



Ph.D. graduate Kenyaria Noble visits the MUSC Urban Farm with her kids. Read her story on page 8.

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Health and Well-Being

'I feel good about the future,' says MUSC scientist tracking COVID

BY HELEN ADAMS

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The COVID case rate basically held steady in the Tri-county area in the MUSC COVID-19 Epidemiology Intelligence Project's latest update. There were 874 new cases during the past week in Berkeley, Charleston and Dorchester counties combined, compared with 863 the week before.

But project leader Michael Sweat, Ph.D., is optimistic. "I feel good about the future, because the fact that we're getting growing numbers of people vaccinated is going to have an effect. There's just no question. It protects more people. It also breaks up the ability of that virus to spread through networks. It's not slowing down enough to make it go away right now, but it's helping a lot."

Sweat has been through global health crises before, honing his expertise in developing mathematical models to predict what viruses will do – and what factors can change their trajectories.

During the AIDS epidemic, he provided analysis for the Centers for Disease Control and Prevention on HIV. He later worked in international health at the Johns Hopkins Bloomberg School of Public Health, where he's still an adjunct professor. Sweat currently directs the Center for Global Health at MUSC and serves as a professor in the College of Medicine.

Since the start of the coronavirus pandemic, he's been using data from MUSC

Health, the South Carolina Department of Health and Environmental Control and other sources, along with emerging research on COVID-19, to give daily updates on cases per day for the Tri-county area and other parts of South Carolina, and weekly big-picture updates.

As he watches the number of vaccinated people tick up, Sweat is also looking at the role of natural immunity in getting us closer to possible herd immunity. People who have had COVID may keep antibodies to the coronavirus for at least five months. The degree of immunity is affected by the severity of infection, the person's age and other factors.

But Sweat said new research does appear to confirm that natural immunity works. "There have been a couple of high-quality, very prominent studies that came out in the past few weeks – one in Denmark and one in the U.K. – using huge numbers of people, tracking breakthrough infections for people who already had an infection and also looking at infection rates among people who've been vaccinated."

Their conclusion: "I think the message, at least based on these two studies, is natural immunity seems to be as effective as vaccination," Sweat said.

But that message comes with some important caveats. "Seems to be" isn't the same thing as "is definitely" Sweat said. He brought up four key points.

❑ Vaccines have been proved to reduce the severity of, hospitalization rate related to and



Rachel Wachs created this image of the coronavirus with a green check mark, representing immunity. Illustration from Wikimedia Commons.

mortality from COVID-19. We do not have evidence that natural immunity has the same benefit.

❑ Vaccines are highly effective against the current variants in circulation. We do not know if natural immunity is effective against variants.

❑ Vaccines work well for all age groups. Natural immunity has been shown to be much less effective among people 65 years and older.

❑ Many people mistakenly think that they have had COVID-19 in the past. If you avoid vaccination because of this, it is very risky.

Sweat's team at MUSC has been calculating immunity estimates for every county in South Carolina. The current statewide estimate is 66%. That number goes up and down as people who had COVID more than five months ago are no longer considered immune.

Jane Kelly, M.D., an assistant epidemiologist with SCDHEC, called

Sweat's work high quality. "I'm excited by this analysis, but we don't know enough yet about duration of immunity. I am concerned that people will think they will be long-term protected by natural infection, but we don't have definitive proof of this," she said.

Using what has been proved, Sweat did some extra analysis this week on South Carolina data, looking at the impact of both vaccinations and natural immunity.

First, when it comes to vaccinations, the shots clearly make a difference. "We compared the 30 counties that have less than 40% vaccination immunity to the 16 counties that have 40% or more vaccination, and we looked at the growth rate over the past 14 days," Sweat said.

"Those with lower vaccination saw 17% growth. But the counties with 40% or more vaccination went down about 17%. So the virus is clearly spreading more easily in places with lower vaccinations."

See **TRACKING** on page 15

MUSC CATALYST news

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Front Photo: College of Graduate Studies Ph.D. graduate Kenyaria "Kiki" Noble spent a lot of free time with her kids Domani and Kaydence at the MUSC Urban Farm and areas around campus. Read her story on page 8.

Photo by Sarah Pack

Editor's Note: After a year-long hiatus of its printed, hard copy edition, The MUSC Catalyst News, is back. The Office of Public Affairs and Media Relations staff have consulted with MUSC infectious disease and Safety and Quality experts and industry studies to confirm that paper products such as newsprint are safe and low-risk in surface-based transmission of the coronavirus.

Copies of the newspaper will be distributed bi-monthly to racks around campus as well as via the MUSC Mailroom's zoned mailbox system on campus and at various MUSC satellite medical offices and clinics in the Tri-county, as well as MUSC's Regional Hospitals, upstate. For information about delivery or advertising in The Catalyst News, contact Cindy Abole, print editor at catalyst@musc.edu or 792-4107. Remember to recycle!

Health professions grad spreads OT knowledge in S.C. and abroad

BY LESLIE CANTU

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Melissa Turpin has done a little bit of everything as an occupational therapist – worked with babies and toddlers in their homes, patients in a hospital, children at school and residents in nursing homes.

Now, as a member of the first cohort to graduate with a Post Professional Occupational Therapy Doctorate from the College of Health Professions at MUSC, she'll be able to share her knowledge and skills with people who are entering the career field. She is serving as both an instructor and the admissions director for the new occupational therapy program at Presbyterian College, her undergraduate alma mater.

"It's been fun. It's been great to be on the ground level of a program," she said. "I went to PC, and the motto is 'While we live, we serve,' so I'm super excited and passionate about that."

There will be plenty of opportunities for OT students at PC to serve, she said, as the program will develop opportunities that help them to understand occupational therapy as well as population health.

She's also looking forward to expanding upon her capstone project, in which she provided some OT training to teachers at a special-needs school in Nicaragua. COVID-19 curtailed her initial plans, so she's hopeful that she will be able to travel there and work with the teachers in person.

But first comes graduation.

Turpin is one of 12 students in this first cohort. Over the course of five semesters, the students have explored each of the four possible tracks – leadership, teaching, population health and advanced clinical practice – and produced their own unique capstone projects.

The program was developed in response to feedback from MUSC alumni who saw a need within the profession, said Michelle Woodbury, Ph.D., director of the PPOTD program.

The field of occupational therapy is expected to grow by 16% between 2019 and 2029, according to the U.S. Bureau of Labor Statistics, more than the average job growth of 4%. Yet many people remain unsure of what occupational therapy is. Turpin herself began her undergraduate work thinking she wanted to be a physical therapist; it wasn't until the summer before her senior year that she was exposed to occupational therapy when she worked as a rehab aide.

