

COVID patients share their stories

Families urge others to learn from their ordeals, get vaccinated



Photo by Sarah Pack

It was a middle-of-the-night phone call no husband wants to get. "They called me and asked, 'What do you want us to focus on – your wife or the baby?'" Doctors delivered Prem Koonkhuntod's baby while she was on ECMO. Happily, both survived. Read her story on page 5.



Photo by Sarah Pack

Like most 17-year-olds, Christian Davila felt invincible. He certainly didn't fear COVID – he was too young to get really sick, he thought. His experience in the hospital and on a ventilator changed his mind about COVID – and about getting the vaccine. Read his story on page 6.

3

Quit help

Brain stimulation offers new way to quit smoking.

11

Mental health resources

Boeing, MUSC, CCSD team up for kids' mental health.

2

Meet Christine Cimo Hemphill

4

Faculty Awards

10

I am an MUSC Innovator

Dear MUSC students,

I would like to extend a warm “welcome back” to each of you returning this semester to continue your education! I hope you all had a great summer and that each of you took whatever time you could to relax and refresh as you prepare for the next semester.

It is also my pleasure to congratulate those of you who are new students on your acceptance to MUSC and thank you for choosing MUSC for your education. I imagine that many of you have mixed emotions ranging from excitement to sadness, as you leave family and friends, to anxiety about the challenges you might face as you enter this next phase of your education. Please know that we are committed to providing you not only with an excellent education but with the support necessary to help you reach your goals. The majority of those who can provide direct support to students are in the Division of Education and Student Life, and I hope you check out their website to familiarize yourself with all they have to offer. We are here to help!

As you begin this academic year, I encourage you all to strive to maintain a healthy lifestyle and to carve out time for activities that bring you joy. Caring for yourselves should be a constant goal that will help you to manage stress and overcome difficult situations. I know that is easier said than done, but it is critical to your physical and mental health and potentially to your ultimate success.

We would not be the Medical University of South Carolina without you – our students. You are central to our mission and our vision for the future, and we look forward to working with you during your tenure here. I look forward to an exciting year with you as each of you write the next chapter of your personal stories and as we work together to create a better MUSC.

Lisa K. Saladin, PT, Ph.D.
Executive Vice President for Academic Affairs and
Provost

As we begin a new school year, the excitement is already bubbling on campus. Whether you’re a new student, have been mostly virtual during your time at MUSC or returning to campus, I’d like to welcome you all home! I hope you all had a wonderful and relaxing summer and are ready to channel your passion and energy into “Changing What’s Possible.”

As we begin to settle back into our new normal, I’d like to take a moment to say how proud I am of all of you. This past year and a half presented a new type of challenge and seeing the entire MUSC community rise to the occasion reminds me of how resilient we are. From students volunteering to give COVID vaccines to helping essential MUSC employees with child care, your strength in the face of adversity highlights what it truly means to be part of the MUSC family.

The MUSC Student Government Association (SGA) is an interprofessional group comprised of student members from all six colleges on campus and dedicated to serving the student body. The MUSC SGA serves many functions – from hosting a wide variety of events to offering leadership and service opportunities to advocate for student concerns; however, our core purpose is to serve as a resource for you all. We are so excited for this upcoming year with you all and look forward to hearing all the great ideas you have to continue improving the MUSC student experience.

Yours in service,
Elizabeth C. Davis
MUSC SGA President, ‘21–‘22

MEET CHRISTINE



Christine Cimo Hemphill, M.D.

Favorite part of your job? *My favorite part of my job is getting to tell couples who have carried the cross of infertility/subfertility that they have finally conceived the child for which they have longed to have in their family.*

What does being a woman in medicine mean to you? *Being a woman in medicine means that I can add that feminine touch to the science of medicine, enhancing compassion, and, in my field of OB-GYN, sometimes add personal experience in order to better empathize with my patients.*

Favorite thing to do outside of work? *My favorite thing to do outside of work is to sit by a fire pit outside, enjoying a cup of coffee and watching my children roast marshmallows.*

What is something your patients probably don’t know about you? *My patients probably do not know that as a teenager, I won three national gymnastics titles (Vault, Floor and All-Around).*

Anything else you want to share? *I am very excited to return to practice in my home state of South Carolina, and I am even more excited to be able to work for my alma mater, MUSC.*



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.

A new way to quit smoking?

MUSC Health among first to offer brain stimulation as quit aid

By HELEN ADAMS

ashamshel@musc.edu

As a food truck operator who whips up tasty Polish dishes like pierogi, golabki and kielbasa, Victor Krupka is proud to carry on his family's culinary traditions. But he had a tradition of his own that he was ready to get rid of: smoking. So when he heard MUSC Health was among the first sites in the country to offer deep brain stimulation to help people quit, he signed up.

"I've been a smoker for over 30 years. Smoked about a pack and a half, or almost about a pack and a half a day. I have tried to quit, very unsuccessfully. I tried Chantix. I've tried just stopping on my own, tried cutting back. Nothing really worked," the Charleston, South Carolina, man said. "In my opinion, the majority of smokers thought about quitting at some point in their lives."

The treatment, the first of its kind cleared by the Food and Drug Administration for addiction, is called BrainsWay. MUSC Health is one of just 10 sites in the U.S. to offer it.

As its name suggests, the treatment targets two areas of the brain that are involved in decision making, impulse control and emotion: the prefrontal cortex and the bilateral insula. It uses a process known as transcranial magnetic stimulation, or TMS, to send magnetic pulses to try to boost the strength of the targeted brain areas — and help the smoker fight off cravings.

But friends who smoke figured Krupka would fail. While more than half of adult cigarette smokers try to quit each year, only 7.5% succeed. Nicotine is extremely addictive. "They thought I was going to try this, then go right back to smoking."

