

Heart patient says 'I do' at MUSC Health prior to surgery

Newlywed hopeful LVAD heart device will let her be more present in her children's lives

BY LESLIE CANTU
cantul@musc.edu

"For better or for worse, for richer or for poorer, in sickness and in health." Calvin and Chaneika Myers have lived those words these past 14 years. But on July 14 in the sunlit mezzanine of the Ashley River Tower at MUSC Health, with family members and fellow patients looking on, the pair made it official.

Buoyed by joy, the glowing bride stood up from her wheelchair to walk down the aisle to her waiting groom. Family members, nurses, social workers and even a representative from the heart device maker Abbott had scrambled to come up with a dress, flowers and food. Someone had volunteered to play the piano but then couldn't make it when the wedding was moved from July 13 to July 14. But there on Saturday afternoon, a tired-looking man dozed in an armchair while his wife received chemotherapy. As the staff organized the room, he was drawn to the piano and began playing. As it turns out, the man plays the piano at church every week, and he was pleased to be able to play for this hospital wedding. The wedding had its pianist.

After the wedding, the bride returned to her hospital room. Two days later, she would undergo surgery to implant a left ventricular assist device, or LVAD, to help her failing heart.

Chaneika was just 28 years old when

she had a heart attack. She had no idea what was happening.

She was at a neighbor's house in Darlington when she began feeling fluish. She was sweating, coughing and felt sick to her stomach. Her neighbors were so alarmed they called an ambulance, which took her to McLeod Regional Medical Center in Florence. From there, she was rushed to MUSC Health.

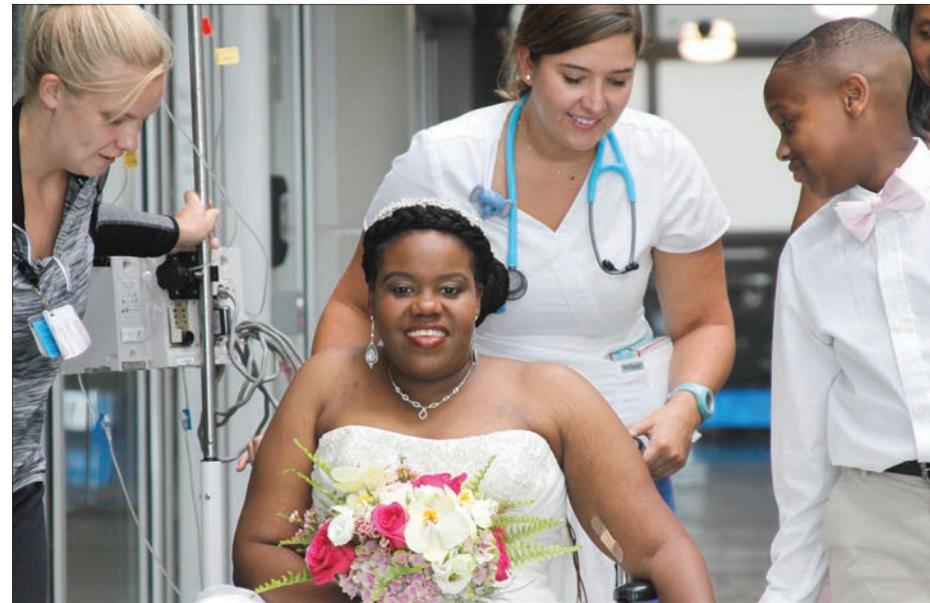
Looking back, she says, she can now see she had symptoms building up prior to the heart attack. She felt a pulling in her back, her shoulders and neck were tight and her legs were swelling up. But she never felt that stereotypical pain in her chest.

"At that age I definitely wasn't thinking, 'Oh, I'm having congestive heart failure,'" she said.

Daniel Judge, director of cardiovascular genetics, said the cause of Chaneika's heart disease still isn't entirely clear. Although he's had patients in her age range before, it's rare to see someone so young, he said.

After her heart attack, Chaneika began seeing cardiologist Michael Craig, who treats patients both in Charleston and at the MUSC Health Cardiology center in Florence.

Over the years, the couple's children, Cashion, 13, and Calvin Jr., 12, learned to help out at home, making sure Chaneika took her medicine. They also



This is not your average wedding procession, but just two days before Chaneika Myers is scheduled to have heart surgery, the health care team isn't taking any chances with the bride.



As a medical monitoring device peeks out of the back of her wedding gown, Chaneika shares a kiss with Calvin Myers while brother-in-law Edwin Williams looks on.

Photos by Leslie Cantu

learned to cope with their mother's hospitalizations, knowing she often wouldn't be coming home for a while. Chaneika is particularly grateful for Calvin's mother, who keeps the kids

when she's hospitalized. It's one thing off her mind, because she knows they're well cared for in her absence.

But six years after her heart attack, it

See WEDDING on page 6

4 Chemicals in food
AAP calls for stricter food
safety regulations.

7 Swimmer's ear
Pediatric specialist offers
tips to avoid pain.

2 MUSC approved to expand
5 Meet Grace Hill
8 SURP Program

July-Aug. "Health Focus" schedule on SC Public Radio

Visit www.southcarolinapublicradio.org/programs/health-focus

July 30 – Segment #1

Topic: Transition from Cancer Patient to Cancer Survivor

Guest: Dr. Stacey Maurer

Clinical psychologist Dr. Stacey Maurer will discuss the transition from cancer patient to survivor. Maurer is the psychosocial services coordinator at Hollings Cancer Center.

July 30 – Segment #2

Topic: Understanding How the Brain Processes Memories

Guest: Dr. Leonardo Bonilha

Neurologist Dr. Leonardo Bonilha will talk about how the human brain processes, stores and retrieves memories. Bonilha is an epilepsy specialist and brain and language researcher.

Aug. 6 – Segment #1

Topic: Help for Veterans with PTSD and Substance Abuse

Guest: Dr. Sudie Back

Department of Psychiatry and Behavioral Sciences professor Dr. Sudie Back will speak about treatment available for veterans with post-traumatic stress disorder (PTSD) and substance abuse. She is the director of MUSC's Drug Abuse Research Training Program and staff psychologist at the Ralph H. Johnson VA Medical Center.

Aug. 6 – Segment #2

Topic: Keeping Children and Teens Safe Around Water

Guest: Dr. Keith Borg

Pediatric emergency physician Dr. Keith Borg will discuss how to keep children

and teens safe around water. Dr. Borg is an associate professor of pediatrics and emergency medicine.

