app aims to help individuals to bring their best selves to life and work each and every day while providing the support and accountability necessary to do so.

WHAT IS IT?

Purposeful is a groundbreaking mobile app designed to simplify the process of defining one's purpose

MUSC Health & Well-Being

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



in life and to connect that purpose to daily actions, building a more meaningful rhythm into each day. The Purposeful app is designed specifically to help individuals to focus on what matters most in life and at work, which ultimately leads to improved well-being and productivity.

WHY IS PURPOSE IMPORTANT?

Effects of purpose in action can include faster recovery, strong immune responses, higher quality sleep, increased brain function, lower stress levels, elevated mood, more openness to change and greater resilience. A growing body of scientific research demonstrates the positive impact of purpose on resilience, openness to change and the ability to achieve post-traumatic growth rather than post-traumatic stress. Additionally, recent analyses of Purposeful app users studied against the backdrop of the COVID-19 pandemic found that Purposeful users reported an increased sense of purpose at work and at home, increased resilience in the face of adversity and an uptick in daily behaviors that boost their well-being.

Ready to bring your best to what matters most? Join your colleagues who are enjoying a more purposeful day, each day, by activating your free Purposeful account courtesy of SCHAs Working Well and MUSC's Office of Health Promotion. Begin your Purposeful journey today.

HOW TO ACCESS THE PURPOSEFUL APP:

- ❑ Unlock the power of purpose in just a few minutes a day with this mobile application by Kumanu. Bring your best to what matters most each day through personalized meaningful interactions that harness your "why."
- ❑ The app is available in Google Play and the Apple App Store. Check it out with this brief intro video. Get the most out of the app with this "How to Use the App" video.
- ❑ To access the Purposeful app, complete the following steps and enroll via the app:
 - Text MUSC to (734) 436-3939.
 - Follow the prompts and enroll in the application.
 - Use daily and connect to your purpose.

February campaign celebrates contributions of Blacks in MUSC workforce

Staff Report

Each February since 1976, communities, businesses and campuses recognize the achievements of Black Americans with Black History Month celebrations.

At MUSC, it is an annual opportunity to recognize people and their special contributions to health care, research and education throughout the institution's long 197-year history.

For 2021, planners focused on an expanded campaign by acknowledging employees across MUSC Health's growing presence in communities throughout the state as a result of the purchase of four community hospitals in 2019 and new medical clinics.

"We wanted to communicate to our audiences how far MUSC has come and celebrate the contributions of Blacks and African Americans who are part of the fabric that makes up the MUSC community, said Willette Burnham-Williams, Ph.D., MUSC chief equity officer, who guided the planning, along with the support of Enterprise Campaigns and University Communications' Deborah H. Reynolds, director, and Kelly Warren, manager, and other collaborators. "We also wanted to provide a current perspective of our Black community members across MUSC's enterprise by saying 'This is who we are.'"

The campaign focuses on the "Changing What's Possible," theme and includes a historical timeline celebrating people, programs and milestones. Social display ads honored present-day Black faculty and MUSC Health care team members Nicholas Shungu, M.D., Family Medicine; Felesia Bowen, DNP, Ph.D., College of Nursing; Kristen Watson, M.D., and Anita Ramsetty, M.D., Family Medicine; and Kiandra Scott, M.D., Surgery. Other display ads included a collage of employees from the MUSC Health Charleston, Florence and Lancaster divisions. Full and half-page display ads ran in the Charleston and Columbia newspapers as well as other markets.

"This campaign is important because it allows us to recognize MUSC's historic milestones, but by featuring current members of the MUSC family, we are able to underscore the work and achievements of our current Black faculty and staff members. It points to our ongoing commitment to continuing progress in creating a more equitable and diverse organization that mirrors those we care for and educate," said Reynolds.

Burnham-Williams added that with the recent launch of OneMUSC, MUSC's new strategic campaign, there's no better campaign that promotes

Medical milestone: 100,000 doses and counting

By Bryce Donovan

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This week, MUSC administered its 100,000th dose of the Pfizer-BioNTech COVID-19 vaccine. That's 200,000 gloves. Thousands of MUSC Health care team members. And lots of little Band-Aids.

"I think the Herculean efforts that have gone into getting that many needles into that many arms are just awesome," said Jason Mills, Pharm.D., pharmacy supply chain manager for MUSC.

A little over two months ago, MUSC administered its first dose to Shemika Champion, R.N., a pediatric nurse at MUSC Children's Health. Since then, MUSC has set up over a dozen fixed sites as well as two to three weekly mobile sites targeting rural areas across the state, with the single goal of getting as many South Carolinians vaccinated as possible.

"The resiliency of the care teams through this entire process has been stunning," said Danielle Scheurer, M.D., MUSC Health System chief quality officer. "Honestly, it's just been fun to watch. I'm constantly amazed at how nimble and unfazed by change these people are."

Scheurer remembers one particular instance, early in the process, when MUSC received more vaccine than it was expecting. They needed to set up a clinic, so they called several team members on the New Year holiday, and the very next day, the East Cooper site on Hungryneck Boulevard was up and running.