And frankly, Krupka thought that might happen, too. "I was hoping it would work, you know what I mean? But I was very skeptical at first. Just knowing myself, and from the results of all my prior attempts, I thought it probably wouldn't work."

But he went in for his first appointment anyway on the campus of the Medical University of South Carolina. He wanted to give it his best shot.

"Before I even started the sessions, I got myself ready. For probably about two weeks prior to the first session, I started off by getting off my brand of smokes and buying the cheapest, most disgusting brand that didn't bring me as much satisfaction. I also limited myself to only one cigarette per hour, and no more than that, by setting up a timer on my phone," Krupka said.

"One of my many craving triggers was also driving. So I would put my cigarettes way in the back of the car where I couldn't reach them. This enabled me to break the habit of smoking every time I got in the car. I just thought, if I'm going to do this, I'm going to go all the way."

That enthusiasm was welcome news to TMS expert Baron Short, M.D., an associate professor in the Department of Psychiatry and Behavioral Sciences at MUSC. He's a leader of the team giving the BrainsWay treatments. "With Victor, we were trying to get him to start cutting back, not immediately go from a pack and a half to zero cigarettes a day," Short said.

Krupka said he was told to avoid cigarettes for two hours before his first appointment. "That was a little hard for me at first. They do a breathalyzer test in the beginning. So we checked the levels of carbon monoxide my first day. And



Photo by Sarah Pack

Food truck operator Victor Krupka smoked for more than 30 years.

then I think it's a scale from 1 to 30. My first day, I think I was at like 46. It was kind of embarrassing. I didn't even make the chart."

Then, Short and his team put what the doctor described as a device that looks like a salon hairdryer helmet on Krupka's head. "But it's more fitted to the head than that. It's an arm that's attached to a power supply unit. The doctor can set the stimulation parameters of the device," Short said.

Krupka described it from his perspective. "The nurse fits a cloth helmet over your head and adjusts what feels like a cushioned, tight-fitting bike helmet over that while you sit in what looks like a dentist's chair that doesn't recline. Ear plugs and mouthguard are optional but highly recommended."

Then, Short said, they try to cause cravings. "Asking them not to smoke two hours before the visit is one way we do that. The other is we show them images or video related to smoking to drive their cravings. We may even give them a cigarette to hold and lighter to light, but we don't let them light the cigarette. On a scale of 1 to 7, we're trying to get them to around a 4 to 5. We're not trying to get them to crawl out of their skin, but

we are trying to get them to crave quite significantly."

The treatment that follows takes about 20 minutes. "It doesn't hurt," Krupka said. "It's a very, very weird sensation. It's hard to describe, but it pulses on each side, like somebody tapping you on the head very quickly — but not very hard. Just enough to rattle you. The first time it fired, it almost threw me off the chair. But then after a couple of times, I kind of got used to it."

He came back every day for three weeks, then once a week for three more weeks. By the tenth appointment, he was able to quit. He believes the visits that followed, which included counseling from Short, have helped him continue to fight his way through cravings.

"I'm not as congested as I was before. I'm not coughing every morning when I wake up," Krupka said. "I feel like my lungs are already starting to heal themselves."

The treatment is not yet covered by insurance, something Short is trying to change. "It's a clinical treatment for people who have tried medicines and behavior therapy but who are still smoking a lot, and they have reasons to

See **QUIT** on Page 8

"I was hoping it would work, you know what I mean? But I was very skeptical at first."

Victor Krupka
former smoker

Faculty kick off school year at 2021 Colbert Lecture and Faculty Awards

BY CINDY ABOLE

aboleca@musc.edu

For the first time in two years, MUSC faculty gathered both in person and virtually for the second 2021 James W. Colbert Lecture and Faculty Awards and Recognition Ceremony on Aug. 17 in the Drug Discovery Auditorium.

The event was hosted by MUSC executive vice president for Academic Affairs and provost Lisa K. Saladin, P.T., Ph.D., who greeted attendees.

“Our faculty, students and staff distinguish us as a top-tier university and health system,” began Saladin. “To the faculty who serve as educators who impact our students – you have the capacity to inspire, to motivate and to guide the future of our students’ lives. To the faculty who are clinicians who impact the health of our patients every day and shape the health of our community – you change lives. To our faculty who are researchers advancing scientific discovery – you truly have the opportunity to change the future and impact the future of health care. Each of you has the change to what’s possible every day, and we value your contributions.”

Saladin praised faculty members for their commitment, especially throughout the continuing pandemic. “Our faculty represents our most valuable asset, and we often don’t take time enough to express our gratitude. We thank each

one of you and recognize that this past year, more than any other, has stressed you to the limit. We are aware of the pressures you’ve all been facing related to COVID-19, and we thank you for your perseverance, your resilience and commitment to excellence,” she said.

The event also celebrated the life of the university’s first provost, James W. Colbert, M.D., who served from 1969 to 1974 before he was tragically killed in an airplane crash. A man of great vision, diplomacy, fairness and pragmatism, Colbert worked to strengthen MUSC’s core missions – education, research and patient care – by integrating functions that would lead the institution to become the academic medical center it is today.

Mary Mauldin, Ed.D., professor and executive director of Instructional Technology and Faculty Resources in the Department of Education and Student Support, gave the 2021 James W. Colbert lecture about digital transformation and its impact on faculty, titled, “The Question You Don’t Want to Ask About Digital Transformation.”