Occupational therapy is a holistic profession that seeks to increase independence, safety and function in all areas of the patient's life, Turpin said. "Occupation" could mean the patient's work, but really it refers to anything that occupies



Photo by Janice Jones

Post professional occupational therapy graduate Melissa Turpin with husband, Rick, and sons, Liam and James.



Photo Provided

Turpin has been the therapy lead on several medical mission trips to Nicaragua.

the patient's time. For children, that's usually play and school. For adults, it could be cooking, cleaning and basic hygiene.

Turpin said she fell in love with the profession during that summer before her senior year. She loved how creative the therapists could be in their interventions and how they

considered the whole person. Since she had started college with the intention of going into physical therapy, with a few tweaks she was able to change course. After graduating from PC, she began her entry-level OT training at MUSC.

After her first graduation from MUSC, she began her OT career working at Dorchester School District 2, where she worked both with individual students and as a consultant for teachers struggling with students' behavioral issues or those who had sensory issues. On weekends and during summers, she worked at a skilled nursing facility.

She also did some work at Summerville Medical Center, working with both adult and pediatric patients. Occupational therapists are especially important in discharge planning, she said, because they consider such things as whether the patient will be able to bathe, navigate stairs in the home or cook and clean. She cited a study that found that additional spending on occupational therapy was the only hospital spending category that resulted in reduced readmission rates for patients with heart failure or who'd had heart attacks or pneumonia.

In 2015, after a friend who was an early intervention specialist told her how desperately they needed occupational therapists who would work in children's homes, particularly children under the age of 3 who qualified for the state's BabyNet early intervention program, she launched her own business.

She loved working in homes because the whole family would become involved in the child's therapy. And by having the parents involved in the sessions, she could instruct the parents on activities to do when she wasn't there.

"I would bring mom in or bring dad in, and they would be an active participant in the session," she said. "I could explain why I was doing everything that I was doing. Why are we

See THERAPY on page 15

Pharmacy graduate means business

BY HELEN ADAMS

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When Keeana Ross tells people where she's headed after graduating from the College of Pharmacy at MUSC, they have no problem recognizing the name. "It seems like everyone knows Pfizer these days, especially with their contributions of the new vaccine," she said.

Ross won't be working on vaccines, although she's proud to have landed a postdoctoral fellowship with a company that has played an important role in fighting COVID-19. No, the people she hopes to help through her work at Pfizer and beyond are those whose illnesses don't often make headlines.

"I'm going to be working in their rare disease therapeutic area. That covers sickle cell and growth hormone deficiency and other genetic diseases that are commonly not really focused on because they affect fewer than 200,000 people in the U.S. so they're not seen as big-ticket items."

They are, however, close to her heart. "I feel like I've given a lot of my effort and energy and passion to underserved populations, giving a voice to people who don't always have one. I'm excited to see how that correlates with big pharma and its business practices."

Assistant professor Yuri Peterson, Ph.D., who has worked closely with Ross during her time at MUSC, applauded her next professional step. "The fellowship is a highly competitive and prestigious position," he said.

Ross is no stranger to competition – and rising to the top. While earning a bachelor's degree in biological systems engineering and serving in multiple campus leadership roles, she knew she wanted to stretch herself further.

"With engineering, our goal was really to understand how to create things on a mass scale and develop these processes that are

going to be used to manufacture the drugs. I wanted to know more about the drugs and what they do in the body and how they impact patients."

To learn that, she decided to go to pharmacy school at MUSC – oh, and she also decided to earn a Master of Business Administration degree at the same time at The Citadel.

"I think I have a really different skillset. I like working with people to come up with ideas and bringing them to life," Ross said.

Peterson, one of Ross' mentors, said she has the inquisitive mind and intellect to have quite an impact. Her range of research interests has been broad. "Her best work, which is soon to be published, is in safety advocacy and analysis of National Institute for Occupational Safety and Health workplace hazardous drug exposure."

Ross also has a knack for leadership, as her undergraduate days indicated. She's a current regional facilitator of the Student National Pharmaceutical Association and former chapter president of that organization's MUSC chapter. She's also done an externship with the U.S. Department of Veterans Affairs' Investigational Drug Services unit and Prisma Health's Acute Oncology Clinical Pharmacy team.

Now, Ross is about to return to her roots – at least, geographically. While she calls Columbia, South Carolina, her hometown, she spent her first six years in Queens, a borough of New York City. Her Pfizer fellowship will take her back to her birth state, where she plans to live in Brooklyn.

Ross, the only child of doting parents, said she couldn't have made it this far without her family's support. "They are very quick to come to my rescue if I need anything. When I was younger, I was like, 'Oh my gosh, helicopter parents.' But now I'm very thankful."

She also credits the support of mentors, such as Peterson, at MUSC. "He's been very, very helpful. I started to doubt whether I made the right decision because there are all these different things you could do in pharmacy. But then I realized that if you pick the road that's less traveled, you kind of have to pave it yourself. I'm so thankful for people like Dr. Peterson who were constantly in my corner."



Photo by Sarah Pack

College of Pharmacy graduate and Columbia, S.C. native Keeana Ross earned a dual Pharm.D. (MUSC) and MBA (The Citadel). She will work in the Medical Affairs branch at Pfizer.

"We can have the best clinical trial data and groundbreaking research but if we can't effectively communicate the information to healthcare providers who make decisions on behalf of patient care we can't actually ensure the safe and appropriate usage of our drugs, which is the most important part. That's where Medical Affairs comes in."

Keeana Ross

Ross will work in Medical Affairs at Pfizer. "I kind of explain it to my family like this: Medical affairs teams for pharmaceutical companies allow all the science and research to have an impact in actual patients' lives. We can have the best clinical trial data and

groundbreaking research but if we can't effectively communicate the information to healthcare providers who make decisions on behalf of patient care, we can't actually ensure the safe and appropriate usage of our drugs which is the most important part. That's where Medical Affairs comes in," she said.

"Most companies' Medical Affairs teams include their Medical Science Liaisons (MSLs), who are commonly usually PharmDs. They create and maintain personal relationships with providers and can answer more questions about the medications and the science behind them."

Ross, during her two-year fellowship, will work with medical science liaisons to keep them abreast of new studies and clinical trials. "I'll help to support external activities such as educating MSLs as well as internally by helping with promotional review of advertisements and setting strategy for the rare disease division."

At the end, she looks forward to helping direct internal medical affairs roles or possibly taking on a frontline role as a medical science liaison herself one day. "I feel like I'm a lot stronger coming out of the fellowship application process than I was going in. I know a lot more about myself and what I want and where I see myself long term."

MEET KRISHNA



Krishna Bharani, M.D. Ph.D.