Scheurer was there and remembers the energy and optimism at the site. "People coming to the site were happy. The care team members were happy. It was like a New Year's celebration. It was like the gloom of 2020 had left, and there was the promise of recovery."

Though vaccine quantity and delivery times have varied almost weekly, MUSC has managed to navigate the process nimbly every step of the way. To date, not one single person who was eligible to receive the vaccine and signed up to get it has been turned away.

Scheurer and Mills are quick to point out how good communication – and trust in the people they



Mills



Scheurer



Photo by Sarah Pack

In mid-February, MUSC Health care team members celebrated giving the 100,000th dose of the Pfizer-BioNTech COVID-19 vaccine.

"Some of these patients are crying with joy afterward. They're high-fiving us. That's not something we often get doing this type of work."

Sean Nelson

are working with – has been the key to improving continually throughout this process. Every day, more than a dozen leaders have 8:30 a.m. and 11 a.m. conference calls to discuss what is happening, what needs to happen and how to make it happen. And in addition to the leaders and thousands of team members, Scheurer said they have over 550 volunteers who have given their free time to help to get people vaccinated.

"I've been at MUSC for almost 15 years, and I've seen us take on projects and need to make changes, and it can, from time to time, be a slow and steady process," Mills said. "This was a huge operation that we had to make work, and the fact that we did it so quickly and with relatively few hiccups is really incredible."

Most of the vaccine sites now have extended hours

– including on Saturdays – to accommodate as many people as possible. And as it turns out, the people getting the vaccines aren't the only ones who benefit. "Some of these patients are crying with joy afterward. They're high-fiving us. That's not something we often get doing this type of work," said Sean Nelson, MUSC Health ambulatory director for primary care. Nelson said some people even come dressed in their Sunday best. "For some, this might be one of the few times they've been out in months. They all just seem so grateful. And that energy uplifts the team."

With vaccine production continuing to ramp up and as more vaccines appear to be coming to the market, MUSC is poised and ready to administer as many doses as possible in the coming weeks and months. As the second largest vaccinator in the state, MUSC will continue to be a key player in the state's health and well-being.

"We all want to get back to normal," Mills said. "As health care providers, we care about the health of our community. But we're regular people, too. We want to hang out with our neighbors and go to our kids' birthday parties. We just want our lives back."

MEET BRANDIE



Brandie Reynolds, M.D.

Department; Years at MUSC

MUSC Health Primary Care – Pamplico; 13 years

How are you changing what's possible at MUSC

Taking care of patients as I would want my family cared for

Who inspired you to go into medicine

My hometown doctor, Dr. Sidney Griffin. He let me shadow in his office while I was in high school.

Meal you love to cook

Risotto

Latest TV series to binge watch

"Snowpiercer" on TNT

First thing you notice about a person

Since everyone's wearing masks — their eyes

Greatest moment in your life

When I married D.J. Reynolds

Favorite quote

"But those who hope in the Lord will renew their strength. They will soar on wings like eagles; they will run and not grow weary, they will walk and not be faint." — Isaiah 40:31

Community Aid, Relief, Education & Support

The COVID19 pandemic has been hard on all of us—especially our most vulnerable populations. CARES clinic cares for the uninsured in our community relying on grants and donations alone. The pandemic has demanded a slew of extra, unexpected costs. The Medical Student Alumni Committee is holding a T-shirt sale to raise money to help keep CARES operating and growing.

\$19 T-Shirt for COVID19 RELIEF

When: Sales from January 28-March 12, 2021
Distribution: Final week of March, First week of April on MUSC campus
Please include email at purchase for details closer to time (construction-dependent)
Who: Open to **everyone** to benefit the MUSC CARES Clinic
Where: [SCAN QR CODE TO THE RIGHT](#)
covid19reliefforcares.com with password: Cares2021

MOVE MORE CHALLENGE

LET'S GET MOVING MUSC!

Step 1: Start or join a team at www.LowcountrySCHeartWalk.org/MUSC2021

Step 2: Download the free Heart Walk app and login with your username and password

Step 3: Once the challenge launches, you'll have 30 days to log your minutes. See if you can reach 150 minutes a week! Any way you move counts! You can walk, dance or even vacuum to stay moving.

Step 4: Join us on Celebration Saturday (February 27th), as we celebrate the results of the challenge and what we have accomplished together as a community!

TIPS TO MOVE MORE

- Put the screens on hold. Instead of heading right for the TV after dinner, take a walk, practice a sport, or play a game of hide-and-seek.
- Clear some space, put on some music, and take a dance break!
- Tune into fitness during TV time. Walk or jog in place or on a treadmill, lift weights, or do yoga while you watch your favorite shows.
- Get your garden on. Gardening, mowing and yard work are a great way to get active outdoors.
- Create an at-home circuit workout without any special equipment.
- Learn more ways to add activity to your routine at heart.org/HealthyForGood

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PAINT JUST LIKE Bob Ross IN ONE DAY!

ARE YOU AND YOUR COLLEAGUES LOOKING FOR A CREATIVE OUTLET?

Join Arts in Healing at Redux Contemporary Art Center for a fun workshop with "Bob Ross - certified" instructor, Toby Casey at the discounted price of \$20 for all MUSC employees. Spaces are limited! Contact Katie Hinson to enroll at hinsonka@musc.edu.