Aug. 13 – Segment #1

Topic: Teens and Electronic Cigarettes

Guest: Dr. Kevin Gray

Department of Psychiatry and Behavioral Sciences professor Dr. Kevin Gray will talk about teens and their increasing use of electronic cigarettes. Dr. Gray is the director of child and adolescent psychiatry.

Aug. 13 – Segment #2

Topic: Coping with Grief and Staying Connected

Guest: Dr. Alyssa Rheingold

Department of Psychiatry and Behavioral Sciences professor Dr. Alyssa Rheingold will discuss coping with grief and the importance of staying connected with friends and family. She is director of clinical operations with the National Crime Victims Research and Treatment Center at MUSC.

Aug. 20 – Segment #1

Topic: Cancer Immunotherapy Research

Guest: Dr. Mark Rubinstein

Hollings Cancer Center immunologist Dr. Mark Rubinstein will share information about cancer immunotherapy research related to advanced lung cancer.

MUSC
Health

LEADERSHIP TEAM

Dear MUSC Health Care Team,

In the last few days, MUSC has received approval to build new hospitals in Berkeley County and Beaufort County. South Carolina Department of Health and Environmental Control granted the approval through its Certificate of Need program. DHEC is the state body that must issue a CON before certain types of health care acquisitions, expansions and creation of new facilities are allowed.

MUSC Health Community Hospital at Nexton will be a 311,221-square-foot facility with 128 beds, providing a range of specialized inpatient and outpatient services. Estimated at a cost of \$325 million, the project is expected to be operational in 2022. One of the area's newest planned communities, Nexton is located in Summerville at the crossroads of I-26 and 17A in the path of metro Charleston's vigorous growth.

Previously, the state health plan identified the need for 147 additional MUSC beds to serve the Tri-county area, based on MUSC's existing hospital occupancy and fill rates. MUSC Health Community Hospital at Nexton is designed to meet many of the increasing health care demands by bringing consistent, high quality and compassionate care to a convenient neighborhood location.

The Beaufort County hospital will be in Bluffton, SC and is a joint venture with Beaufort Memorial Hospital. This will be a 60,000 square-foot facility with 20 beds and an estimated cost of \$40 million. It is expected to open in late fall of 2020. The hospital will be located within one of Bluffton's newest planned communities, Buckwalter Place. This facility will bring much-needed acute care services to a community that is growing twice as fast as the state.

Thank you for the great care you provide every day.

Patrick J. Cawley, M.D.

CEO, MUSC Health and

Vice President for Health Affairs, University

"The Nexton hospital will be a much-needed addition to our health care system. Our network of MUSC hospitals, clinics and other facilities is positioned to provide patients with the right care, at the right time and in the right location. As the only publicly assisted, comprehensive, statewide academic medical center, MUSC has a mission and responsibility unlike any other health care facility in South Carolina. We are charged with discovering, developing, teaching and delivering the most advanced health care for every patient across the state."

MUSC President David J. Cole

MUSC CATALYST
news

Editorial Office

MUSC Office of Public Affairs & Media Relations, 135 Cannon Street, Suite 403C, Charleston, SC 29425.

843-792-4107

Fax: 843-792-6723

Editor: Cindy Abole

catalyst@musc.edu

The MUSC Catalyst News is published bi-monthly. 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.

Charleston Medical District Greenway Survey

The Charleston Medical District Greenway planning team wants to hear from you. Visit the survey. Your feedback will help team members learn more about the type of events, programs and activities that MUSC employees want to see and participate in on the Greenway. Thank you for your time and participation. Visit the survey – it takes less than 7 minutes to complete. <https://redcap.musc.edu/surveys/?s=LJRP9YTF3W>.

Expansion foreshadows big year for MUSC Health

2019 will see opening of multiple new clinics

BY LESLIE CANTU

cantul@musc.edu

Two new TV commercials for MUSC feature only a brief glimpse of a white-coated doctor; instead, the commercials focus on the jam-packed days of both a working mom and a boy with a broken arm. Both are able to squeeze in a visit to the doctor, because their provider is in a clinic near where they live. The message: MUSC is where you are.

Local expansion is just one part of a trifold growth plan, said Patrick Cawley, M.D., CEO of MUSC Health and vice president for health affairs for MUSC, as he shared an overview of what lies ahead for the health system.

MUSC Health really consists of three components, he explained: the local Tri-county business, the regional business that falls within a two-hour radius and the state and national business.

"We're trying to grow in all three of those domains. We're trying to bring MUSC services to as wide a group as we can," he said. "We think we've got something special here, in terms of quality and patient focus, which we're just going to keep trying to bring to as many people as we can."

On a statewide level, MUSC is the sole provider within South Carolina of several services. It is the only transplant center in the state and the only pediatric cardiac surgery center. Additionally, MUSC Children's Hospital was recently named No. 11 in the nation for cardiology and heart surgery by U.S. News & World Report. Cawley said the center served patients from 48 states last year.

Regionally, MUSC Health works with partners like Tidelands Health in Georgetown, Horry and Williamsburg counties; Regional Medical Center in Orangeburg; and Beaufort Memorial Hospital in Beaufort County to offer specialty services to South Carolinians in these areas.

Regional Medical Center, with about 100 physicians, is able to augment its services by partnering with MUSC for its cancer care and stroke care services. Likewise, MUSC offers specialties like thoracic surgery and nephrology in Beaufort and Bluffton. Earlier this year, MUSC and Beaufort Memorial announced plans to



Cawley



S.C. Department of Health and Environmental Control recently approved plans allowing MUSC to build the 128-bed MUSC Health Community Hospital at Nexton in Berkeley County. It is slated to open in 2022.

open a micro hospital together in fast growing Bluffton.

The S.C. Department of Health and Environmental Control (DHEC) approved the plan July 24. The microhospital should open in late 2020.

MUSC has a significant presence both on the peninsula and throughout the Tri-county area, providing the type of local medical care that, were it not here, another hospital might step in to provide.

In the early-2000s, MUSC was at a crossroads, and leaders considered whether the peninsula was the place to be. After robust discussion, it was decided the peninsula would remain home to the main hospital and those acute care patients who needed MUSC's multidisciplinary teams. Ambulatory care, however, was to start moving off the peninsula, closer to where people live.

"That's accelerated in the last five years," Cawley said, adding that with Charleston's tremendous growth and people's frustration with parking and traffic, this is a logical development. Consequently, he said, 2019 will be a big year for MUSC Health.