College/Program; How many years
Medical Scientist Training Program; 8 yrs.

How are you changing what's possible at MUSC

By advocating for and exemplifying a good work-life balance to promote a culture of wellness

Hometown *Rolling Meadows, IL*

Family and Pets

Wife, Chelsea; and daughters, Inarah, 16 months old, and Asha, 3 weeks old

Residency plans: *Pathology residency at Stanford University*

Cities or countries you've visited

I took a sabbatical in 2018-19 to backpack around the world with my wife. We traveled to 11 countries in Europe and Asia

Favorite quote

"The only way to get smarter is by playing a smarter opponent."

— Fundamentals of Chess 1883



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Sometimes you can't take the country out of the boy or the boy out of the country

BY **BRYCE DONOVAN**
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There's a little place off S.C. Highway 17, just after you cross over the Edisto River, known to locals as The Hill. Situated a couple hundred feet back from the road, behind a faded pink thrift store, you'll find a slight rise in the terrain. Casey Chubb, a 2021 MUSC College of Medicine graduate, will forgive you if you don't see it immediately. It might not be much, he said, but what it lacks in elevation, it more than makes up for in memories. And whether he's thought about it or not, it's a fitting symbol for the past six years of his life.

But Chubb's relationship with Jacksonboro, South Carolina, goes back much further. In fact, the 30-year-old, who will soon begin his family medicine residency at MUSC, has spent all but his time in med school in this small town.

Growing up in a one-stoplight town with a population of 399 means everybody knows everybody. Or more accurately, everybody knows everybody else's business. In some small towns, that level of intimacy can be suffocating, even toxic; in Jacksonboro, Chubb said, it's brought them closer together. They're a community here. These are his people. His family. And it wasn't all that long ago that Chubb was a scruffy-haired boy running around barefooted, riding four-wheelers and throwing dirt clods.

"Put it this way: My great-great grandmother was won in a poker hand. That's how country I am," he said with a laugh.

Things certainly were a lot simpler back then – back before life became such an uphill battle – but he'll be the first to tell you that adversity has made accomplishing his goal all the more satisfying.

UNFINISHED BUSINESS

When Chubb was 9 years old, his mom's sister-in-law got very sick. Oddly enough, it's the laughter than he remembers the most. He remembers going with his mother to visit her – she had cancer and was in a lot of pain, he recalls – and his main focus was trying to make her smile.

"I saw that if I could make Aunt Trish laugh for, like, five minutes, it was an escape for her," he said. "I think that's kind of when it clicked. I thought, 'If I can make her feel better with a laugh, what could I do with a medical degree?'"

After all, there was some unfinished business between medicine and the Chubb family.

Long before she started a family -- before her stint as a postal worker or that time she was a welder, heck, she even ran the pink thrift store for a bit – Chubb's mother was on track to become a registered nurse. "Dirt poor," as he described her, she busted her tail to get the grades and, in turn, scholarship to go to nursing school. All throughout school she continued to shine. At the top of her class and just three weeks away from graduation, her gallbladder ruptured. That unfortunate event forced her to miss 11 days of school and, unmercifully, her scholarship was revoked.

"She always regretted not going back to nursing school," Chubb said.

As he – along with his desire to become a doctor – continued to grow, his mother pushed him to get his EMT certification as well as volunteer at the Jacksonboro Fire Department. He even got a job as a technician at a nearby hospital.

"She was my biggest champion," he said. "She was my person. My best friend."

Sadly, she would never get to see her little boy become Dr. Chubb.

A FORK IN THE ROAD

After missing out on admission the year before, Chubb got into MUSC's College of Medicine in 2015. Though he was elated, his focus was still squarely on his family. He had people depending on him day in, day out. His cousin Alaina, his parents – they wouldn't admit it, but they needed him. So throughout medical school, he traveled back to Jacksonboro frequently, even moving home for his final year. That 90-minute round trip is one Chubb knows well.

"I know it sounds nuts, but I don't know what I would have done without that drive," he said. "Usually, I just listen to music. Maybe make a phone call. But whatever it is, it gives



Photos by Bryce Donovan

College of Medicine graduate Casey Chubb stands in front of the thrift store his mother used to run in Jacksonboro, S.C.



Casey Chubb takes a selfie with his family. At right are his mother and father.

me the time to decompress."

On the morning of Chubb's very first day of medical school – a day that normally should be full of anticipation and excitement – he learned his grandmother had terminal cancer. Refusing treatment, she returned home, given six months to live. Chubb and his mother took over caring for her, and she would go on to defy the doctors and live two more years.

During that time Chubb settled in at school. He found his rhythm. Things were good.

Then, just weeks before he was to begin his third year, his maternal grandfather had a massive stroke. For three straight days, his mother spent every minute by her dad's side.

As his condition continued to deteriorate, he was moved to the intensive care unit. All the stress, the worry, it took its toll on Chubb's diabetic mother.

"She was always more worried about everybody else than herself," he said. Fever turned into a cold. A cold turned into pneumonia. That forced her to return home to get some rest. Family urged her to seek medical attention herself, but she was tough – and stubborn. "She didn't want the focus off her dad," Chubb recalls.

But what nobody knew at the time was she was in the beginning stages of septic shock. She would die less than 24 hours later.

See DOCTOR on page 7

DOCTOR *Continued from Page Six***LOOKING DEEP WITHIN**

In medical school, after the first two years, there's a test. Historically, in the eight weeks preceding it, students buckle down and spend the majority of their time studying. Unfortunately, this time happened to coincide with the loss of Chubb's mother and grandmother.

In the course of just two short months, Chubb lost two of the most important people in his life, was pulled off rotations and forced to sit out a year of medical school. It would turn out to be a very long year.

"That was such an awful stretch," Chubb said. "I won't lie, there was a point where I wasn't sure if I wanted to go back to medical school. I kept thinking, 'What's the point of doing this if I can't even save my own mom?'"

Though it was filled with sadness, the year off proved to be a blessing. It gave him time to heal. To think. To talk with his family. There were lots of tears shed, heated discussions, late-night arguments, but in the end, they convinced him that his mom would have wanted him to finish medical school. This time, he passed his certification.

"Once I passed that test, I stopped

doubting myself," he said. He laughed, adding, "Besides, I had so much debt, the only way out was to be a doctor."

HOMECOMING

Jacksonboro runs deep in Chubb's blood. Raised in a Baptist household, he was taught from an early age that service comes first. You always give back.

"Mom always said, 'Don't forget who you are and where you come from.'"

Though he'll primarily be working in Charleston for the next three years – and finally bought his own condo in town – he'll still come back to visit. And when those three years are up, he plans to move back home – this time for good – and set up a practice in Colleton County.