Mauldin detailed the importance of digital transformation and how it is accurate and broad-based, has a huge impact on systems and can affect business. She also emphasized that students and educators are at the heart of this change. Mauldin explained how technology has led to the development of easy teaching tools to enhance student



Photo by Jonathan Coultas

MUSC faculty members were honored during a recognition ceremony that convened in person for the first time since 2019.

education. Software and apps like Panopto (lecture video sharing), Webcam (video streaming) and Poll Everywhere (audience interaction/feedback) are just some of the tools being used in class lectures.

Mauldin also praised the accomplishments of a cadre of innovative faculty members for using educational technology successfully. They are networking and sharing their ideas and

teaching methods to learn new tools such as WebCT (course tools) and other systems with students. “To me this is real transformation in education,” said Mauldin.

Other transformational tools on the horizon include OneMUSC, which will bring systems together, and OurDay, a transformation system that integrates the learning experience with digital health care.

TEACHING EXCELLENCE AWARDS

- ❑ Michael Kern, Ph.D. – Teaching Excellence: Educator Lecturer
- ❑ Michelle Nichols, Ph.D. – Teaching Excellence: Educator Mentor, Academic-Scholarship
- ❑ Tim Tremont, D.M.D. – Teaching Excellence: Educator Mentor, Clinical-Professional
- ❑ Erin Weeda, Pharm.D. – Teaching Excellence: Developing Teacher

FACULTY AWARDS

- ❑ Rupak Mukherjee, Ph.D., associate professor, Department of Surgery – Commitment to Excellence in Interprofessional Education and Collaborative Practice
- ❑ Sarah Ball, Pharm.D., assistant professor, Department of Medicine – Population Health
- ❑ Amy Martin, Dr.PH., professor, College of Dental Medicine – Population Health

- ❑ Frederick Nolte, Ph.D., professor, Department of Pathology and Laboratory Medicine – Population Health
- ❑ Virgilio George, M.D., associate professor, Department of Surgery – Outstanding Clinician
- ❑ Christine Holmstedt, D.O., professor, Department of Neurology – Outstanding Clinician
- ❑ Ennis James IV, M.D., assistant professor, Department of Medicine – Outstanding Clinician
- ❑ Nandita Nadig, M.D., associate professor, Department of Medicine – Developing Scholar
- ❑ James Otis, Ph.D., assistant professor, Department of Neuroscience – Developing Scholar
- ❑ Steven Kautz, Ph.D., professor, Department of Health Sciences and Research – Peggy Schachte Research Mentor

See **FACULTY** on Page 9

Pregnant Myrtle Beach woman with COVID gets lifesaving help at MUSC Health

BY HELEN ADAMS

adamshel@musc.edu

It was a middle-of-the-night phone call no husband wants to get. “They called me and asked, ‘What do you want us to focus on – your wife or the baby?’”

Terry Koonkhuntod’s pregnant wife, Prem, was on a ventilator at MUSC Health in Charleston, South Carolina, at risk of dying from COVID-19. And she was getting worse, which put their baby in jeopardy, too.

At one point, Prem’s heart stopped beating. To her husband’s relief, it restarted after the intensive care unit team gave her emergency chest compressions and medication.

“I don’t ask much from God, but that time, I was just like, ‘Please, God, don’t let me be a single dad. I’m not ready,’” Terry said.

How did they get here, he wondered. Just a few days earlier, Prem was home with him and their two kids in Myrtle Beach. She’d been so careful, they thought, taking precautions against the coronavirus. But Prem hadn’t gotten a COVID shot, even as the Delta variant raged across the state.

“She did want to get vaccinated because she wants to be safe. But then again, the vaccine is too new. They haven’t done a lot of study on it. So she decided not to do it,” Terry said.

It was a decision they would both come to regret.

On Aug. 3, the day their ordeal began, Prem realized she wasn’t feeling well.

“I got sick and coughed. I was worried, so I went to get tested. It was positive. I was pregnant, so I was worried about the baby,” she said in a later interview, her voice still hoarse from the ordeal.

As her symptoms escalated, she was admitted to a local hospital, then transferred to MUSC Health. “The doctor said they have the right equipment over there,” her husband said.

MUSC Health has doctors and nurses experienced in taking care of pregnant women with COVID. Those women are at a higher risk than people who aren’t pregnant of getting severely sick, as Prem now knows. The Charleston hospital also has specialized equipment to help COVID patients, including a type of machine that would become critically important in keeping Prem alive.

“I remember they took me to the room, and the doctor came and talked. After that, they took me to the intensive care unit. After that, I don’t remember,” Prem said.

It was a shocking turn of events for a couple who



Photos by Sarah Pack

Patient care tech Octavia Jenkins-Watson checks Prem Koonkhuntod’s vital signs. Koonkhuntod is recovering from a near-fatal case of COVID-19. Her baby was born while she was unconscious.

met years earlier when Prem left her home in Thailand for an exchange program that brought her to South Carolina. She was working in a Thai restaurant in Myrtle Beach when Terry, also born in Thailand, came in for a meal.

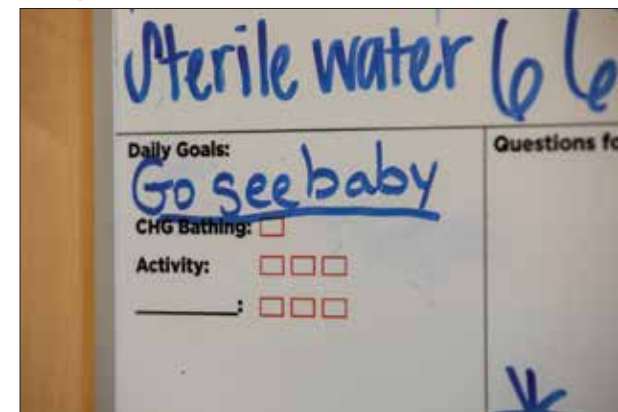
They fell in love, and Prem moved to the U.S. They married, had two children and were looking forward to welcoming their third child. Now, COVID was putting everything they’d built as a family at risk.