In the first quarter of the coming year, a pediatric ambulatory facility will open in North Charleston. The 100,000-square-foot facility at Rivers Avenue and Mall Drive will include a pediatric outpatient surgical facility and a pediatric multispecialty medical office building that will include an urgent care clinic, imaging facility and infusion rooms.

Next summer, an ambulatory surgery unit will open in Mount Pleasant on Coleman Boulevard.

MUSC Health East Cooper already offers primary care, specialty care, radiology and more. This local center also functions as something of a regional center as patients from Georgetown find it easier to access

than peninsular MUSC, Cawley said. He added that the only service not offered in Mount Pleasant currently is ambulatory surgery, and that will soon change within the next 18 months.

See **OUTLOOK** on page 11

**250 ISLAND PARK DRIVE UNIT 105
CHARLESTON, SC 29492**



\$995,000 MLS# 18006792

Privately situated within perhaps the most desirable part of Daniel Island, the Island Park Condominiums are the perfect combination of refined sophistication and modern convenience. With sweeping views of the nationally ranked Daniel Island Golf Course and beautiful Lowcountry salt marsh, Unit 105 is truly a one of a kind opportunity. Top floor unit with over 2,500 square feet of living space, this 3 bedroom, 3 and one half bath condo is truly a construction of world class quality and modern styling. Offered as a fully decorated and furnished listing, this residence is ready for a seamless transition to its new owner.

Visit www.edhunnicuttt.com for more info.

Ed
HUNNICUTT

Call Ed Hunnicutt for more info:

843.270.0292



Pediatrics academy warns about food additives, chemical exposure

Doctors caution that certain chemicals may affect hormones, growth, development and obesity risk

By HELEN ADAMS

adamshel@musc.edu

MUSC Health doctors, including one who has conducted research on the effect of phthalates on babies' development, are applauding the American Academy of Pediatrics' call for stronger food safety requirements to protect kids.

"As pediatricians, we stand proud that the AAP is calling for stricter regulation of chemicals that can have a significant impact on children's health," said pediatric critical care specialist Elizabeth Mack, M.D.

The American Academy of Pediatrics' policy statement, appearing July 23 in the journal Pediatrics, calls for "urgently needed reforms to the U.S. food additive process." It cites a growing body of research suggesting some food additives can affect children's hormones, growth, development and obesity risk.

The AAP is targeting:

- ❑ Bisphenols such as BPA, which are used to harden plastic containers and line metal cans.
 - ❑ Phthalates, which are chemicals that make plastic and vinyl tubes used in industrial food production flexible.
 - ❑ Perfluoroalkyls, or PFCs, used in grease-proof paper and cardboard food packaging.
 - ❑ Perchlorate, which is added to some dry food packaging to control static electricity.
 - ❑ Artificial food colors, which according to the AAP may be associated with making attention deficit hyperactivity disorder (ADHD) symptoms worse.
 - ❑ Nitrates/nitrites, used to preserve food and enhance color, especially in meat.
- The second item on that list, phthalates, is of particular interest to Roger Newman, M.D., professor and director, Division of Obstetrics and Gynecology Basic Science. He's been studying their possible impact on pregnant women and their unborn

babies, working with scientists from the National Institute of Standards and Technology. Newman said they found prenatal exposure to phthalates appeared to have the potential to affect the genital development of some baby boys, a change that could signal later infertility and a low sperm counts.

He called the data from human and animal research overwhelming. "All the chemicals on this list are contributing to multiple infant, childhood and adolescent complications. The FDA must prove, rather than assume, that these endocrine-disrupting compounds are safe before allowing people to be exposed to them."

Newman encouraged parents to take the AAP recommendations seriously. "While many of these chemicals are ubiquitous, several studies have demonstrated that consumers can dramatically reduce their exposure by being aware of, and adopting, recommendations such as those from the AAP."

Mack said parents should read labels and serve healthy food. "Fresh fruits and vegetables are extremely important to incorporate into a healthy diet."

Mack said glass and stainless steel are good alternatives to plastic.

Should adults be concerned about the list of chemicals, too? Mack said avoiding them is good health advice for all people, but it has a greater impact on children's growing bodies.

"Children eat and drink more relative to their body weight than adults, so there are more opportunities to make a healthy choice."

Valet parking at CSB

MUSC Health has launched valet parking for patients/visitors at MUSC Clinical Sciences Building, on Jonathan Lucas Drive, weekdays from 6 a.m. to 6 p.m. The fee is \$8.



Photo by Sarah Pack

Two-year-old Adeline Pack eats a healthy lunch of organic broccoli, cheese, nitrate-free turkey, organic fruit and organic milk.

MUSC pediatric critical care specialist

Dr. Elizabeth Mack

shares these tips to parents:

- ❑ Wash your hands thoroughly before and after touching food.
- ❑ Clean all fruits and vegetables that cannot be peeled.
- ❑ Eat less processed meat.
- ❑ Avoid microwaving food or beverages in plastic when possible.
- ❑ Avoid putting plastics in the dishwasher.
- ❑ Avoid plastics with recycling codes 3 (phthalates), 6 (styrene), and 7 (bisphenols) unless they are labeled as "biobased" or "greenware."



650 Harbor Creek Place

Absolutely stunning END UNIT in HIGHLY sought after Harbor Creek. Beautiful marsh views with fantastic sun-room and open deck for those spectacular sunsets year round. Master bedroom on the main level and great flow of space. Beautiful kitchen with great flow of space into dining area and main living room with fireplace. The sun-room allows for great sunsets year round and the light in this wonderful end unit is spectacular. The pool is an oasis in and of it self and the location to downtown and the beaches is unparalleled. Sprinkler system in the home. Most likely the best view of all the units in Harbor Creek. Just minutes from downtown, MUSC, Boeing and the historic district. Very close to shopping and all fine dining in the area. Great location for out of town guests to visit you! **\$429,500** | 18007206

BRYAN THOMPSON

AgentOwned Charleston Group
902 Savannah Hwy | Charleston, SC 29407-7802
843-452-1686

bryan.thompson@agentownedrealty.com | http://bryanthompsonrealestate.com



IP03-1701711-1

MEET GRACE



Grace Hill

Department; How long at MUSC
Volunteer Services-candy striper program; second year volunteering

How are you changing what's possible at MUSC

I am working with the GetWellNetwork showing patients and their families how to use the software. I hope I'm helping to make their hospital stays more enjoyable and leave a lasting impression for MUSC.