He also envisions eventually setting up a free clinic – in honor of his late mother – as a place for locals who can't afford medical bills to come and get quality care.

He even has the perfect location for it: her old thrift store.

"The people here are good people. They deserve the same treatment as everybody else," he said.

He would know. After all, they are his people.



Photo by Bryce Donovan

One of the advantages of small-town life means living on a road bearing your family's name.

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RESIDENTIAL BROKERAGE

Mom, researcher achieves work-life balance

By CINDY ABOLE

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On the track field, a hurdler's technique is just as important as her speed. Running hurdles is a highly specialized, goal-oriented mechanical technique of jumping over an obstacle at a sprint.

For talented athletes, it requires hours of disciplined drills and practices.

Kenyaria "Kiki" Noble has tackled her share of hurdles and obstacles already in her 29 years.

A three-time St. Lucie County multi-event track and field high school champion from Fort Pierce, Florida, Noble knows all about the value of preparation, hard work and persistence to attain her goals.

Throughout her journey, she's learned to appreciate the challenges and struggles as well as the opportunities in life to find success.

"A disciplined mind equals a disciplined body," she said, with a smile. "In my first year running hurdles in high school, I fell every race. The next year, I found a way to prepare myself, and with training and hard work, I started winning. I approach my science the same way as I prepare for sports – I figure out how to win, train myself and win."

It's this combination of balance, focus and hard work that has helped her in all stages of her life.

That same formula still works for Noble today. "It's kismet," said Noble, with a broad smile, describing something that "is meant to be."

On May 15, she will receive her Ph.D. from the MUSC College of Graduate Studies. Then, she'll be ready to tackle her position as a cell and molecular biologist, working in private industry.

Noble grew up on Florida's "Treasure Coast" in a close-knit family. Studious and goal-oriented, Noble is the eldest of three siblings from a secure single-parent family. Noble is the first-born girl in what she describes as a long line of strong first-born women in her family. Her mother – a hard-working and industrious woman – worked most her life in various jobs in the hospitality industry. "Mom instilled a sense of independence in each of us – allowing us to figure out things and discover what we are comfortable with, relying on each child's unique skill sets and goals. It helps us find our own successes independently," said Noble.

Noble, taking a page from her mother's advice, decided to pursue medical school, seriously considering a career as a cardiothoracic surgeon.

Good grades and her interest in research got her into the University of South Florida (USF), where she thrived in an accelerated B.S. to M.D. honors program that expanded her passion for science and introduced her to lab research. By her junior year, she was named a Merck Science Initiative scholar, which led her to a summer research internship at Baylor College of Medicine in Houston, Texas. That summer was transformative for Noble as it opened doors, expanding her thoughts about medicine and increasing her interest in the



Photo by Sarah Pack

Kenyaria Noble, MUSC graduate studies student, holds her two children, Kaydence Miller and Domani Miller after they picked and ate carrots at the MUSC Urban Farm.

"Science is what informs physicians about what patients should be doing. It's through science that we are able to develop specific therapies and new treatments to treat specific diseases and illnesses. I can do this, and I want to go this route."

Kenyaria Noble

biomedical sciences. Noble realized her true passion was not going to be medicine – but would, instead, be science.

"Science is what informs physicians about what patients should be doing. It's through science that we are able to develop specific therapies and new treatments to treat specific diseases and illnesses. I can do this, and I want to go this route," she said.

While Noble attended USF, her mom relocated from Florida to Charleston and encouraged her to apply for a position at MUSC. Cautiously, Noble submitted applications for three vacant research lab tech positions. She received a call back from one.

Hainan Lang, M.D., Ph.D., professor, Department of Pathology and Laboratory Medicine, was impressed with what

she saw in Noble's application. She was looking to fill a lab technician assistant position. Through a 20-minute phone call, the two hit it off.

"Kiki's application rose to the top of the pile because of her research experiences and accomplishments. When I looked up who she was in USF news, I saw she had won the prestigious Merck Science Initiative scholarship and was impressed. I scrolled further down the page and saw a warm and friendly face. Immediately I thought, 'This is one incredible candidate,'" said Lang. She hired her on the spot.

Within a week of graduating from USF, Noble reported to work at MUSC. From day one, Lang was pleased with Noble's performance in her lab. In six months, Noble was promoted to lab manager. Not long after, Lang initiated a conversation about Noble's future. "You can't be a lab manager forever. You have to be more ambitious and do something greater," Lang said, hoping to plant a seed in her protege to pursue graduate school at MUSC.

Following Lang's advice, Noble applied to the MUSC Ph.D. program, and was accepted. Two months after she began her Ph.D. studies in the Lang Laboratory of the Department of Pathology and Laboratory Medicine, she welcomed her first child into the world, Domani, now six years old.

A BALANCING ACT

Earning a Ph.D. is no easy task. Nor is being a mom of two while earning that advanced degree. Two years after the birth of her son, daughter Kaydence was born. It's been a juggling

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RESEARCH *Continued from Page Eight*

act for Noble. Between being a doctoral student, a woman scientist and a mother to two children with sickle cell disease, she's had more on her plate than she could say grace over – especially dealing with the complexities of their disease and the frequent trips to the Emergency Department, hospital stays, doctor's appointments and discussions with specialists. But she persevered, learning as much about the disease as a scientist and mother can and doing her best to manage it. As an NIH Initiative for Maximizing Student Development scholar, Noble was also committed to mentoring others in science, whether it was undergraduate summer students to assisting peers in the lab. In her community work, she reached out to minority middle- and high-school-age kids, promoting science and STEM careers. Her professors and mentors call her commitment and results nothing short of incredible.

DO YOU HEAR WHAT I HEAR?

With Lang as her research mentor, Noble chose to continue her studies in hearing science and aging research as it relates to hearing pathology and the immune system for her independent dissertation research project.

"The ear is such a complex organ to be the size of a person's thumb," Noble said. "I



Photos Provided

Left photo: Kenyaria Noble poses with her siblings and mom, Latoya Gordon, right. Above photo: Noble was close to her late grandmother Patricia Ann Voltaire. It was she who inspired her to pursue science.

love studying the ear because it's so unique, so niche. I'm surprised there's not more interested researchers who are part of this community."

Chris Cowan, Ph.D., the William E. Murray SmartState Endowed Chair of Excellence in Neuroscience and chairman of MUSC's Department of Neuroscience, serves as a senior faculty mentor to Lang and invited her team, which includes Noble, to attend his lab meetings and participate in other activities. He saw her potential right away.