“The idea that I could lose her came across my mind a lot,” Terry said.

But Prem had something important going for her: a huge team of doctors, nurses, respiratory therapists and other experts working around the clock. “We have had over 100 people involved in her care,” said Daniel Young, M.D., a critical care fellow who was part of that team.

“We’re a big university hospital, and we brought all of our resources to bear. She probably wouldn’t have survived if she weren’t at a place like this.”

Those resources included something Prem wouldn’t have had access to anywhere else in Charleston: ECMO machines. ECMO stands for extra corporeal membrane



A whiteboard in Koonkhuntod’s hospital room lists her daily goal: Go see baby. He’s in the MUSC Shawn Jenkins Children’s Hospital while she recovers in the adult hospital.

oxygenation. ECMO coordinator and registered nurse Lucy Linkowski explained what the machine, which is only used as a last resort, can do.

See PREGNANT on Page 7

Father, son urge vaccination after teen's time on ventilator



"I don't wish this on anybody. I really don't."

Anthony Rainey
father of patient

and other children on the floor, and he would never want to be in their shoes.

"I have witnessed firsthand that these doctors and nurses are all hands on deck, at all times. You don't just have one doctor. You don't just have one nurse. You have a whole team here that will do anything they can to help," he said.

Unfortunately, said Mack, we are not on the other side of this COVID surge. "This has been the roughest week so far of the pandemic for children in this state," she said on Sept. 16. "We are not seeing the virus abating, in terms of severity of illness in children."

The South Carolina Children's Hospital Collaborative reported that, as of Sept. 16, there are 36 children in the four children's hospitals in the state. Of those, only one is vaccinated. Of the remaining 35, 60% are old enough to be vaccinated, and 40% are under 12 years old and therefore ineligible for the vaccine. Of the 36 children, 16 are in intensive care and six are on ventilators.

None of the children hospitalized at MUSC Shawn Jenkins Children's Hospital over the course of the pandemic has been vaccinated, Mack said. Of note, about half were of age to be eligible for the vaccination.

Christian is making good progress in his recovery. Just a few days ago, his labored breathing prevented him from saying more than a word or two at a time. Now he can speak in sentences again. He's working with physical therapists and occupational therapists who are helping him to take on ordinary tasks like walking. What he'd like more than anything is to be home in his own bed, he said.

Rainey urged people to get vaccinated. It's not a cure, he said, but it will reduce the symptoms and hopefully prevent people from being in his son's position.

"I don't wish this on anybody. I really don't," he said.

Photo by Sarah Pack

Christian Davila gets help walking around his room at the MUSC Shawn Jenkins Children's Hospital on Sept. 15. Above right, his father Anthony Rainey has been staying at his son's side.

BY LESLIE CANTU

cantul@musc.edu

Like most 17-year-olds, Christian Davila and his friends figured they were invincible. They certainly weren't worried about COVID-19.

"We saw it as, 'Oh, we're young. Our bodies can fight it off easier than others,'" said Christian, of Little River, South Carolina.

His father, Anthony Rainey, was also unafraid.

"To be honest, when this first came out, I thought it was a joke. I'm not going to lie," he said, sitting by Christian's bedside.

But with Christian's three-week stay at MUSC Shawn Jenkins Children's Hospital, including a couple of weeks on a ventilator, father and son know all too well how serious COVID-19 is. They each received their first dose of the vaccine during Christian's hospital stay, and they're encouraging others to get vaccinated as well. In fact, some of Christian's friends have already gotten the vaccine as have Rainey's co-workers.

"People want to imagine that previously healthy children can't get sick with COVID, can't get severely ill with COVID, can't die from COVID, and that's simply not true," said Elizabeth Mack, M.D., chief of pediatric critical care medicine. "Christian is an example of that,

and I am so grateful to them for all that they have done already in the community. Even though they've been going through this themselves, they've thought about other people all along the way."

Christian became ill in August after an outing with friends. He was diagnosed with COVID-19 on Aug. 16. At first, he had extremely high fevers that wouldn't come down. After about a week, when he started experiencing shortness of breath and chest pain, his parents took him to the local hospital. After a few days, he was transferred to another hospital and then SJCH.

Because the rest of the family had COVID, too, they couldn't visit Christian. Instead, they had to get updates on his condition through phone calls. When Rainey was cleared to visit and he walked into his son's room for the first time, to see Christian hooked up to tubes and a ventilator, his heart just dropped, he said.

Not only have Christian's lungs been affected, he said, but the disease has also affected his liver and kidneys. And even once Christian is released from the hospital, they don't know what future damage may show up because of COVID, he said.

"For any parent, you don't want to see this. You don't want your child to be here," he said. "As a parent, you feel like you failed."

Rainey said he's watched the staff caring for his son

PREGNANT *from page 5*

"For patients like this, it pulls blood out of the right side of the heart into a machine, which spins it around and pushes the blood through an oxygenator. That puts in oxygen and removes carbon dioxide. Then, the blood is returned to the patient," Linkowski said.

"So we return oxygen-rich blood to the patient because their lungs aren't able to do the oxygenation and the ventilation that they normally do."

Prem would need every bit of that help. "She had an acute decompensation early one morning. I actually got called when I was on the way in," said Young, the critical care fellow.

He arrived to find Prem hanging on by a thread. "We made the determination that we needed support beyond what we were able to provide with conventional ventilation. And so we moved really quickly," Young said.

"I worked with our interventional cardiology colleagues to stabilize her by putting her on ECMO so we could deliver her baby."



A nurse holds one-month-old Alex in the MUSC Shawn Jenkins Children's Hospital.