Family

Parents, David and Amy Hill; brothers, Adam and Riley; and dogs, Olivia (German shepherd mix) and Mayzie (Rottweiler mix)

What music is in your player now

Etta James and Ella Fitzgerald

Last book read

The Count of Monte Cristo by Alexandre Dumas

Food that is a must have in the pantry

Peanut butter

Your idea of a dream vacation

Southern France or Portugal



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

requests the honor of your
 presence at Faculty Convocation
 to celebrate the new academic year
 and
 honor faculty award recipients

Tuesday, August twenty-first
 four-thirty o'clock

Keynote Speaker
Teresa Stephens, Ph.D., MSN, RN
College of Nursing

Drug Discovery Building
 Room 110

Reception to follow in
 Drug Discovery Building Lobby

A PLEASANTLY BEEPLESS COMMUTE

BOAT TO WORK

FRIDAY JULY 27

DANIEL ISLAND FERRY 7:30AM | DEPART

FREE COFFEE & BREAKFAST

5:30PM | RETURN

RSVP: COASTALCONSERVATIONLEAGUE.ORG/BOAT2WORK

+ BoomTown! +

Innovation Station

MUSC's Tech Store

Tax Free Weekend

Friday, August 3rd-Saturday, August 4th, 2018*

PAYROLL DEDUCTION
 NOW AVAILABLE!



- Buy a MacBook® get a choice of FREE:
 - Beats® earphones
 - Powerbeats® Wireless headphones
 - OR Solo3® Wireless headphones
- Medical Devices
- Bluetooth and Wireless Speakers
- Computer and iPad® Accessories
- ... and much more!



Located on the First Floor of the Colbert Library
 Hours of Operation:

Monday through Friday 8:00 a.m. to 4:00 p.m.

* Special Hours for Tax Free Weekend:
 Saturday 9:00 a.m. to 2:00 p.m.



The Best Views In Charleston!

HARBORVIEW
 RESTAURANT & LOUNGE
 CHARLESTON, SC • EST. 1971

The Harborview Restaurant & Lounge located on the top floor of the Holiday Inn Charleston Riverview is the perfect location for your next special event!

Let our experienced staff take the stress out of planning your next event.

Wedding Receptions, Rehearsal Dinners, Bridal Luncheons, Birthday Parties, Family Reunions, Corporate Luncheons or Dinner Banquets.

Mention this ad and receive
50% off
 Event rental fee!
*based on availability

Holiday Inn Charleston Riverview
 301 Savannah Highway
 www.hiriverview.com
 To book your event please contact the Sales Department at 843-556-7100

WEDDING *Continued from Page One*

became clear something more needed to be done.

Chaneika was admitted again in late June. She was weak and wobbly, but her doctors encouraged her to keep moving. On July 4, she nervously agreed to a nurse's suggestion to walk down the hall to watch fireworks.

"Just getting down to the end of the hall without having to stop was exciting," she said. She told the nurse, "I don't know if I'm more excited about the fireworks or the fact that I didn't pass out."

A committee evaluated her for LVAD surgery. Implanting the LVAD is a major operation, Judge said. Living with it is a lifestyle change, too. The LVAD is an internal pump that moves blood from the left ventricle to the aorta. A cable connects the LVAD inside the body to a power source outside the body. The LVAD needs electricity or battery power, so a power outage can be a life-threatening event. In addition, Judge said, once the LVAD is implanted, the patient no longer has a pulse. Special equipment is needed to check a patient's blood pressure, making even routine visits challenging.

Judge said the one-year survival rate is approximately 90 percent for the newest version of LVADs, and the five-year survival rate is not yet known, because they are so new.

But the LVAD could also allow her to be more present in her children's lives,



Eli Williams, the couple's nephew, gets ready to deliver the wedding bands.

Photos by Leslie Cantu

rather than spending so much time in bed. The doctors wanted to give her a chance at a better quality of life.

"The cardiology group roots for her a lot," said palliative care social worker Kate Rogers.

When Chaneika told Judge she was worried about the surgery, he responded that he would be worried if she didn't have concerns. It's a "very big deal," he said.

As the two talked, Chaneika told the doctor about everything she wished she'd done before things got so bad, including getting married.

Chaneika and Calvin had wanted to get married for a long time. In fact, most people probably think they're already married, she said. But money was tight, and though she would have been fine with a justice of the peace ceremony, he wanted her to have it all – the church, the dress, the reception – everything.

Though Judge was the first person to

suggest to Chaneika that she could get married at the hospital, he credits Rogers with planting the idea. Rogers, on the other hand, credits Judge for making it happen, including drafting a letter to the probate office explaining why Chaneika couldn't appear in person to apply for a marriage license.

As the wedding began to take shape, Calvin's sister, Sierra Williams, jumped into action, helping Chaneika track down a dress on LetGo.com. A nurse gave her shoes, and someone else gave

her a necklace. Just like Cinderella, everything came together for the big day.

"I've built a rapport here," Chaneika said. It's obvious that the nurses and techs really care about the patients and see this as more than just a job, she said. "I've been gushing about how great they are."

And on July 14, everything came together. After a particularly hard week, Rogers said, "this has been one of our little bits of happy."

Chaneika's surgery was performed by Lucian Lozonschi, director of Surgical Heart Failure and Cardiac Transplantation. The day after the surgery, he reported that everything went well, and he was very happy with the result. "She looks great," he said. "She's doing just wonderfully." Now, she faces a minimum of one to two weeks in the hospital for recovery, though she has mentally prepared herself for six to eight weeks.

And she even thinks that maybe one day, she and Calvin will return to Charleston: not to visit MUSC, but to honeymoon.



Present are Calvin Jr., from left, Edwin Williams, Calvin Myers, chaplain George Rossi, Chaneika Drake Myers, Sierra Williams and Cashion.

HANDSOME
Homes
LEASING & PROPERTY MANAGEMENT



FRENCH QUARTER RENTAL AVAILABLE!
8-B PRIOLEAU STREET | \$5,950/MONTH



THIS IMMACULATE CONDO IS LOCATED JUST STEPS AWAY FROM CHARLESTON'S BEST PARKS & RESTAURANTS!

- 3 BEDROOMS
- 3 FULL & 1 HALF BATHROOMS
- APPROX. 2,990 SQ. FT.