"I was really struck with Kiki's engagement in these meetings. She immediately was always among the first people to ask questions

and interject her thoughts – which were always really interesting, insightful thoughts. What makes a person like Kiki stand apart is her ability to think outside the box and identify questions that aren't being answered or explored. I could tell she was a brilliant person," said Cowan, who participated in her dissertation defense last November.

As Noble researched her post-graduation options, Cowan offered her a postdoc opportunity in his lab. But she's yearning for a change. She hopes someday to establish and run her own biotech startup company or return to academia and MUSC in a research leadership position.

Upon graduation, she'll be relocating her family to Boston, Massachusetts, to work as a translational researcher for Akouos Inc., a biotech company focusing on hearing-loss genetics and developing treatments for hearing loss and deafness.

"Kiki has that spark and extra piece that makes her stand out. She's collaborative, has a great personality and has all the pieces that makes one successful no matter what she does. In industry, she can see the big picture and knows how to work with others to bring something forth in the future. She'll be successful no matter what she chooses to do," Cowan said.



Noble worked in Dr. Hainan Lang's lab and focused on hearing science and aging research.



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Twins head to North Carolina after dental graduation

BY LESLIE CANTU

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First things first – David and Michael Dudleck are well aware that no one likes going to the dentist. That’s what one of their older brothers warned them when they were considering the College of Dental Medicine at MUSC.

People might not like going, the twins figured, but they’ll like us. After all, they liked their dentist. And when they shadowed dentists to get a feel for the profession, they saw the jovial, easy relationship that a good dentist can have with patients.

“It’s pretty intimate once you’re in someone’s mouth. I just like the doctor-patient relationship,” Michael said.

David took a little more convincing. He was initially torn between medicine and dentistry. Their mom is a nurse who assists in open-heart surgery cases, and David had the chance to observe some of those surgeries as well as shadow some doctors. Physically, he could handle the blood and gore. But emotionally, he didn’t think he could handle giving someone a bad diagnosis. Between those doubts and Michael’s strong advocacy in favor of dentistry, David was convinced. The College of Dental Medicine it was.

Now, the twins are graduating and headed to a one-year residency at East Carolina University in North Carolina.

For the first time in their lives, they’ll live in different cities. Michael will be in Elizabeth City while David will be four hours away in Davidson County.

Residencies aren’t automatic for dental graduates the way they are for medical graduates. While some of their classmates will go directly into private practice, the Dudlecks wanted to get the extra training that a residency can provide.

“If you get a little more training in things that specialists do, you can do some of the easier cases that they would normally do,” David said.

The ECU residency is intended to increase dentists’ knowledge so they can provide care in complex cases in geographic areas where dentists don’t have the benefit of



Photo by Sarah Pack

Dental Medicine graduates David and Michael Dudleck.

other nearby dental specialists. The university’s residents are located in areas that lack both oral and medical health care options.

Not only will the extra training enable them to take on more complex cases, but it will somewhat make up for the four months of clinical training they missed when the pandemic first reached South Carolina in March 2020 and all public universities and schools were ordered to close.

The Dudlecks and all their classmates went home. By that point in their training, most of each day should have been taken up by hands-on clinical work. Instead, they had to wait until the clinic could safely reopen. Even then, they found that patients were leery of returning, and they weren’t as busy as usual. Only in the past three months or so have the patients come flooding back, keeping them busier than ever.

As dental students, they’re assigned between five and 20 patients. They stay with each patient through the entire treatment plan, and their professors ensure they get to perform a variety of procedures. They also spend time in the special needs clinic, which was challenging but rewarding, and something David said he’ll incorporate into future practice.

The Dudlecks don’t lead with the fact that they’re twins when they first meet individually with patients, which has led to more than one confused patient.

“I walk out into the lobby, and his patient stands up,” Michael said.

Unbeknownst to them, when they first started at the college, their classmates came up with a memory trick to remember who was who. At the time, David had long hair, so their classmates labeled them “short hair/long name” and “long hair/short name.” Unfortunately for their classmates, David cut his hair when he realized that long hair was a liability when you spend all day leaning over, looking into people’s mouths.

The twins get their fair share of “Heeeeeey, you” when people are unsure of which one they’re talking to, but it doesn’t bother them.

“With the masks and the hair, there’s just no chance,” Michael said.

“I don’t want people feeling guilty – we look alike. It’s not a referendum into how well you know me. We look the same,” David said.

They envision opening a practice together after they’ve tackled their student debt, probably somewhere in South Carolina – although they can’t yet agree on a name. Michael’s pitched “Identical Dentistry.” David’s response? “Cringey.”

But they have some time yet to figure it out. In their last weeks before beginning residency, they’re enjoying golfing, the easy access to beaches and the great dining scene in Charleston.

“We’re going to miss Charleston. This city’s so great,” David said.



Grandmother's health struggle inspires nurse-scientist to help others

By HELEN ADAMS

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When Joy Buie was growing up in Rock Hill, South Carolina, she lost a beloved family member.

"My grandmother had diabetes, hypertension, all the things. She had both of her legs amputated and over 20 surgeries before she died. She was only 63 years old."

At the age of 8, Buie saw the devastating impact of that death on her father. "I'd never seen him like cry, but the day that his mother died, he slid to the floor in tears. And I was like, 'Oh my gosh, this is just so painful for him.' It really had an impact on me — my hero was so vulnerable."

As she grew up, she noticed that her other grandmother, who also had diabetes, was in much better health. And Buie saw the reason for that. "The difference was that one grandmother was diligent about taking care of herself, whereas the other was like, 'No, I still want to eat these cakes and pies and engage in the behaviors that are toxic to my body.'"

That contrast, with its life-or-death implications, helped set Buie on a path to becoming a nurse-scientist. As she graduates from the College of Nursing at MUSC, she's ready to focus on studying and solving health differences caused by disadvantages linked to race and other factors.

Buie's journey to MUSC began when she was a biological sciences major and microbiology minor at Clemson University. She worked in an immunology lab at Clemson and decided to apply to the Student Undergraduate Research Program at MUSC, a 10-week program that encourages students to go to graduate school and gives them some of the skills they'll need.

Perry Halushka, M.D., Ph.D., dean emeritus of the College of Graduate Studies and Distinguished University Professor, got to know Buie there. "During her summer in the laboratory, I served as her co-mentor. It was clear that Joy was a very bright, enthusiastic and driven student. It was because of that that we encouraged her to apply to graduate

school, to get a Ph.D. in the biomedical sciences."

"That was kind of it for me," Buie said. "I was like, 'I need to do this.' I got a master's in clinical research before I finished my Ph.D. and did a post-doc at the bench."