That was a first, said maternal fetal medicine specialist Rebecca Wineland, M.D. "We've never had to deliver a baby while the mother is on ECMO before. At that point, it was life and death for Ms. K.," she said, referring to Prem.

To everyone's relief, mother and baby

survived. The little boy Prem wouldn't meet for a few weeks, as the ECMO machine did its work, was tiny, less than five pounds. But Alex's arrival was a welcome development during an agonizing time for the family.

When Prem finally woke up, she slowly

took in her surroundings. "I saw the machine. I felt a little bit scared, but I was happy to be alive. After that, I asked my husband, 'How's the baby? What's going on?' He didn't want to worry me too much, but he told me the baby's strong and healthy. That was good news for me."

Prem has made remarkable progress since then. She's working with a physical therapist to recover from COVID's ravages, and her baby is thriving.

Young is thrilled by their outcome. "To have her and her baby both doing well – that's the reason we do what we do," he said.

But his team's work is far from done. "A lot of the general public doesn't know how hard the staff here in the intensive care units at MUSC and across the state are working. So I think we really need to give a lot of credit to the ICU nurses and respiratory therapists, residents, advanced practice providers and other health care team members who are working really hard around the clock, dealing with this pandemic."

See **PREGNANT** on Page 8



Tel: 854-900-2099 471 King Street, Charleston Web: Guinotcarolinas.com



European Waxing

With Guinot's anti-hair growth Serum

Smoother, hair-free Skin

Added Comfort

Slows Hair Regrowth

Helps prevent Ingrown Hair

Other Services:

- Facials, Peels
- Body Treatments
 - Anti-Cellulite
 - Firming, Contouring
- Eyebrows, Lashes
- Make up & Products

Now Buy 4 sessions &
The 5th is Free!*

*Offer Not Cumulative with other promotion



IP03-1943966-1



ALICE'S
CLUBHOUSE

◊ MEMORY CARE DAY CENTER ◊



*Caring for
someone with
memory loss
is hard.
We can help.*

The first medical model memory day center in the Lowcountry.
We provide unrivaled private care for those affected by memory loss.

Better for your loved one.
Better for you.

1156 Bowman Rd., Suite 105 Mt. Pleasant, SC 29464
843-284-8367 | diane@alicesclubhouse.com
alicesclubhouse.com

IP02-1955736-1

PREGNANT *from page 7*

He encouraged everyone who can to get vaccinated, which greatly reduces their risk of ending up in the hospital. Wineland said that advice applies even to people who have had COVID. “We’re seeing pregnant moms get sick again. Even prior COVID should not be a reason not to be vaccinated now, because the Delta variant is 100% in South Carolina and is continuing to cause devastation to those who are unvaccinated.” Prem saw that firsthand and doesn’t want other mothers to go through what she and her baby have. “I think everyone, even pregnant women, should take the vaccine.” Her husband agreed. “If I knew this would happen, I would ask my wife to go ahead and get the vaccine to keep her from getting COVID.”



facebook.com/MUSCCharleston

President’s Values in Actions awards taking nominations

The annual MUSC President’s Values in Action awards recognize five deserving individuals who demonstrate MUSC’s five values: compassion, respect, innovation, collaboration and integrity. Our commitment to these values has never been more important as we navigate our way through a global pandemic. So many people at MUSC go above and beyond each day, and President Cole needs your help in recognizing the diverse, creative, heroic and best efforts of these outstanding individuals in 2021. The nomination process is simple, and there is plenty of time before the deadline of Oct. 15 to submit nominations. Nominees can be submitted from any department across the MUSC enterprise, including the MUSC Regional Health Network. Visit <https://web.musc.edu/about/leadership/president/values> to nominate someone in your sphere.



Photo by Sarah Pack

Krupa at work in his food truck.

QUIT *from page 3*

quit. More than 34 million adults smoke cigarettes. About 480,000 die each year, accounting for about 1 in 5 deaths, so we need more options to try.” He said the out-of-pocket cost is equivalent to about a year’s worth of cigarette purchases. “If your goal is to quit, you can look at the fact that you’d spend this money over a year anyway on cigarettes.

Why not spend it quitting and save money next year and the years after that?” Krupka thinks the treatment finally allowed him to give up smoking after years of trying. At his last appointment, his carbon monoxide level was down to a healthy three. “It’s still not easy. Sometimes, those cravings are still like same as day one. But like Dr. Short said, ‘You’ve just got to battle one craving at a time.’

Enjoy Waterfront Views of Charleston Harbor, Easy Access to Downtown Charleston and Free Parking!

Looking for a great staycation location with wonderful views, an amazing restaurant and bar? We have a great meeting space venue and Happy Hour deals right around the corner from MUSC!

Our beautiful Charleston, SC hotel is conveniently located off Savannah Highway (Hwy 17) and overlooks the Ashley River. Our location is perfect for guests looking for lodging near Charleston’s best attractions and is close to MUSC. Charleston is known for its amazing history, restaurants, and shops. We offer free shuttle service to the historic Downtown Charleston area for your comfort and convenience.