MONDAY, FEBRUARY 22ND
 6:30 - 8:30 PM

3rd Annual MUSC Septima P. Clark Poetry Contest & Awards Reception

Celebrating the poetic achievements of local youth and the legacy of a national hero

Submissions accepted from
January 18, 2021 to March 15, 2021

Theme: *Life During COVID-19*

Virtual Awards Ceremony:
April 30, 2021, 6:00 pm via Zoom

Registration is required. See link above for more.

Employees’ values, actions praised during pandemic

By CINDY ABOLE
aboleca@musc.edu

At MUSC, values are respected throughout the organization. And during the pandemic and these unprecedented times, MUSC employees have proved themselves, some beyond measure, that they can be responsive, innovative and collaborative working with others.

Marking its fifth year, MUSC President David J. Cole, M.D., FACS, and first lady Kathy Cole are praising the work and commitment of exceptional employees with the President’s Values in Action awards. The awards honor remarkable employees who exemplify MUSC’s five values: compassion, innovation, integrity, collaboration and respect.

In a new action, the Coles created a special category to complement Values in Action – the Impact Award. This award will not be presented annually but awarded during rare occasions to an individual or individuals based on their exceptional work, dedication and values that uniquely impact MUSC and the greater community.

The 2020 awards recognize five employees who have demonstrated the five individual values, plus two individuals who have gone above and beyond in their work, devotion and inventive contributions.

For the Coles, rewarding these recipients is heartfelt and meaningful, as they are actively involved in every step of the process from reading nomination letters to presenting the awards – albeit virtually due to precautions around the pandemic.

“Values are the fabric of our institution and the basis for how we move forward and accomplish our mission and purpose – to provide health innovation for the lives we touch. All seven of these award winners represent the heart and soul of our institution, and I personally am, and I think all of us are, very grateful for their hard work and dedication,” said Cole.

The 2020 President’s Values in Action winners are:

- ❑ **Compassion** — Carolyn Page
- ❑ **Innovation** — Satish Nadig, M.D., D.Phil.
- ❑ **Integrity** — Sorin Teich, D.M.D.
- ❑ **Collaboration** — Iggy Pla
- ❑ **Respect** — Tonya Hazelton
- ❑ **Impact** — Cassandra D. Salgado, M.D., and Michael Sweat, Ph.D.

Page was awarded the Values in Action award for Compassion. Page is no stranger to working and responding to the needs of students. For years, she has served as assistant dean of students in the College of Nursing. Cole presented the award to her during a virtual Jan. 7 college executive leadership council meeting.

In her nomination letter, College of Nursing colleague Cathy Durham, DNP, assistant dean for graduate practice programs, praised Page’s attributes as the epitome of kindness and servant leadership, especially during the COVID-19 pandemic year. As the university had transitioned to online learning, Page served on the university task force and shared expertise on the College of Nursing’s online practices and provided input on developing policies and procedures for exposures and quarantine during the pandemic. She worked closely with students who tested positive and were quarantined – helping and guiding them and communicating with faculty preceptors and family members as needed. She also shepherded students who lost family members during COVID – supporting them in their grief – so they could continue with classes.

“Thank you so much – I’m so overwhelmed,” said Page. “It has been a group effort, and all I can say is that I love our students, our faculty and dean. Go College of Nursing!”

Nadig, who won the award for Innovation, said he shares his award



Image Provided

College of Nursing colleagues celebrate Values in Action 2020 award winner Tonya Hazelton (Respect), top row and photo, middle column, with President David Cole who presented the award virtually on Jan. 8.



Photos provided

2020 Values in Action award winners include Carolyn Page, (Compassion), Nursing, and Dr. Sorin Teich, left, (Integrity), Dental Medicine.

directly with colleagues in the Center for Cellular Therapy and other collaborators at MUSC. The award was presented to him virtually during a Jan. 21 Department of Surgery Research Council meeting.

An immunology researcher, transplant surgeon and head of MUSC’s COVID-19 antibody testing task force, Nadig was recognized for being an instrumental leader in developing an in-house COVID-19 antibody test and saliva test as an alternatives to the COVID-19 nasopharyngeal testing at MUSC.

Raymond DuBois, M.D., Ph.D., dean of the College of Medicine and director

of MUSC Hollings Cancer Center, wrote Nadig’s nomination letter for the Values in Action award.

“Dr. Nadig pulled together an outstanding interdisciplinary team to begin important work to develop an in-house antibody test. That team was able to deliver on the task within three weeks by utilizing the combined basic science, clinical skills and knowledge of its members. The validated COVID-19 antibody test produced by this team provided a key tool for MUSC with respect for our ability to develop

Fake masks and other things to know about the COVID-19 vaccine

BY BRYCE DONOVAN

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What did the box of vaccine say when MUSC Health employees opened it?

“Supplies!” (#dadjoke)

That was the scene early February when the pharmacy supply manager and his team looked inside the package of what was believed to be the second delivery of Pfizer doses and found themselves staring at a shipment of vaccine-related supplies that included gloves, syringes-needles, etc., instead.