Halushka served as her mentor during that post-doctoral fellowship, too. "She once again demonstrated her enthusiasm, drive and tenacity, taking on a very challenging project. We had several conversations about her desire to work with patients. After discussions with several people, she chose to go to nursing school."

Buie, who already had served as an assistant professor, clinical research manager and medical science liaison, became a student again. "It was very difficult at first, just getting back into the mindset of a student and really lean into the process and just learn everything that I could learn."

But once she settled in, she thrived. "I love working with patients. It was definitely rewarding. There's a lot of the times where we're working in the lab and we don't really see the direct impact of our work on people. But in a clinical setting, you're having direct patient contact, and you see the immediate results of your work."

Her clinical settings included COVID-19 testing sites, where she took nasal swabs from people who might be infected with the coronavirus. She had a husband and child at home, and she didn't want to get any of them sick.

"I was like, OK, I can do this. I have this respirator on, I trust the science behind it and I'll be OK. So I did what I had to do, and that's kind of been my life story. I do what I need to do to get to where I want to go."

Halushka isn't surprised by Buie's success. "She has a talent for relating to people that makes her an ideal person to work with individuals. A degree in nursing is the perfect fit for Joy. She will bring much credit to the profession and has the ability to contribute significantly to the health and well-being of individuals through her passion, caring and clinical research."

Her current research includes a study



Photo by Sarah Pack

Nursing graduate Dr. Joy Buie is excited to be a nurse-scientist after many years of academics and clinical research. She will receive her nursing doctorate from MUSC on May 15.



Photos Provided

Buie was inspired throughout her life by grandmothers from both sides. Granma Tommie, left, and Grandma Elsie Jones.

looking at the association between mental stress and hypertension. It's funded by the National Institute of Neurological Diseases and Stroke. "With that grant, I am doing what I consider my life's work."

The grant provides money for a faculty position. "I'm applying for jobs but also

getting my project started," Buie said.

She credits her family and her faith with allowing her to continue to multitask, and her nursing degree with opening new doors. "I've been able to identify unmet needs, and I have some new ideas about how to expand my current research program."

Retired nurse celebrates dual milestones: nursing and 90th birthday

BY CINDY ABOLE

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Charleston resident Hazel Alston is the epitome of nursing at its core.

The spry 90-year-old spent 35 years caring for Charleston-area patients at MUSC, beginning in 1955. Mrs. Alston has the distinction of being among the first African American licensed practical nurses (LPNs) hired to work and help to open the Medical College Hospital.

Fast forward 34 years, which was also 14 months into the COVID-19 pandemic, and Mrs. Alston found herself on a surprise Zoom call on April 27 while several dozen family members, including grandchildren, great-grandchildren and great-great-grandchildren, friends and a surprise guest greeted her and shared virtual birthday wishes. Throughout the day, she was showered with cards, flowers and a colorful birthday yard greeting to honor the nonagenarian. The event was arranged by daughter Carmen Alston Alexander and her sisters, Thelma Alston and Rosa Alston Hutchinson, and other family members.

Patti Hart, DNP, R.N. MUSC Health chief nursing officer, was an invited guest and praised the retired nurse for her dedication, compassion and commitment to MUSC and to nursing – regarded, she said, as among the most trusted professions. Hart read aloud from a special MUSC Health “Certificate of Appreciation” that she presented to Mrs. Alston virtually.

“On your 90th birthday, we are honored to be a part of celebrating you. This enduring memento of our gratitude and appreciation is for your 35 years of service and dedication to MUSC. As one of the nurses who contributed to the preparations for admitting our very first patient, we could not have opened our doors in 1955 without you. We are sincerely grateful for your many extraordinary contributions to the organization and commitment to the nursing profession. Over 90 years, you have touched many lives with your compassionate care and have achieved many accomplishments. You are a true inspiration for all. Thank you for making a difference.”

The certificate was signed by Hart and David Zaas, M.D., MUSC Health Charleston chief executive officer.

“I did not know my family had done this,” said Mrs. Alston, tearing up on the Zoom birthday call. “I told them we wouldn’t celebrate my birthday now but at a later time because of the virus. What they did for me was very, very nice – I was excited.”

Hazel Alston began her career at MUSC in 1955 following the completion of Roper Hospital’s Practical Nurses Training program. She worked at Roper and also Methodist Hospital-Jefferson University Hospitals in Philadelphia, Pennsylvania, before getting engaged and relocating back to the Holy City.

“At that time, MUSC’s hospital was so much smaller,” she said, unlike the sprawling modern campus that it is today. Mrs. Alston was part of the hospital staff that helped to set up the hospital’s wards – stocking supplies, arranging bedpans and other equipment needed to support patients. “Our team was ready for that first patient,” she continued.

Hazel Alston began her career caring for patients on the cancer, kidney transplant and heart floors. She recalls people being admitted to the new facility were very sick patients, and the staff’s focus was primarily patient care and administering medications per medical orders.

She remembers a good collegial work relationship between physicians, nurses, LPNs, support staff and medical students.

Looking back at some of her proudest moments as a nurse, Mrs. Alston said providing excellent patient care was her, and everyone’s, priority. Patients loved her bedside manner and caring attitude. “I’ve strived to treat patients as I would treat members of my family. I’d tell myself, ‘This patient could be my brother, my sister, my mother.’ I’ve always treated people with the respect and compassion that they deserve.”

Because she is a religious woman, staff would often ask Alston to recommend a chaplain or local pastor to provide spiritual support for a patient or family members. She’d always recommend her friend AME church Bishop Z.L. Grady to help out. At that



Photo Provided

Retired MUSC LPN nurse Hazel Alston’s staff photo in the mid-1970s.



Screenshot by Sarah Pack

Family and friends greet Alston, top row left, during her 90th birthday celebration via Zoom. The call included a surprise visit and presentation by MUSC Health chief nursing officer Dr. Patti Hart, top row right, who honored her years of service to nursing and MUSC.

time, Pastor Grady, who is now deceased, was the pastor of Morris Brown AME Church – located just five blocks away from the hospital. “I’d call Rev. Grady, and he’d come over to sit with or pray with the patients and their families,” she said.

A working wife and mother, Alston was the first nurse and health care worker in her

family. Over the years, she managed to find a work-life balance that worked for her family.

“Everyone has their ups and downs in life. For me, I had to struggle to care for my husband who was sick and almost had to quit my job. But my MUSC family took care of me. And when he died in 1981, they

See **NURSE** on page 13

Take the Eat Local Season Challenge: Make an impact, improve well-being

MUSC is proud to sponsor the Lowcountry Local First "Eat Local Season Challenge" in which Lowcountry Local First engages individuals and organizations across the Lowcountry to shift their purchasing and eating habits to focus on supporting local farmers and purveyors.