Holiday Inn

Justin Claiborne Sr. • Sales Manager
 301 Savannah Hwy, Charleston, SC 29407 • 843-460-1442 (Direct Line)
<https://www.ihg.com/holidayinn/hotels/us/en/charleston/chsr/hoteldetail>

SAND • PLAY GROUND MULCH

GROUND COVERING DISTRIBUTOR

Proudly Serving East Cooper and the Islands for 15 Years

1135 Hwy. 41 Mt. Pleasant, SC
www.lowcountrymulch.com
971-7010

PINE STRAW • ROCK

MULCH • MUSHROOM • COMPOST • TOPSOIL

PICK-UPS • DELIVERY • BARK BLOWING AVAILABLE

IP003-1961960-1

FACULTY *from page 4*

DISTINGUISHED FACULTY SERVICE AWARD

- ❑ Scott Bradley, M.D. – Distinguished Faculty Service
- ❑ Valerie Durkalski-Mauldin, Ph.D. – Distinguished Faculty Service
- ❑ Sherron Jackson, M.D. – Distinguished Faculty Service

NOMINATION EXCERPTS

Michael Kern, Ph.D., College of Medicine, Department of Regenerative Medicine and Cell Biology, Teaching Excellence: Educator Lecturer
Kern believes that to be the best educator, one must be a facilitator of learning. A life-long learner, he remains current on learning styles, new technology and best practices to encourage critical thinking. His teaching methods demonstrate innovation and collaboration while his mentorship of students is rooted in compassion, respect and integrity.

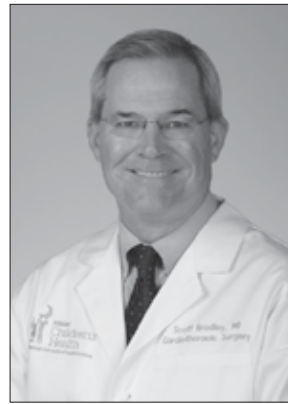
Michelle Nichols, R.N., Ph.D., College of Nursing, Teaching Excellence: Educator Mentor, Academic-Scholarship
Nichols came to MUSC as a student in the College of Nursing's Ph.D. program and has become one of the most valued educators within that program. She works with learners on all levels, whether a beginning graduate or undergraduate student, adolescent in the community or an experienced clinical scientist. She desires to enable her mentees to achieve their short and long-term goals. She recognizes that everyone learns and grows at different rates and routinely incorporates innovative methods and technology.

Tim Tremont, D.M.D., College of Dental Medicine, Teaching Excellence: Educator Mentor, Clinical-Professional

Tremont is an exceptional educator with an unbridled passion for shaping the next generation of orthodontists. A skilled educator, he has an amazing ability to break down complex topics into simple, easy to understand building blocks. He uses past cases from his time in private practice to allow residents opportunities to diagnose and develop treatment plans. He then employs the Socratic approach to facilitate discussion before providing the residents with detailed steps of the treatment that Tremont ultimately provided the patient. Because of his work, Tremont has helped to transform MUSC's once struggling orthodontists program into one of the most coveted residencies.

Erin Weeda, Pharm.D., College of Pharmacy – Teaching Excellence: Developing Teacher

Weeda is the instructor for the Outcomes Design and Assessment course in the College of Pharmacy. She works hard to relate how skills learned in her course



Bradley



Durkalski-Mauldin



Jackson



Kern



Nichols



Tremont



Weeda

will be utilized to enhance patient care. Her teaching success is rooted in her teaching philosophy. She finds it of the utmost importance to explain the connection between the content and future success and create a learning environment where feedback is inspiring. She is highly respected among faculty and students alike for her engaging presentation style, command of material and approachability. Colleagues describe Weeda as a "treasured teacher," and "irreplaceable resource" to both students and colleagues and a "dedicated mentor."

Scott Bradley, M.D., Department of Surgery, Distinguished Faculty Service

Bradley's superiors and colleagues hold him in the highest esteem, one remarking that he "has taken a very good Congenital Heart Surgery Program and transformed it into a truly world class program," currently ranking 7th best program in the U.S. Another noted that Bradley's teams "produce congenital heart surgery outcomes that are equal to or better than" any in the world. The key result, as another colleague emphasized, is that there are thousands of children and even adults "born with congenital heart disease who literally had their broken hearts fixed by Dr. Bradley." Bradley's skillset has earned him Best Doctors in America accolades every year since 2001. His scholarly contributions include 93 invited presentations and 141 peer-reviewed publications. He currently holds the Robert D. Sade, M.D., Endowed Chair in Pediatric Cardiac Surgery.

Valerie Durkalski-Mauldin, Ph.D., College of Medicine, Distinguished Faculty Service

Durkalski-Mauldin is a biostatistician who has risen to national prominence as an accomplished scholar and director of MUSC's Data Coordination Unit. She's been described as the epitome of a great collaborator, as she learns about diseases and treatments under study and compassionately helps to educate and inform the entire research team. It's been described that through Durkalski-Mauldin's leadership and talent that the work conducted the Data Coordination Unit represents the gold standard for statistical design and data management. Not only has she served as mentor for junior colleagues and on multiple dissertations but also has been an outstanding teacher of clinical trial design for the Department of Public Health Sciences in both introductory and advanced levels.

Sherron Jackson, M.D., Department of Pediatrics, Distinguished Faculty Service

Jackson has been an invaluable faculty member who has provided care to a vulnerable population. For more than 30 years, Jackson has been MUSC's key clinician in establishing, developing and expanding the program to provide compassionate care for children with sickle cell disease. Her deep and abiding commitment and advocacy for these patients and families is a hallmark contribution of Jackson's clinical faculty service. She remains committed to her patients and has taken extra steps to assure that caring for these patients is part of training every pediatric trainee at MUSC.

Quarterly ‘I am an MUSC Innovator’ awards recognize excellence

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

Andrea Coyle, DNP., College of Nursing, **Alyssa Rheingold, Ph.D.,** and **Tenelle Jones,** Department of Psychiatry and Behavioral Services

Problem: As the global pandemic continues its devastating march across the globe, it has become mission critical to care for the people that deliver care to patients. The Resilience Program was created to offer monthly peer support sessions via Microsoft Teams as well as individual and group resilience interventions.