FOR MORE INFORMATION, PLEASE CONTACT:

KARA COVILLE
843.718.9626

DEBBIE FISHER | BROKER-IN-CHARGE

285 MEETING STREET, CHARLESTON, SC 29401 | 843.990.9047 | WWW.HANDSOMEHOMES.COM



Summer months bring rise to swimmer's ear, infections

BY SEAN PEDERNALES
pedernal@musc.edu

Charleston is a major summer attraction thanks in part to one of its most dazzling features – water. From Folly Beach and Kiawah Island, all the way to the Isle of Palms, the beaches of the Lowcountry are prime drawing points for tourists and locals alike.

This summer, MUSC hopes to help parents and kids alike avoid one of the biggest buzzkills for summertime relaxation down by the waterfront – swimmer's ear.

Clarice Clemmens, M.D., a head and neck surgeon at MUSC's Children's Hospital, offered a few tips on keeping ears clean during the hottest season of the year.

Plenty of parents bring their children to her office, certain they have a middle ear infection. In reality, however, their children are suffering from an external ear infection, or swimmer's ear. Clemmens hopes to clear things up, allowing for proper treatment to begin earlier on.

Swimmer's ear is a bacterial infection of the external ear canal that typically results in a lot of pain and drainage, she said.

A very common ailment this time of the year, swimmer's ear results in roughly 2.5 million American health care visits annually.

Swimmer's ear is contracted when moisture lingers in the external ear canal. Clemmens explained that the presence of bacteria within the ear canal is normal, but the addition of moisture makes the skin more vulnerable to infection. As many children swim more often in the summertime, the risk for swimmer's ear is increased. According to Clemmens, swimmer's ear is also more common in humid, warm climates.

Although people of any age can suffer from swimmer's ear, it is an ailment that is particularly common in children, for a variety of reasons.

Clemmens said the abundance of swimmer's ear in the pediatric population is in part due to the simple fact that kids swim more frequently.

"In the summertime, they're the ones out running around in the heat and humidity and swimming to stay cool," she said.

That being said, childhood activities are not the only factors predisposing children to swimmer's ear. "Anatomy also plays a role in the development of swimmer's ear in children," explained Clemmens. "Children's ear canals are smaller, making them more prone to trapping moisture."

Something that parents ask Clemmens all the time is what kind of preventive steps can be taken to avoid swimmer's ear altogether. After an evaluation to confirm that it is safe, physicians may recommend simple acidifying or drying agents that can be applied directly to the ear canal.

Other simple methods to prevent swimmer's ear include using a hair dryer on a low setting to dry the ear canal or using earplugs to keep excess moisture out.

If left untreated, swimmer's ear can lead to unbearable pain and increased risk of further infection. Since swimmer's ear is a bacterial infection, it will not go away with time and requires treatment.

Antibacterial eardrops are the standard treatment option for swimmer's ear, and most patients fully recover in just four or five days, Clemmens noted.

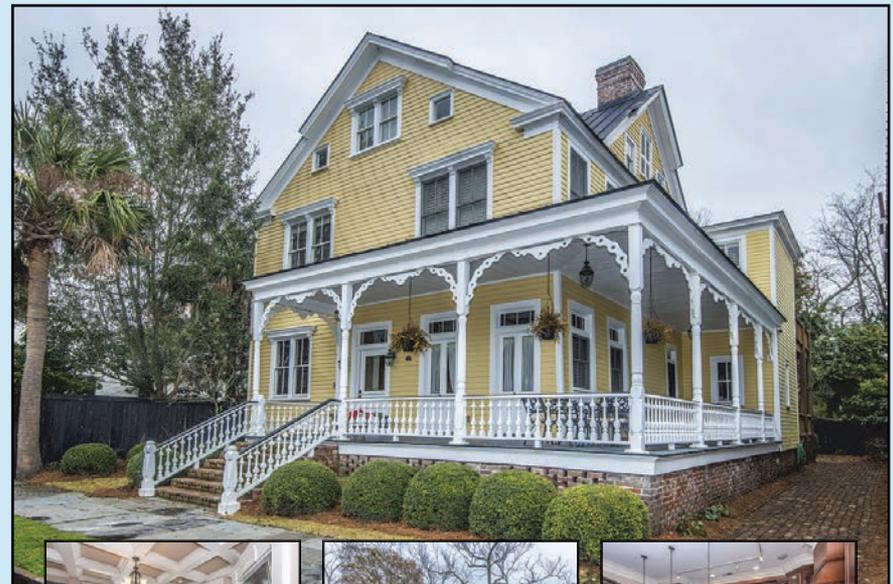
Swimmer's ear affects one out of every 200 Americans annually and is increasingly common at younger ages. Clemmens often sees patients with chronic swimmer's ear, and she hopes that parents and kids alike begin to recognize the symptoms earlier on so as to avoid long-term risk or suffering. Although swimmer's ear is extremely common in the summertime, she added that it is certainly something that can be avoided with a little bit of preventive care from parents and children alike.



Photo provided

Summertime fun with locals and tourists visiting Lowcountry beaches brings the rise of swimmer's ear, a type of external ear infection caused by bacteria.

Fabulous two-story condo with roof top deck!



**1 Bennett St | Walking distance to all medical facilities
Monthly or long term rental | Furnished or unfurnished
For information call 843-814-1291**

Program offers invaluable firsthand experience to students

Summer research program ignites passion in undergraduates from across the U.S.

BY KATHLEEN HALL

hallkat@musc.edu

College is a place of self-discovery, both in and outside of the classroom. Friendships are formed, new memories are made and each decision could have a potential impact on the future. While students are given their first glimpse of independence and are allowed to blossom as individuals, this newfound responsibility also carries a certain amount of pressure with a graduation date looming in what seems to be so far into the future. However, undergraduate students typically have just four years to decide the course on which they will steer their entire lives.

Sitting in a classroom for four years without gaining firsthand experience in a field is unlikely to ignite the passion that a student should feel for his or her future career choice. A bride wouldn't want to buy her wedding dress without trying it on first, and most students wouldn't want to wind up on career paths without testing the waters beforehand.

MUSC's Summer Undergraduate Research Program (SURP) allows students who are interested in biomedical science and research to do just that. This innovative 10-week program combines laboratory research and professional development to provide a unique learning experience for students, teaching valuable skills such as proper lab conduct and scientific writing and, of course, offering opportunities to conduct a lot of research.