Naturally, on week one, where vaccine amount and delivery frequency were abruptly changed on state vaccinators, a few curve balls were to be expected. And though that hiccup forced MUSC Health to make over 10,000 appointment adjustments, in the end, no one scheduled to get a dose — either first or second — missed out on being vaccinated. Ultimately, MUSC received nearly 18,000 doses, which is almost exactly what it requested. And they all went into arms.



Scheurer

Going forward, if consistency in quantity of vaccine and delivery time continues, Danielle Scheurer, M.D., MUSC Health System chief quality officer, says things like shifting appointments on the fly shouldn't have to happen again.

“It feels like everybody is starting to get better at this,” she said. “That includes DHEC, Pfizer, vaccinators. Look, in the end we all want the same thing: to get as many people vaccinated as soon as possible. And it feels like we might be beginning to hit our stride.”

With the vaccine landscape changing almost daily,



Photo by Clay Banks on Unsplash

When it comes to vaccination, boxes don't always contain what they appear.

each week we are checking in with Scheurer to ask her the most pertinent questions that are hanging in the

balance.

See COVID Q&A on page 9

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Expert advice on protecting yourself as COVID variants loom

By HELEN ADAMS

adamshel@musc.edu

The increasing availability of vaccines and a recent drop in the number of COVID-19 cases shouldn't distract us from the fact that we're in the thick of a pandemic with a virus that is mutating and able to spread more easily. That's according to infectious disease specialist Krutika Kuppalli, M.D.

"If we don't get the virus under control, more variants could emerge. We really need to double down on our public health measures," she said.

Kuppalli, a nationally recognized expert and an assistant professor in the College of Medicine at MUSC, said she's bewildered by people who are going about their lives as if the virus isn't a big deal. "We're seeing no outrage over the number of deaths that are occurring. It's very perplexing to me how people are acting."

Kuppalli is concerned about the impact of the variants that have emerged so far. The three that are best known were first detected in the United Kingdom, South Africa and Brazil. All three have since shown up in the United States.

The variant that cropped up in the U.K. last fall, B.1.1.7, became the dominant strain of the coronavirus there in about three months. And it didn't waste much time in crossing the pond. "It's been identified in a number of states here in the United States, including one case here in South Carolina over the weekend. That is obviously concerning," Kuppalli said.

The variant first identified in South Africa, B.1.351, emerged around the same time as the one in the U.K. It's a world traveler, too, showing up in South Carolina and other states so far. "The biggest issue we're concerned about with this variant is that it may affect the levels of neutralizing antibodies from both the Pfizer and Moderna vaccines," Kuppalli said. Both companies are developing booster doses. Another concern: B.1.351 may be able to reinfect people who have recovered from COVID-19.

The variant first detected in people from Brazil, P.1, showed up in December

and is blamed for causing a huge surge in the city of Manaus. And worryingly, like B.1.351, P.1 may be able to reinfect people who have already had COVID-19.

Kuppalli said health experts and the public need to factor all of that into their plans as the pandemic continues. "We need to learn lessons from what has happened with these variants in other countries to try and prevent those situations from happening here."

PANDEMIC PRECAUTIONS

The good news is that there are plenty of steps people can take to try to stay safe. We're all familiar with physical distancing, hand washing and avoiding crowds and poorly ventilated places.

But what about masks? Are the ones you've been using good enough? The Centers for Disease Control and Prevention recommends using masks with two or more layers of washable fabric you can breathe through. Make sure they completely cover your nose and mouth and fit snugly without gaps on the side of your face.

Michael Schmidt, Ph.D., a nationally known microbiologist, immunologist and professor in the College of Medicine at MUSC, said masks can work. The fact that almost nobody is getting the flu in South Carolina, thanks to mask wearing, shows how effective the face coverings can be.

But they aren't foolproof. The coronavirus is much more easily spread than the flu, he said.

That's why some people are trying new approaches such as double masking. "One will contain a substantial fraction of the virus that you're shedding. Mask two will catch the stragglers that are escaping."

Schmidt has a tip for people who want to try double masking. "You can cheat. You can sneak a second mask into the first mask, cutting the strings off of one of them. So you have another layer without the added burden of contending with two sets of strings."

That can work with both medical surgical masks and with N95s. "N95s only exclude 95% of liquid and airborne particles. Five percent always leak



Photos by Sarah Pack

A man wears two masks to guard against COVID-19.



Layering masks can increase the protection the wearer gets from COVID-19.

through. If you add another mask, you up your protection."

But Schmidt said N95s can be pretty uncomfortable. "The N95 mask is extremely taxing to wear because you have to move air across the pressure differential. So it's not pleasant to wear."

That's part of the reason Schmidt personally uses copper masks. The other part: He's known for studying and showcasing that metal's antimicrobial properties in clinical settings. Now, the coronavirus has given copper a pandemic patina. "We know copper does indeed inactivate SARS-CoV-2, and it does it very quickly."

If you're considering using a copper

mask, Schmidt suggests making sure you choose one that has undergone scientific scrutiny. You can use his double-up trick with the copper mask, too, cutting the strings off a surgical mask and putting it inside the copper mask for extra protection.