Impact: This innovation offers peers support by leveraging Teams, offering hybrid workshops and meetings with care team members both in person and virtually. Unit-based Nursing Shared Governance councils, where staff seemed to be experiencing the most distress, were contacted and became involved. As part of the team’s work, data was collected on the nurses’ perception of their burnout, compassion fatigue and secondary trauma to demonstrate the impact of the team’s work. The number of units that became involved grew exponentially. Initial data indicates that the work with the unit-based councils is having a positive impact on the nurses’ perceptions of their level of burnout.

Acknowledgements: Nurse managers Rhonda Flynn, R.N., Austin Zeyfang, R.N., Marilyn Hauser, R.N., and Peter Gardella, R.N., as early adopters of the Resilience Program; the Surgical Trauma Burn Intensive Care Unit Shared Governance Council; and the Wound Care team – all of which have embraced resilience.

Amy Smith, R.N., College of Nursing

Problem: As the number of patients diagnosed with chronic, life-limiting illnesses increases drastically, it has become critical to ensure that all undergraduate and graduate nurses are trained in primary palliative care and end-of-life care. The current pandemic has also shown us how valuable it is for all health care providers to have training and education on palliative care/end-of-life care.

Impact: My innovation was designing a five-part series interprofessional end-of-life simulation that incorporated key concepts from the End-of-Life Nursing Education Consortium (ELNEC) and TeamSTEPPS. It was developed to educate health care students on the value of interdisciplinary collaboration in providing care for a family and patient

with a serious illness from diagnosis to end of life. I am currently building the simulation videos into a guided presentation that can be utilized by health care programs everywhere.

Acknowledgement: I wish to recognize my mentor, Carrie Cormack, DNP, for her support, guidance and assistance in developing my interprofessional simulation.

Melissa Hortman, Ed.D., Erika Rowell, Mary Smith, Brett Berman and **Amy Bandy Taylor,** Academic Affairs and Information Solutions Strategy and Management

Problem: As part of the Microsoft Teams for Education Hackathon, six institutions, including MUSC, had six weeks to envision and build an innovative solution that could be delivered through Microsoft Teams.

Impact: The team envisioned a transformational solution allowing for individual and community growth around wellness as hybrid work continues and MUSC expands its workforce across the state. During the six weeks, the team worked with the Office of Health Promotion to reenvision and rebuild the wellness challenge-based program, Imagine U, into a personal app in Microsoft Teams. The team used myriad Microsoft tools, many of which had never been used at MUSC before, to build the innovative solution. Most of the knowledge to build this solution was gained during the Hackathon time on nights, weekends and lunch breaks to meet the deadline of the competition. During this pilot phase, 210 people joined the team, and 32 people completed a personal wellness challenge, with over 1,800 points earned through challenges and 116 replies with 165 reactions to 37 posts. MUSC was named a winner of the Hackathon. Next, Imagine U, in its new form, will roll out to the entire MUSC enterprise across all sites in South Carolina with the aim of reaching over 17,000 employees.

John Wrangle, M.D., Hollings Cancer Center

Problem: Treatment for patients with advanced non-small cell lung cancer (NSCLC) who are in an unmatched arm (of a clinical trial) – which comprises patients with tumors that do not have mutations targetable with a drug – has been limited.

Impact: Wrangle is bringing a novel combination immunotherapy treatment – pembrolizumab + N-803 – to NCI’s Lung-MAP clinical trial. Lung-MAP, or the Lung Cancer Master Protocol, is open at more than 700 sites across the United States. The combination

immunotherapy developed by Wrangle and colleague Mark Rubenstein, Ph.D., will be offered as a treatment in the unmatched arm. The Lung-MAP trial is an umbrella precision medicine clinical trial, which means that the efficacy of many drugs will be tested in this one trial, in the patients that they are most likely to benefit. When a patient is enrolled in the trial, his or her tumor genetics are screened. If that tumor has targetable genetics, then the patient is assigned to a treatment arm. However, 90% of patients are anticipated to be in the unmatched arm. Beneficially, umbrella trials allow new treatment groups to be added over time as new drugs emerge. The unmatched arm provides patients with a treatment option that is not usually available without actionable tumor mutations.

Gabrielle Redding, Alexzandra Sanders, Jordan Flynn, and **Katlyn Elderman,** Student Affairs – College of Medicine

Problem: COVID-19 affected every aspect of life – personal and work. Our medical students thrive on supporting each other and when Match Day was approaching in March of 2021, the team had to get creative so as to allow our students to celebrate their amazing accomplishments.

Impact: Envisioning a space that allowed the event to continue in a safe manner, we moved it to the Joseph P. Riley Jr. Park baseball stadium. This outdoor venue offered enough space for 100-plus students to participate live and offered virtual capabilities for family and friends to join through a live-stream feature. The event was done safely, well attended and was also enjoyed by over a thousand virtual attendees. The team continues to offer hybrid programs and modify in-person activities to allow for social distancing. Most recently, they’ve used this model for the Class of 2025 orientation by bringing students to campus for small group activities and keeping large sessions virtual.

Acknowledgements: The Student Affairs Team for work in planning and supporting the event; the College of Medicine career advisors for their guidance and advising, leading our students to successful residency matches; and Production Design Associates, a local event production company that supports our (now regular) virtual events.

Patrick Flume, M.D., College of Medicine

Problem: The COVID-19 pandemic presented specific challenges related to pertinent clinical trials

See **INNOVATOR** on page 11

INNOVATOR *from page 10*

over the last 17 months. An integral and organized leader was needed to coordinate MUSC's numerous clinical trials and ensure that our status as an authority on research development was maintained.