MUSC Health & Well-Being

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



While there is an element of gamification in eating and shopping local for the months of May and June for the purposes of the Eat Local Challenge, eating local isn't merely a fleeting trend but rather a conscious return to the way in which humans have consumed food for thousands of years. The eat local movement has been a decades-long effort to improve local economies, develop more sustainable food networks and generate healthier food consumption practices linked to improved health outcomes.

The primary benefit of eating locally grown foods is that it gives your body the nutrients it needs and limits the substances that can be harmful to you in high quantities, such as refined sugar, high fructose corn syrup, salt, synthetic trans fats, etc., that are often found in highly processed packaged foods.

A growing body of research strongly suggests that by choosing to eat local, you can reduce or reverse a variety of

risk factors for chronic diseases, including diabetes, heart disease, high cholesterol, hypertension and even many different types of cancers. "Food as medicine" is a term now commonly used to describe an emerging recognition among health professionals that food plays not just a supplemental but a central role in overall health and well-being. When the emphasis is placed on eating locally, there is a natural reduction in the consumption of highly processed/preserved food items that negatively affect our health, so not only does eating locally bolster the local economy, but it can also affect your well-being, longevity and reduce a variety of biometric risk factors.

You can start supporting the eat local movement with small shifts in what you choose to purchase and from whom. For example, purchasing produce directly from farmers at farmers markets, participating in a CSA (community supported agriculture) and buying regional foods from the grocery store,

which are usually labeled with the "certified South Carolina" seal, are all ways to make a shift. You can also encourage the local food vendors and restaurants to buy local by asking which items on the menu are from South Carolina.

Start today by joining the MUSC Eat Local Challenge team, leading MUSC to victory for the 2021 LLF Eat Local Season Challenge. Together we have the power to make a tremendous impact on our community and our own health.

Simply use the team name "MUSC" when signing up and pledge to shift \$10+ of your weekly food spending to local food sources throughout the month of May. This year's campaign includes amazing prizes for those who prove that they're shifting their spending by submitting receipts along the way.

Visit <http://eatlocalseason.com/> or email daporek@musc.edu for more information.

NURSE *Continued from Page Twelve*

were very patient with me – kind, supportive and flexible. That's why I've always regarded MUSC as my second home – a place where everyone knows and cares about people. I've never forgotten that."

Alston doesn't remember what drew her to nursing as a career – although she said she's been caring for people all her life. For anyone interested in a career in nursing, she shares some sage advice: "It's important that you love people – unconditionally. One can't go into a room and treat them any old way – you must treat them like humans," she said.

In 2011, Mrs. Alston participated in an interview for the Waring Historical Library's oral history program, in which she shared her story and chronicled her 35-year career with MUSC. From caring for the first patient admitted to MUSC to the segregation and integration of the hospital and the 1969 hospital workers strike, she shared the highs and lows of her time during MUSC's history.

Brooke Fox, university archivist with the Waring Historical Library, interviewed Mrs. Alston at the retired nurse's home about a decade ago for the library's historical



Alston

MUSC.

"It was an honor to be included in Mrs. Alston's surprise Zoom birthday party and to witness her receiving a Certificate of Appreciation from MUSC for her many years of service as well as hear her family and friends talk about her impact on their lives. Their tributes brought tears not only to Mrs. Alston's eyes but mine as well. She is a gracious human being and truly one of the most generous and caring individuals I've ever had the pleasure of knowing. It is a privilege to know her and to have had to opportunity to preserve her legacy," Fox said.

program. Fox also attended her virtual birthday surprise party last month. "Mrs. Alston's willingness to share her memories demonstrates yet again her importance to her community and to the history of

- 1. Lather away.**
 - back of your hands
 - between fingers
 - under the nails
- 2. Scrub.**
 - Count to 20.
- 3. Rinse well.**
- 4. Dry completely.**
 - using a clean paper towel or an air dryer.

MUSC Libraries  Changing What's Possible

Students eager to put pandemic behind them, get vaccinations at school

By HELEN ADAMS

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Sebastian was one of about 60 students at Stall who signed up to get the Pfizer vaccine. It's the only one currently approved for people as young as 16.

Ellen Nitz, director of nursing for the Charleston County School District, knows 60 is not a lot of students for a school with hundreds of eligible teenagers. But it's a start, she said.

"The way we are looking at it is for each shot we get into an arm, that's a victory. We're trying to remove all the barriers. You don't have to worry about transportation. There's no financial responsibility with it. It's a convenient way to be able to make sure that students are protected."

Stall is one of eight Charleston County high schools working with MUSC Health to vaccinate eligible students whose parents give permission. Allison Eckard, M.D., division chief for Pediatric Infectious Diseases at MUSC, told news reporters at the school that student vaccinations are an important step toward moving away from the pandemic.

"I'm really hoping that with media coverage

and getting the word out, that we will see more and more students registering throughout the week. Maybe if they don't do it this week, there are plenty of opportunities everywhere around the state, probably close to their home to get vaccinated as well. So we really are hoping that this will start driving up the numbers of students who are vaccinated."

Eckard said community rates of COVID-19 are still high, even though they've come down since the holidays. "It is very important for everyone who's eligible to be vaccinated. Many of the teenagers and young adults are driving up our numbers, and the more people that we can get vaccinated in that age group, the better off we'll be in the long run."

Tenth-grader Dorien Jenkins-Hall's dad encouraged him to get vaccinated. "I had to get some motivation from him," Dorien said, pointing to his father as they sat together during the 15-minute wait after Dorien's shot. "But I want to go out instead of being inside all day."

Eckard called the vaccine very safe. "I have no concerns about safety in 99% of people. There are very few people who have a history of allergic reactions to vaccines who may not get the vaccine because of that concern. But



Photos by Sarah Pack

Like a lot of us, he can't bear to watch. But Sebastian Gutierrez is happy to have received his first COVID-19 shot.

otherwise, it is generally safe for everybody."

Sebastian, the junior eager to return to in-person classes, said the shot wasn't a big deal. "It's quick. Not painful or anything, you know?"

But he wasn't surprised to see a relatively small turnout for the vaccine at his school. It's early days for teenagers like him. "As time goes on, people will get more and more comfortable."



Dorien Jenkins-Hall hopes getting the COVID-19 vaccine will mean more freedom.



MUSC clinical pharmacist Joseph Xavier reconstitutes the Pfizer Covid-19 vaccine for students at Stall High School.

Turpin is now at Presbyterian College, her undergraduate alma mater, helping to start up an OT program.

Photo Provided



THERAPY *Continued from Page Three*

working on this skill? Well, what we're doing now leads to being able to eat or being able to brush teeth or being able to write."