This highly competitive program consists of rising college juniors and seniors, chosen from a pool of 400 applicants from all over the United States, who will participate in independent, graduate-level research on MUSC's campus. Each student chooses five research areas that are of interest to them, is paired with a graduate faculty mentor and placed in a research lab that is as closely matched with these interests

as possible. This year, 55 students were chosen based on their impressive grades, prior research experience and genuine interest in biomedical sciences.

Stephanie Brown-Guion, director of SURP and other summer programs in the College of Graduate Studies, noted that the participating faculty members are just as driven as the students. They volunteer their time and dedicate their summers to the students and genuinely want to see them succeed.

"I think we sometimes take our faculty for granted. We have a very distinguished faculty at this university who work really hard and will always give up time for their students."

Brown-Guion also said it truly is the drive within the students selected that stands out the most in their applications. The personal statement portion of the application is considered just as closely as a student's credentials, since it's the only time each student is given the opportunity to express just how interested they are in a specific research area the program offers.

For one student, however, there wasn't one specific area of research that stood out more than the others. Associate professor Christine Kern, Ph.D., and her student, Chiagoziem Ogbonna, are conducting research in regenerative medicine and cell biology. A rising senior at Wake Forest University, Ogbonna wasn't sure where his heart was leading him in the field of research, but he now knows that he ended up exactly where he belonged.

"I didn't have a specific preference, but I'm so glad I ended up in this lab. It's been exactly what I wanted to get out of this summer, which was a true experience working in a lab steering my own project."

The areas that he had expressed an interest in on his application didn't quite align with the research in Kern's



Photo by Sarah Pack

SURP student Jasmyn Hardin, left, a senior at Dominican University near Chicago, consults with her mentor, Dr. Samar Hammad, Department of Regenerative Medicine and Cell Biology. Hardin is among 55 students selected to participate in a 10-week laboratory-research learning experience.

**SOLD ~ 224 KING GEORGE ST.
DANIEL ISLAND PARK \$1,000,000
By TAPP PALMER REALTOR®**



**ARE YOU BUYING OR SELLING A HOME?
CALL TAPP PALMER FOR A CONSULTATION TODAY.
PUT YOUR TRUST IN A RESULTS DRIVEN REALTOR®
WHO WILL MAKE YOU HIS TOP PRIORITY.**

EXPERIENCE • EXCELLENCE • INTEGRITY • LUXURY PROPERTIES

5% of Tapp's commissions will be donated to the Charleston Children's Hospital. Partner with Tapp to exceed your real estate goals while helping the children at MUSC.

Charleston Metro Homes
REAL ESTATE

Tapp Palmer | 843-408-9456
tapp.palmer@charlestonmetrohomes.com

See SURP on page 9

SURP *Continued from Page Eight*

lab, but Cynthia Wright, Ph.D., associate dean for admissions and career development for the College of Graduate Studies, realized his potential and knew that he deserved to be in the program. When she asked Ogbonna to look into Kern's research, he readily agreed to participate.

Kern, who has been involved in the program for 10 years, was excited for the chance to mentor another student this summer and impressed with Ogbonna's open-mindedness.

"You just need to be open to the type of research that you do," she said. "If you can dive into a project, investigate a hypothesis, learn to critically think and do new things, the specific research doesn't matter as much."

The pair is focusing on a particular protease, an enzyme that breaks down proteins in the body, to discover the role it plays in the remodeling of hearts during development. They've hypothesized that the absence of the protease will have an effect on other cell populations in the heart during development that also play a role in the heart's structuring.

Kern had previously discovered that mice without this protease, ADAMTS-5, have cardiac valve defects 100 percent of the time. Now, she and Ogbonna are working to trace this back to the origin of the cardiac valve defects by looking earlier in mouse development. To do this, they flag particular cells during development and trace the cell's lineage so they can then observe how their behavior has changed, which conveys how they're responding to the loss of the protease.

Just two doors down from Kern's laboratory, associate professor Samar Hammad, Ph.D., and her student, Jasmyn Hardin, are also conducting translational research on the role of a special class of lipids, sphingolipids, in the well-recognized acceleration of cardiovascular disease in autoimmune disorders. Hardin made the trek down South for the summer from Dominican University, located just outside of Chicago, and is taking advantage of SURP to determine what her next step will be after graduating this December.

"It's opening my eyes to research, because before this, I had never really thought about pursuing it. Dr. Hammad has introduced me to the M.D.- Ph.D. program, so I've been looking into that as a possibility now too," said Hardin.

Together, Hardin and Hammad are looking at sphingolipid profiles, which consist of lipids other than cholesterol and triglyceride, in female patients with and without lupus. Their goal is to predict who is more likely to develop lupus symptoms and, more specifically, cardiovascular and kidney complications related to this autoimmune disease. Their goal is to pinpoint the disease markers to be able to predict which people are more prone to these complications, with their main focus on comparing African-American patients with



Photo by Sarah Pack

SURP student Jasmyn Hardin works in the lab of Dr. Samar Hammad, where they are looking at sphingolipid profiles in female patients with and without lupus. Hardin had not considered research as a future career choice. She and fellow SURP students will be presenting their summer research to peers and mentors starting at 9 a.m., Aug. 1 at the College of Health Professions and first floor of the Colbert Education Center and Library.

Caucasian patients, since African-Americans are more susceptible to developing the disease.

Hammad is another long-term mentor in the program and said SURP is one of her favorite activities with which she's involved at MUSC.

"Everyone involved in this program has passion. It's so inspirational," she said. "The students come for 10 weeks, and the amount of energy and enthusiasm they show is so contagious. They come here with a lot of thirst for science, and they truly want to gain more knowledge."

In the end, this program focuses on the students and drives them to discover where their passions lie. Being an undergraduate student is about trying new things and putting themselves out there, and this program allows for that. In the past, Kern mentored a student who realized throughout the program that her heart just didn't belong in research, or biomedical science at all for that matter. She completely shifted gears and is now an accountant at a major national bank, but had it not been for SURP, she may not have realized her true passion until much later in life.

Still, the vast majority of students involved in the program are dedicated to science and research and plan to attend either graduate or medical school after completing their undergraduate education. Students involved in the program will be presenting their research on Aug. 1. The morning session will

run from 9 through 11:45 a.m., and the afternoon session from 1 through 4 p.m., both in the College of Health Professions on Rutledge Avenue and in the Colbert Library, first floor. All members of the MUSC community are invited to attend and learn more about the myriad research projects the students have been involved in.