Whatever type of mask you choose, Schmidt said make sure you wear it. "They need to be wearing masks when they're out in public, irrespective of whether they think coronavirus is real or not, because we're not infringing on your civil rights, we're protecting you and your loved ones. And you're helping us protect

See MASKS on page 11

What you need to know about the COVID-19 vaccine – Part 2

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

Q. What phase are we currently in and who is eligible?

A. We're still in Phase 1a, although it's getting a bit confusing how we just keep adding groups but calling it the same phase. State residents over the age of 65 are now eligible. That's 309,000 more people. And right now, demand is grossly outweighing supply.

Q. How does vaccine distribution work? What are the logistics?

A. Every week, we tell SCDHEC how much vaccine we'd like to receive and then — based on how much has been allotted for our state and who has asked for what amounts — they make the determination as to which vaccinators get what. They place the order with Pfizer and then it is shipped directly to us.

Q. Is immunity the same whether you've had COVID-19 and recovered or if you've gotten the vaccine?

A. That's a great question. I don't think we know yet for sure. My guess is that natural immunity — that is, getting COVID and recovering — is probably better, but we just can't know for sure. And we might not ever know.

Q. Should cancer patients be concerned about getting vaccinated?

A. No, they shouldn't be concerned. In fact, for the most part, patients who have or have had cancer should be vaccinated. Now if they're right up against a chemotherapy regimen, maybe they should give it a little time. But for the most part, it's a good move to do it, after talking to their cancer doctors about the best timing.

Q. Should people with allergies be concerned about getting the vaccine?

A. For the most part, no. The main thing we ask people with allergies to consider is if they have a history of anaphylaxis, especially as it relates to getting vaccinations or receiving injectable medicines. All that said, according to the extremely thorough data that has been collected throughout the vaccination process, any patient who has experienced a severe allergic reaction in the course of being vaccinated was subsequently treated and eventually recovered. And maybe people don't know this, but each vaccination site is required to have epinephrine and other emergency supplies on hand should a patient experience a severe allergic reaction.

Q. Is there a difference in terms of what is administered in the first dose and second?

A. No. There's no difference. The reason people tend to be feeling worse after the second dose isn't because it's a stronger version of the vaccine. It's because their bodies already have an immune response prepared, so it's ready to fight. People always think that if we feel bad that means the virus is winning, but that's not the case. It just means our immune system is doing its job. It's mounting a defense, and that's a good thing.

Q. Why do we recommend second doses being administered between 19 and 23 days later when the Pfizer guidance is 21?

A. Pfizer actually allows for a four-day grace period on either side of the 21-day window because of, well, life. We're busy. Maybe your second dose falls on a weekend, and you can't get it until the following Monday. Or maybe it's easier to do it the Friday before. Pfizer is just taking that into account.

Q. Do you think that vaccine administration should be expanded to primary care providers?

A. I do, but logistics are at play a bit here. Right now, the ultra-cold storage required for the Pfizer vaccine makes it unfeasible for most doctors' offices. But the Moderna and Johnson & Johnson vaccines — the latter of which should be given emergency authorization soon — can be stored in a regular refrigerator. So yes, assuming the supply is there, I think they should be getting it. And I think that's going to happen soon.

Q. Why isn't monoclonal antibody treatment as widely available or talked about? It seems like it might do almost as good a job as vaccine. I understand many people get it after the fact, but if you got it preventively, would that also be smart?

A. Monoclonal antibody treatment is more like a Band-Aid. These manufactured antibodies don't last as long, so it's not ideal. But because the vaccine doesn't do somebody with active COVID-19 any good, it's a great alternative. Right now, there are over 35 sites in the state offering it. Think of it as a fire extinguisher. It definitely helps, assuming the fire isn't already out of control. There is some really good evidence that these treatments have reduced hospitalizations, so more people should be aware about what it is. It works best if given very early on in the disease and is currently only approved to outpatient or observations patients — not those already hospitalized.

Q. Should people who might not qualify to be vaccinated for a while find a clinical trial to enroll in, in the hope they at least have a shot at getting a vaccine?

A. Absolutely. 100%. Especially if we know how well these vaccines are working and that they all seem to be made in a similar way. And worst-case scenario, if you become eligible while still in one of these trials, you can request to be unblinded. I am not necessarily encouraging that, but no matter your situation, they can still use your data and follow your course long term. And that still helps provide information on safety and efficacy to help those who haven't been vaccinated yet.

Q. Were we one of the states that recently got fake N95 masks?

A. We were not. But sadly, things like this keep popping up — and it's a problem. I think it was last April or May we had to get creative with our personal protective equipment (PPE). We got more than a million KN95 masks that were defective and couldn't use any of them. (Note: KN95 is the designation for Chinese-made N95 masks, which were given emergency authorization to be used in the U.S. due to PPE shortages.)

Q. How will we know when things are getting better?

A. That's what we all want to know, isn't it? I think the proof is in the pudding. The answer probably isn't going to lie in the number of COVID-19 cases or hospitalizations as much as the sheer number of South Carolinians who have been vaccinated. That's the number that matters, and in that regard, we still have a long way to go.

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

MUSC celebrates Black History Month



1824- The Medical College of the State of South Carolina is established.



1897- The Hospital and Training School for Nurses is opened for the education and treatment of African Americans.