Turpin eventually closed the business after she and her husband, Rick, adopted their son Liam from China. Liam joined their biological son, James. Only three months apart in age, the boys are "virtual twins," and although they didn't meet until they were 4 years old, "you would never know that they've ever not been together. They're so close," Turpin said. However, Liam has special needs, and in the immediate wake of the adoption, Turpin found she couldn't maintain a work-life balance. She transferred her clients to another occupational therapist in town and quit the business – but she couldn't permanently quit OT.

2015 was also a pivotal year because it was the first time she went on a medical mission trip to Nicaragua.

"The profession of OT really doesn't exist in Nicaragua," she said.

Turpin has been on five trips so far, each time serving as the therapy lead. From the first trip, they would see children with developmental delays, autism, cerebral palsy and other conditions. Attitudes toward people with special needs are slowly changing in Nicaragua, but there remains a dearth of resources for children and families. These trips became the driving force for Turpin to go back to school. She felt that the additional education would give her a platform to launch a project to help these children.

From this, her capstone project was born. Turpin found an organization, FNE International, that operates a school for children with special needs. The group's website noted that it was interested in

assistance with professional development opportunities for its teachers, so Turpin reached out. From there, she sent a needs assessment survey to the school to find out what areas the teachers wanted more information about and then developed three learning modules based on their feedback.

The modules focused on universal design for learning; function of behavior and managing difficult behavior in the classroom; and the neuromuscular system and simple interventions that the teachers could do, like stretching, yoga and developmental positioning. Because the school doesn't have a therapist, the interventions she provided were all things that a classroom teacher could easily implement.

TRACKING *Continued from Page Two*

Not surprising, right? But then he looked at natural immunity in a separate calculation. "In the eight counties that have less than 20% natural immunity, the growth rate in the past 14 days was up an average of 68%," Sweat said.

"But in the 38 counties where there's 20% or more natural immunity, the growth rate declined by 8%."

Finally, Sweat looked at the effect of vaccines and natural immunity combined. His conclusion: "Vaccination immunity is really working. Natural immunity is working almost as well. And when you combine the two, you can get an even better effect."

All of the findings were statistically significant, Sweat said, meaning they were caused by something other than chance.

He said everyone who can get vaccinated, should.

Although her capstone project went well, Turpin wants to expand it. Because of the pandemic, she couldn't go there in person to train the teachers. Instead, she had to train an individual from FNE International, who in turn had to obtain special permission to go to the school. The training was eye-opening for the teachers there, Turpin said.

"Their knowledge actually increased, but their confidence decreased. I feel like they didn't know what they didn't know," she said. She hopes that by working hands on with the teachers and showing them how to put

Kelly said about 200,000 people across South Carolina are overdue for their second dose of Pfizer or Moderna. "A frequent comment I hear that surprised me was people saying, 'I haven't gotten my second dose because I'm waiting to get the booster for the variant.' But the vaccines we have right now work against the variants. All of our vaccines are highly effective in preventing severe disease and death," Kelly said.

And Sweat said people who haven't had a COVID vaccine or been infected within the past five months are especially vulnerable now. The number of cases per 100,000 people is holding steady – even as more people get vaccinated. "All these infections are now getting more and more clustered in a shrinking group of people, suggesting to me that the seriousness of the epidemic is really bad for people without immunity."

theory into practice, she'll be able to impart knowledge and boost their confidence. She also has some ideas for utilizing technology in future trainings.

And, of course, she's excited about her work at Presbyterian College in Clinton, South Carolina. She was still living in Summerville when this dream job popped up.

"Of course, it involved uprooting my family, moving two, three hours away. My husband's like, 'Just apply for it. Just do it and see what happens.' And here we are," she said.

To celebrate National Poetry Month, we are having a trivia contest. You could win a prize and learn a thing or two about poetry.

The contest will run from April 19th until April 28th. The winners will be notified on April 30th.

Enter at this url: <https://musc.libwizard.com/f/poetry>

Check the MUSC Library's social media pages for poetry all month. FB/IG/TW: [musclibrary](#)

MUSC Libraries



Asian American students concerned by hate crime surge

By HELEN ADAMS

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South Korean-born Jane Lee, now a student in the College of Health Professions at MUSC, is a little worried about her upcoming rotation in New York. A recent report found a 220% increase in anti-Asian hate crimes in New York City in the first quarter of 2021 compared with the same period in 2020.

"I definitely have that in the back of my mind that I will have to be extra careful about where I go, when I go and all that stuff. It's something I'm more conscious about nowadays because of what's been happening since COVID," Lee said.

The report on anti-Asian violence in the United States from the Center for the Study of Hate and Extremism at California State University, San Bernardino, comes as the country marks Asian Pacific American Heritage Month. It's a time set aside to pay tribute to the Asians and Pacific Islanders who have played important roles in America's history and will make important contributions to its future.

But this year, attacks on people of Asian descent are also part of the discussion. The Center for the Study of Hate and Extremism found that nationally, anti-Asian hate crimes rose



Photo Provided

College of Health Professions student Benjamin Magowan worries about his mother's safety.

164% in January through March of 2021 in 16 of America's largest cities and counties compared with the first quarter of 2020.

No South Carolina cities or counties were included, but the report still resonates with Lee. "It's really frustrating, and it breaks my heart," she said. "Asian people just getting attacked – they don't deserve any of that."

During those attacks, some victims are being taunted with phrases such as, "You have the China virus, go back to China." Research shows people have a hard time telling people of other

ethnicities apart.

Lee's classmate Benjamin Magowan, whose mother is from the Philippines, called the attacks disheartening. "How you could feel like that about someone you've never met, just because of how they look? It's scary. It's disappointing. And it makes me angry."

It also makes him worry. "It's very apparent that my mom is Asian, so she feels nervous. It's just her, back home in Rhode Island. It's really hard, especially being so far away from her. And then her being worried about me. I feel like she's not as worried about herself as she is worried about me."

Magowan encouraged people to think about words they're using when referring to the coronavirus, whether it's over the dinner table or on national TV. "When I hear the phrase 'China flu' kind of thrown around, that really makes you think, 'What is going through people's heads when they say that? When bird flu was a thing, did you not like birds anymore? Or when we had swine flu, did you stop eating bacon?'"

"It's really scary when certain language is used on a nationwide platform. It says a lot to the people who are listening about what is and isn't OK to say. Now they think that it's OK to see a certain race as lower than others, or certain people as second class. I think maybe certain things in the news make people who may have kept that to themselves now feel safe expressing that publicly."

Lee said it's important for all of us to see each other for who we are. "I want people to be more aware, more open. There's no reason to hate another human being for no reason."



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