Impact: Together with the COVID Clinical Trial Committee, Flume vetted 484 research opportunities, including interventional clinical trials, observational data analysis, surveys and biologic methods development. Of these, there were 282 interventional trials: 259 therapeutic and 23 vaccine. The committee chose to proceed with 145 interventional trials, offering therapeutics to inpatients and outpatients with COVID, as well as housemates at increased risk of infection. More than 2,066 subjects were enrolled in clinical trials – therapeutic: 386; vaccine: 1,019; antibody and antigen studies: 463; MUSC Biorepository and Blue Coral (specimen collection): 198. These enrollments include our regional affiliates in Florence, Lancaster and Marion.

Our institutional offices, especially the Office of Clinical Research (OCR), which reports to Flume, fast-tracked trials based on this committee's recommendations. They were able to accelerate the processes to allow us to meet the needs of our patients in rapid fashion. Over the last year, we have learned about the experiences of colleagues at other institutions, where there were less-organized approaches that led to chaos and competition in the recruitment of subjects into trials.

Acknowledgements: Kathleen Brady, M.D., Ph.D.; the COVID Trials Group led by Susan Dorman; COVID Operations Committee led by Royce Sampson; Nexus team led by Karen Packard, Pulmonary Clinical Trials team led by Ashley Warden and Alyssa Snell; Research Coordination and Management team led by Clare Tyson; and institutional offices, including the Institutional Review Board (IRB), Office of Research and Sponsored Programs (ORSP) and Office of Clinical Research (OCR).

Boeing, CCSD partner with MUSC to expand mental health resources for schoolchildren



Photo by Andrew J. Whitaker/Post and Courier

Two large million-dollar checks are presented during a press conference for the mental health initiative launch of the MUSC Boeing Center for Children's Wellness at Burke High School on Monday, Sept. 13.

Staff Report

The Boeing Co. and Charleston County School District (CCSD) each announced on Sept. 13 a \$1 million investment in the Medical University of South Carolina's Boeing Center for Children's Wellness (BCCW) to expand the program's offerings to include resources addressing children's mental health in the wake of the COVID-19 pandemic.

The funding from Boeing and CCSD will support the current school-based wellness initiative while adding mental health supports for schools in Charleston County. Supports will include training for classroom teachers to help children find appropriate coping mechanisms and ways to deal with stress as well as integration of MUSC Telehealth, bringing high-quality, evidence-based, trauma-focused mental health services to children in a school setting. In addition, this funding will support the development of a plan to change and improve the mental health system substantially.

"By coming together through partnership, MUSC, Boeing and the Charleston County School District

have seen significant results in reducing childhood obesity and improving student wellness," said David J. Cole, M.D., FACS, MUSC president. "We are so grateful to our friends at Boeing and CCSD for believing in us, sharing our innovative spirit and remaining such important partners as we seek to improve the well-being of children and their families. These funds will make a significant difference in helping the MUSC Boeing Center for Children's Wellness to meet the increasing need for mental health support in schools."

Boeing, a leading global aerospace company with an assembly site for its Commercial Airplanes division located in North Charleston, helped to establish the BCCW through its foundational support 10 years ago.

"Boeing is incredibly proud of this partnership because together we are building off the success of the MUSC Boeing Center for Children's Wellness, the expertise of the Medical University of South Carolina and the dedication and commitment of the Charleston County School District to students, staff, and families," said Jennifer Lowe, vice present of National Strategy and

Engagement with Boeing. "With this investment, MUSC and the BCCW will be able to dedicate resources to children's physical and mental health while creating space for Charleston County School District to focus on their core mission of academic achievement."

The CCSD is the second-largest school system in South Carolina and serves approximately 49,000 students in 88 schools and specialized programs.

"The provision of high-quality mental health services for our students and robust training for our staff is essential to ensuring our children have the tools they need to begin recovery from the impacts of COVID-19," said the Rev. Eric Mack, CCSD Board of Trustees chairman. "We know, undoubtedly, that our students have experienced profound loss in many, many ways this past year, and we must find ways to join together as a community to wrap our resources and supports around our most important assets – our children."

Over the past decade, the MUSC BCCW, which reaches 17 school districts in South Carolina, has focused on wellness and obesity prevention by working directly with schools to implement programs that promote healthy eating, physical activity and social-emotional learning. The programs have demonstrated positive outcomes in connection to body mass index, asthma, school attendance and suspensions/expulsions and high school graduation rates. With Boeing and CCSD's investment, the MUSC BCCW will expand school wellness to include more targeted mental health support by leveraging relationships with schools, state agencies and MUSC Health's vast expertise.

"The Boeing Company is once again leading the way in its support of our efforts to address the needs of children through working with schools. They supported our initial work to turn the tide of childhood obesity and have now recognized the current community need – improved mental health services," said Janice Key, M.D., executive director, Boeing Center for Children's Wellness.

LISTEN UP!

The MUSC Catalyst News is the **BEST** and **MOST EFFECTIVE** way to reach students, faculty, staff, patients, AND patient visitors in the MUSC community!



Promote your message in the Catalyst News today!

The MUSC Catalyst News is an award-winning newspaper, delivered bi-monthly (every two weeks.) The Catalyst News was recognized in 2008 as **best newspaper-newsletter by the SC-PRSA**. The Catalyst News serves an **audience of more than 17,000** MUSC students, faculty, researchers, hospital patients, their families and patient visitors.

MUSC is among the top three employers in the Tri-county area.

The Catalyst News is available (readable) in a PDF online version, which means that each advertisers' message is also promoted electronically.

<https://web.musc.edu/about/news-center>



Contact us today!

843-958-7489 • advertising@moultrienews.com

Island Publications, Inc.'s acceptance of an advertisement(s) for publication in the MUSC Catalyst is conditioned upon MUSC's acceptance of said advertisement(s).