1971- Bernard W. Deas, Jr., M.D., is the first Black student to graduate from MUSC.



2016- The MUSC College of Medicine is recognized as having the fifth largest number of African American medical students in the U.S., outside of historically black colleges and universities.



1896- Dr. Lucy Hughes Brown is the first Black female physician in the area and helps establish The Hospital and Training School for Nurses.



1969- Hospital workers strike for 90 days for higher pay, equal treatment, improved patient safety and unionization (March 17 - June 27).



1976- The first Office of Minority Affairs, led by James Martin, Ph.D., is established.



2021- MUSC establishes the first Office of Equity, integrating and elevating MUSC Health and University's commitment to inclusion.

Board votes to approve two certificates of need, receives mid-year reports

Staff Report

Recently, MUSC and the MUHA Board of Trustees met for their regularly scheduled combined committee sessions and board meeting. In light of the ongoing COVID-19 pandemic, many attended the meeting via video conference. Those who gathered in person in the MUSC boardroom observed appropriate safety protocols, including wearing masks and social distancing. In addition to updates on its education, research and clinical care operations, the board received a primer on how the mRNA vaccine works, as well as information on how MUSC Health is administering the Pfizer BioNTech vaccine and how the health system is working to reduce vaccine hesitancy.

"During this pandemic, our team focus remains to serve communities across the state with engagement on multiple levels, including getting vaccines into arms, providing virus testing, delivery of the newest, most effective therapies to treat COVID-19 patients, and continuing education about safety and prevention," said David J. Cole, M.D., FACS, MUSC president. "We are also working at a grassroots level to plan and execute vaccine distribution to at-risk and rural communities as the limited vaccine supply permits," Cole said.

"To date, we have received 83,850 vaccines and administered 85,407 vaccinations," said Patrick J. Cawley, M.D., MUSC Health CEO and vice president for Health Affairs, University. "The nearly 102% doses administered includes accounting for the extra doses found per vial." Cawley observed, "This week has been particularly challenging due to last-minute supply issues that are out of our control, forcing us to move and reschedule vaccine appointments. Nevertheless, MUSC continues to vaccinate as many people as we can as fast as possible."

Despite the enduring challenges

of the pandemic, MUSC continues to transform and grow. The board voted to support filing two certificates of need (CON) with the South Carolina Department of Health and Environmental Control (DHEC) for the deployment of a linear accelerator in Lancaster County and a surgical robot for MUSC Health, Lancaster Medical Center. DHEC must issue a CON before certain types of health care acquisitions, expansions and creation of new facilities are allowed. A linear accelerator is commonly used by a radiation therapist to deliver external beam radiation treatments to cancer patients. A surgical robot serves to extend the physical capabilities of surgeons, adding the most advanced and refined technology at the fingertips of surgeons to benefit patients.

"It is a tremendous honor to announce the establishment of the Dr. James B. Edwards Endowed Chair in Oral and Maxillofacial Surgery in the College of Dental Medicine," said James Lemon, D.M.D., chairman of the MUSC/MUHA board. "As President of MUSC, Dr. Edwards worked tirelessly with his wife, Mrs. Ann Edwards, to make MUSC second to none in terms of quality care, instruction and research across all colleges. However, as a dentist himself, the College of Dental Medicine held a special place in Dr. Edwards' heart. He and his wife, Ann, who is with us virtually today, are responsible for securing the funding for this endowed chair, which included resources from Conoco-Philips, Waste Management and Mr. Peter Lawson-Johnston II."

Dr. Lemon continued, "Ann, on behalf of the MUSC Board of Trustees and senior leadership, thank you for your sustained support and contributions to MUSC over the years. Today, we honor Dr. Edwards and celebrate this achievement in his honor. Thank you both for making the first endowed chair in the College of Dental

UPDATE *Continued from Page Ten*

Medicine possible. The Dr. James B. Edwards Endowed Chair in Oral and Maxillofacial Surgery will enhance the quality of clinical care and research in this area of expertise for years to come.”

The board voted to appoint Martin Steed, D.D.S., to the James B. Edwards, D.M.D., Endowed Chair in Oral Surgery, effective March 1. Steed is a professor and chair in the Department of Oral and Maxillofacial Surgery and associate dean for Hospital Affairs in the College of Dental Medicine.

The board also reviewed and endorsed the proposed new enterprise strategy — OneMUSC. The focus of the strategy is to empower and propel team members to achieve greater innovation, impact and influence over the next five-year period. One such enterprisewide initiative, the

MUSC Workday Implementation, was shared with the trustees.

Workday is a state-of-the-art platform that will transform, integrate and standardize MUSC business processes across finance, human capital and supply chain across all three major areas of MUSC — the university, MUSC Health and MUSC Physicians. It will consolidate some 70 different human resources, finance and payroll systems into a single core cloud-based system. In addition to simplifying workflows, Workday will also empower employees to complete human resources and payroll actions from anywhere using mobile devices.

In other business, the 16-member MUSC/MUHA board also voted to approve the following items:

❑ Improve access to high-quality breast imaging in the community by locating

3D mammography at the MUSC Health West Ashley clinic.

❑ A capital budget request of \$2.9 million for renovations at MUSC Health, Chester Medical Center.