10-Week Weight Loss Program!

Lunchtime Losers *Express*

Presented by the MUSC Weight Management Center

The Program

- ▶ New and Improved 10-Week Lifestyle Change Weight Loss Class tailored to fit into your work day.
- ▶ Interactive Competition-Based Class: teaching healthy behavior changes that will promote healthy eating, healthy exercise, weight loss... and ultimately, improved health!
- ▶ Participants receive personalized dietary guidance, help in developing appropriate exercise goals, and behavioral information on how to facilitate long-term healthy behavior change.
- ▶ Taught by Registered Dietitian, Exercise Physiologist, & Psychology Professionals.

The Details

- ▶ **Cost:** \$98.00. Includes: 10 classes, program manual and complete set of online/app-based tracking tools. Payable by cash, check, credit/debit or payroll deduction (over 3 months, MUSC employees/spouses only)
- ▶ **Date and Time:** Start date is Thursday September 13, 2018; all classes are on Thursdays from 12:15-12:45 p.m.
- ▶ **Location:** MUSC Weight Management Center, located at 67 President Street, Suite 410 South or Virtually. All classes can be accessed from any computer, smart-phone or tablet with internet connection.

Optional Feature

Meal replacement supplements can be a valuable tool in assisting your weight loss efforts. We have excellent balanced nutrition supplement shakes and nutrition bars available, which we will discuss with the class. If you decide to add meal supplements, the cost of the supplement would be in addition to the basic program fee.

Register Today! Next Class Starts Thursday September 13, 2018

MUSCHealth.org/weight/programs/LL.html 843-792-2273



MUSC Health
Medical University of South Carolina

Changing What's Possible

Holy Spokes program coasts past one-year mark as commuting alternative

BY SEAN PEDERNALES

pedernal@musc.edu

Just one year into its existence, Gotcha Group's bike share program, Holy Spokes, has already pedaled its way into the everyday lives of Charlestonians.

What may have seemed like a touristy gimmick at this time last year has found itself a home here in the Lowcountry.

May 30, 2017 not only served as the birth of the Holy Spokes program but also the birth of a new, healthier community in Charleston.

A year ago, virtually everything surrounding the newest Gotcha Bikes' installment was nothing more than speculation. Now, the results stand as signifiers of a successful venture.

With its implementation, the Holy Spokes program carried with it a goal – to burn a million calories its first year. The bikers who combined to go on roughly 50,000 trips did just that, as they burned off 4,334,538 calories in the program's opening year.

Before the program even saw its one-year anniversary, multiple new bike hubs were plugged in downtown. In the first quarter of 2018, bike racks were installed at Mission Yoga on Spring Street, the Department of Transportation office

on Lockwood Boulevard and here on MUSC's campus at the Medical District Greenway at the corner of Doughty and President streets.

These new additions bring the total number of racks to 28, a number higher than many of the bike share programs in other cities.

In its first year, 13,381 members registered to use Holy Spokes, combining to bike for a total of 108,358 miles. Those 13,381 members haven't just improved their own personal health by biking, they've also made a considerable impact on the environment at the same time. Roughly 95,000 pounds of carbon dioxide emissions were reduced in this initial year.

A major factor behind the bike share program's success is its collaboration with MUSC. All MUSC students and employees are eligible for the "MUSC Plan," which provides a free hour of ride time every day, 24/7.

This program has helped the MUSC community stay happy and healthy physically, while also easing the financial burdens of commuting via car. In the first year of the program, MUSC students and faculty saved around \$13,000 that otherwise would have been used on gas – not to mention parking



Photos by Anne Thompson

The Holy Spokes bike share program hosts 28 racks around Charleston.

fees and other inconveniences related to driving to and from MUSC. The MUSC partnership with Holy Spokes has brought a great deal of ease to many in the MUSC community.

Of the many on-campus racks, a few rose above the crowd when it came to active use. The most popular MUSC bike rack is located on the Horseshoe, followed closely by the Wellness Center and Basic Science building.

When it comes to the average distance of a trip, MUSC members fared pretty well compared to other Holy Spokes users. Members from MUSC averaged a trip distance of 1.64 miles, good for fourth place out of the 13 total subgroups. The only members with a higher average trip mileage are pay-as-you-go users, mostly tourists; users who pay for monthly and annual memberships; and founding members of the Holy Spokes program.

In its first year, the Holy Spokes program has proved to be nothing but

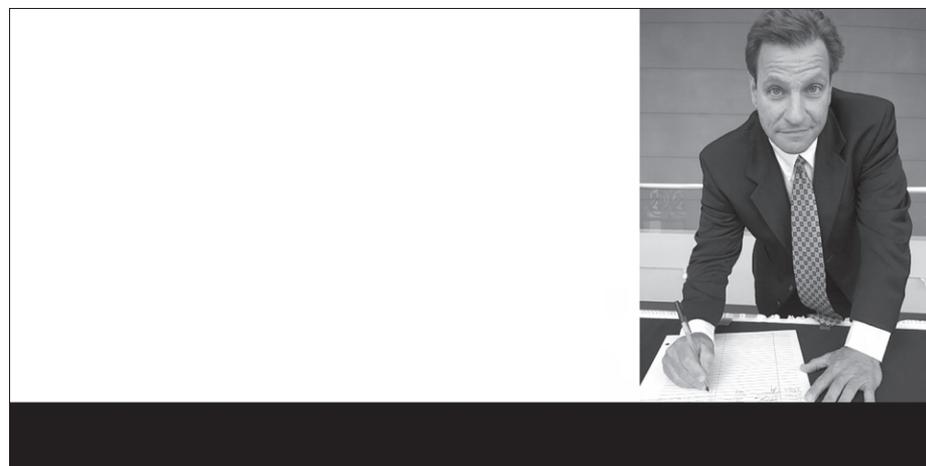
a success and welcomed addition to the Charleston community. Benefits in physical health, economic health and environmental health justify a bike share program in this region, and going forward, the Holy Spokes program can look to continued pedaling along as they add new hub locations and features along the way.

Patrick Cawley, M.D., CEO of MUSC Health and Vice President for Health Affairs, University, is pleased the MUSC community so quickly embraced the fun and healthy bike share program, reinforcing the institution's enterprisewide commitment to the Imagine MUSC 2020 strategy.

"The success of the Holy Spokes bike share system is an example of MUSC partnering with the community to build healthier communities. We look forward to even greater success in the upcoming year through our continued partnership with Gotcha Bike and the City of Charleston."