❑ A lease amendment to continue providing 46,857 square feet of space to the Department of Veterans Affairs on the MUSC main campus in Charleston.

❑ Renewal of an 11,494 square feet lease for office space on Doughty Street in Charleston to continue providing space to support the Department of Psychiatry, Clinical Neuroscience Division, drug abuse research training, and the South Carolina Clinical and Translational Research Institute.

❑ Renewal of a lease for 6,414 square feet of clinical space on Hospital Drive in Charleston that supports delivery of therapeutic services, physical therapy and occupational therapy in the Mount

Pleasant area.

❑ Execution of a new lease agreement for 4,500 square feet of clinical space on Charlotte Highway in Indian Land, which will provide sites for Lancaster pediatrics and a multispecialty clinic.

❑ Renewal of a lease for 4,200 square feet of clinical space on West Meeting Street in Lancaster to continue providing space for MUSC Health general surgery.

❑ A lease renewal for 1,143 parking spaces in the Hagood parking lot located at Fishburne Street and Hagood Avenue.

The MUSC/MUHA Board of Trustees serves as separate bodies to govern the university and hospital, normally holding two days of committee and board meetings six times a year. For more information about the MUSC Board of Trustees, visit <http://academicdepartments.musc.edu/leadership/board/index.html>.

MASKS *Continued from Page Eight*

my loved ones.”

Kuppalli agreed. “We know the variants to have increased ability to transmit. We want to prevent that from happening because increased

transmissions lead to increased hospitalizations and potentially increased death. South Carolina right now is not doing so great with coronavirus. Cases are going down a bit, but compared to rest of the country, we still are toward the top.”

CAMPAIGN *Continued from Page Three*

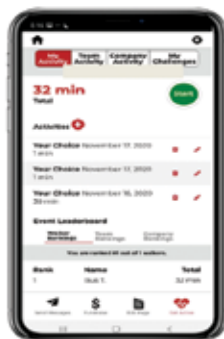
the institution’s statewide footprint in our hospitals in various locations across the state. “We’ve drawn them in the February Black History Month campaign

to say ‘We appreciate and acknowledge you, and you are part of our community.’ We’re now OneMUSC statewide. It makes perfect sense,” Burnham-Williams said.

MOVE MORE CHALLENGE

LET'S GET MOVING MUSC!

- Step 1:** Start or join a team at www.LowcountrySCHeartWalk.org/MUSC2021
- Step 2:** Download the free Heart Walk app and login with your username and password
- Step 3:** Once the challenge launches, you'll have 30 days to log your minutes. See if you can reach 150 minutes a week! Any way you move counts! You can walk, dance or even vacuum to stay moving.
- Step 4:** Join us on Celebration Saturday (February 27th), as we celebrate the results of the challenge and what we have accomplished together as a community!

**TIPS TO MOVE MORE**

- **Put the screens on hold.** Instead of heading right for the TV after dinner, take a walk, practice a sport, or play a game of hide-and-seek.
- **Clear some space, put on some music, and take a dance break!**
- **Tune into fitness during TV time.** Walk or jog in place or on a treadmill, lift weights, or do yoga while you watch your favorite shows.
- **Get your garden on.** Gardening, mowing and yard work are a great way to get active outdoors.
- **Create an at-home circuit workout** without any special equipment.
- **Learn more ways to add activity to your routine** at heart.org/HealthyForGood

Raise funds
AND raise
heartbeats

Simply download the Heart Walk app and GO!



Changing
What's
Possible



Felesia Bowen, Ph.D., DNP
Assistant Dean for Undergraduate Programs & Associate Professor
College of Nursing

MUSC CELEBRATES
BLACK HISTORY MONTH



VALUES *Continued from Page Six*

sufficient testing capacity for our community and state. We are indeed very fortunate to have an outstanding clinician-scientist-leader like Dr. Nadig to help collaborate and do innovative work and lead those teams during the global pandemic.”

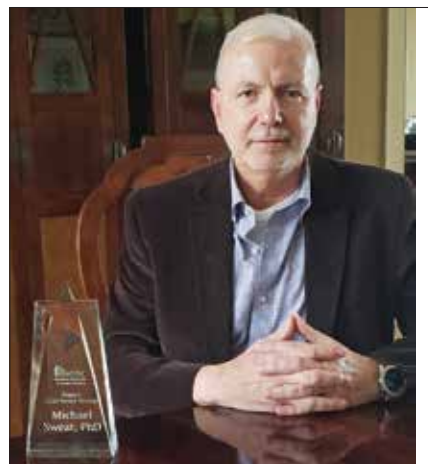
“I’m extremely humbled in this award. It’s important for me to say that this is really a huge team effort. I want to share this award with Dr. Shikhar Mehrota and the full team. This award is a mirror of what our institution can do in leveraging all the abilities that MUSC has and responding during a pandemic. Thank you, I appreciate this very much,” said Nadig.

Teich is Value in Action award winner for Integrity. At a Dec. 8 virtual James B. Edwards College of Dental Medicine staff meeting, Dean Sarandeep Huja, D.D.S., Ph.D., read his nomination and introduced Cole to present the award. Teich is a professor and associate dean of clinical affairs in the college.

“Last March, the college set up a task force consisting of Teich and our associate deans and infection control officer. The largest impact of the pandemic was on our clinical enterprise for the college. During those initial months, I would call and talk to Dr. Teich and the task force daily and on weekends. He demonstrated both integrity and commitment through his role that went above and beyond. He and Dr. John Comisi led multiple divisions of our code and infection control policy and its implementation. This documentation was distributed nationally to other dental institutions as they navigated similar issues early on during the pandemic,” wrote Huja. Teich was also instrumental in acquiring PPE supplies for the dental clinics, coordinated COVID testing protocols for patients and staff, and reviewed air circulation and air flow in the clinics to ensure a safer environment.

“Thank you Dr. Cole and Dr. Huja. I’m humbled and honored to receive this award. As Dr. Huja mentioned, it really was a team effort. Thank you very much,” said Teich.

The Values in Action award for Collaboration went to Iggy Pla, director



Photos provided

In the newest award category, the 2020 Values in Action Impact awards were presented to Dr. Cassandra Salgado (Infectious Disease), and Dr. Michael Sweat (COVID-19 Epidemiology Intelligence Project).

of hospital facilities maintenance, MUSC Health Facilities Management. Pla was recognized for his leadership, dedication and responsiveness throughout the COVID-19 pandemic, converting existing facilities to meet necessary criteria to treat and care for inpatients and support the needs of health care teams and staff.

David Zaas, M.D., MUSC Health chief clinical officer and the Charleston Division’s chief executive officer, applauded Pla’s efforts. “Iggy made Herculean efforts seem effortless as he collaborated with our executive team, doctors, nurses, quality teams, perioperative and environmental safety staff and others to meet the demands of our new reality. His positive attitude and ability to inspire his team to rise to the challenge was instrumental in meeting the hospital’s needs.”

“Thank you,” said Pla. “It’s been an interesting seven months. I’m glad we pushed through it and can now say we can see a light at the end of the tunnel. I couldn’t have done this on my own and really appreciate everyone’s support. I can’t thank our team enough.”

Tonya Hazelton is the Respect Values in Action award winner. Hazelton is a study program coordinator in the College of Nursing and is an active member of the college’s diversity and inclusion council and diversity committee since 2016.

Susan Newman, Ph.D., R.N.,

director of the Ph.D. in Nursing Science Program, praised Hazelton for leading several diversity and inclusion initiatives within the college, including an awareness campaign, featuring a selfie contest; focus groups to raise morale; and campuswide brown bag events, such as “Diversity in Openness Talking Series,” or DOTS, to address social justice and other initiatives. She’s been recognized for helping to create a more safe and welcoming environment for sharing diverse perspectives on sensitive topics. “The college is fortunate to have her as a member of the MUSC family. Mrs. Hazelton is the very person that this award seeks to honor, as she consistently goes above and beyond and puts the value of respect into action to promote diversity and inclusion,” wrote Newman.

“Thank you to everyone – my MUSC family – on this call,” said Hazelton. “I’m so surprised and humbled. Thank you for your support, as I can’t do anything without true leaders, and that’s all of you. Thank you also, Dr. Cole.”

The inaugural Values in Action Impact awards were presented to Salgado and Sweat in a January virtual call. Nominations for both honorees were written by DuBois.

“Dr. Salgado has been at the front lines at our organization’s planning and response throughout the COVID-19 pandemic. She has served as an outstanding example of MUSC’s culture and values throughout this journey. As

director of the Division of Infectious Disease, she and her team have risen to the challenges of this pandemic and have tirelessly engaged on behalf of this institution in ensuring that we are meeting the needs of those we serve. This is met ensuring we are addressing questions and concerns of our workforce with compassion and cognizant of the pressures that we face in our front-line providers and other care team members with respect to appropriate PPE and safety protocols, risk of infection and the like. Dr. Salgado has served as a trusted advisor to many across the organization from members of our board of trustees to physicians and front-line employees throughout this stressful time, and she has done so with the utmost patience, integrity and compassion. We are so very grateful to her and the team that she leads for all their incredible work,” wrote DuBois.

“I’m completely emotional about this award,” said Salgado. “Thank you for thinking of me. It’s silly to say, but it’s my job, and I’m really grateful to be here at a time when MUSC needed me. MUSC has been there a lot for me – both personal and professional. I’m just glad to give back.”

Concerning Sweat, DuBois wrote “Through his leadership in MUSC’s COVID-19 Epidemiology Intelligence Project, Dr. Sweat and his outstanding team of collaborators have provided frequent and reliable updates to MUSC leaders and employees, government and business leaders, as well as members of the general public, regarding COVID-19 trends and impacts to our community. These efforts have helped to ensure that we are facing this challenge with the most reliable verified information to help informed decisions that we are making within our organization and to also help decisions made by others around our state. We are so very grateful to him and his team for their dedication to this important work.”

“It has been an incredible year. Thank you, Drs. Cole and DuBois. I feel we’re at a precipice with the COVID-19 vaccines. We have a lot of hard work to go, and I look forward to continuing with that. It’s what I’ve trained for and has been an amazing opportunity for me and my team,” said Sweat.