Of the 13,381 Holy Spokes registered members, 2,000 are from MUSC.



MUSC granted \$1.27 million for statewide palliative care telehealth program

Staff Report

MUSC's palliative care program has received a \$1,278,000 grant from The Duke Endowment to create a statewide palliative care telehealth program.

Providing end-of-life and comfort care to those in need, especially for the state's most vulnerable and rural populations, is the primary aim of the new effort. Program leadership expects not only an improvement to accessibility for this kind of care but also potential cost savings to individual patients and the system as a whole.

"We have always been focused on improving the quality of life for patients and their families when facing the problems associated with life-threatening illness," said Lauren Seidenschmidt, MUSC Health palliative care program manager. "With help from The Duke Endowment, and as a leader in palliative care and telehealth, we are incredibly excited to increase access to these services. The need is great in our state, and we are so pleased to be able to do even more to meet it."

OUTLOOK *Continued from Page Three*

Finally, in the fall of 2019, the Citadel Mall space will open.

The mall plan came together with a bit of fortuitous timing, Cawley said. A few years ago, MUSC leadership determined it needed a larger ambulatory presence in West Ashley. At first, MUSC Health planned to build its own facility near West Ashley High School off Glenn McConnell Parkway, but the mall developer came to MUSC with an idea for MUSC to be part of the revitalization of the mall.

The mall plan had several advantages over the parkway plan, Cawley said. First and foremost — parking.

The former J.C. Penney store within the mall also offered more space and

Access to palliative care remains inconsistent throughout the U.S., including South Carolina. In May 2018, S.C. Gov. Henry McMaster signed a bill into law to evaluate the state's health care resources for seriously and terminally ill patients and established the state's first Palliative Care and Quality of Life Study Committee. The state seeks to better understand the need for palliative care services, and as the numbers of those aging or dealing with life-threatening illness rapidly increase, innovative and cost-saving solutions are needed now more than ever.

"Palliative care programs have demonstrated the ability to support patients with serious illness by improving pain and symptom management, reducing anxiety and depression, and increasing patient and family satisfaction," said Lin Hollowell, director of health care for The Duke Endowment. "By bringing an intentional focus on holistically meeting the needs of patients facing serious, life-threatening illnesses, this effort will improve care for people across South Carolina."

better highway access. Once opened, the site will offer ambulatory surgery, procedure rooms, radiology, labs, urgent care and doctor's offices. "Just about anything you would need as an outpatient," Cawley said.

Longer term, MUSC plans to build a 128-bed hospital in the Nexton development near Summerville in Berkeley County. DHEC approved this project in mid-July. The MUSC Health Community Hospital at Nexton is estimated to cost \$325 million and is expected to open in 2022.

As Cawley considers MUSC's plans, he also keeps an eye on the national landscape. He expects to see a continuation of the consolidation trend among health systems. It wouldn't be crazy to think the U.S. could go from

MUSC's tech store — not just an Apple Store

BY MELANIE RICHARDSON

richarme@musc.edu

MUSC's tech store called Innovation Station, looks and feels like an Apple store but has a lot more than just Apple products. It was designed to provide a place where MUSC students, faculty and staff can shop for tech products without having to leave campus. The store also carries Dell and HP laptops, Bluetooth and wireless speakers, wireless chargers, cables and other tech accessories and peripherals.

On Friday, Aug. 3 and Saturday, Aug. 4, the store will be participating in the state's tax-free weekend.

Following are some of the items you can find in the store:

- HP Laptop: \$535
- Macbook Pro with a 13-inch monitor: \$1,249
- Beats earphones: \$149
- Powerbeats earphones: \$199

All products in the store are offered at a discounted price for MUSC students, faculty and staff.

The store is located on the first floor of the Colbert Library and is normally open Monday through Friday, 8 a.m. to 4 p.m. But on

6,000 independent hospitals to several hundred health systems, each with multiple hospitals, he said.

"We think MUSC Health system will grow as well. We expect to be a health system that's leading care. We don't expect to be consolidated by somebody else," he said.

As MUSC grows it will continue to focus on quality, he said. A focus on restructuring the health system two years ago was primarily to ensure that as the system grows, it doesn't outstrip its resources, Cawley said.

Innovation Station
First Floor of the Colbert
Library
171 Ashley Avenue
Charleston, SC 29425

Hours of Operation:
Monday – Friday, 8 a.m. to 4
p.m.
Phone: 843-792-5312
innovationstation@musc.edu

Saturday, Aug. 4, the store will be open from 9 a.m. to 2 p.m. for tax-free weekend.

Payroll deduction is available for all MUSC employees. There is a \$20 processing fee, and the payments are based on your income, spread out over six months. To enroll, bring your MUSC badge to Innovation Station.

MUHA departments also can use an intra institutional transfer (IIT) to purchase items. University departments can sign up at Marketplace, order online and conveniently pick up their orders at the store.

For information, contact the store's general manager Corliss Johnson, johnscor@musc.edu, or Tony Coombs, coombsa@musc.edu, or call the store at 843-792-5312.

2Factor update by July 31

Have you updated with the 2Factor Authenticator App to continue accessing MUSC systems? Users must change to the new system by July 31.

MUSC Information Solutions is updating 2Factor to a system that uses a 6-digit code sent to your phone through an app to access MUSC systems remotely. Call the Help Desk at 843-792-9700.

IMPRESSIONS DAY 'IMPRESSES' PRE-DENTAL STUDENTS



Photos Provided

Students from the MUSC chapter of the Student National Dental Association held an Impressions Day and Dinner with the Docs event for 60 pre-dental students. This special outreach event gave students a chance to spend the day performing hands-on procedures in the Dental Simulation Lab while meeting with dental faculty and dental students. Participants prepared dental care packages that included encouraging notes for patients in the hospital.



Dental student Malikah Christie, second right, assists pre-dental students as they learn to prepare a tooth for a crown and other activities in the Dental Simulation Lab. For information, visit muscsnda.com or Facebook at [Jbecdm Snda](https://www.facebook.com/JbecdmSnda).

“My Reviews Speak for Themselves”

David Kent

“I would highly recommend David Kent. He is incredibly knowledgeable and extremely accommodating. He truly has the buyers' best interest at heart and is a pro at negotiating.”



**2017 SC Realtor
of the Year**



www.DavidKent.net | 843.606.0824