MUSC CATALYST NEWS

AUGUST 24, 2018

MEDICAL UNIVERSITY OF SOUTH CAROLINA

VOL. 35, NO. 45

MUSC named No. 1 hospital in state, multiple specialties honored

U.S. News & World Report releases rankings

By Helen Adams

adamshel@musc.edu

Once again, U.S. News & World Report has ranked MUSC as the No. 1 hospital in South Carolina in its Best Hospitals Rankings and Ratings. This marks the fourth year in a row. Five specialties at MUSC Health got high marks as well. That's no small feat when you consider that the rankings and ratings include about 4,500 medical centers across the country.

EAR, NOSE AND THROAT TEAM

Paul Lambert, M.D., director of the Department of Otolaryngology - Head and Neck Surgery at MUSC Health, is pleased to learn his program is ranked the 12th best ear, nose and throat program in the United States. "We're proud to be listed among the elite programs. It has been a relentless climb from relative obscurity 20 years ago. Our first ranking was at No. 35 in 2009. For perspective, our department dates from 1961."

The otolaryngology team treats people suffering from allergies, sinus disease, swallowing problems and voice disorders. Its doctors also do ear and thyroid surgery, treat head and neck cancer and offer cosmetic dentistry and facial plastic surgery.

Lambert says the U.S. News & World

Report ranking is a testament to the fact that his team's faculty members have established themselves as national leaders in ear, nose and throat research and treatment. "As a group, we have recruited wisely, mentored consistently, promoted aggressively, and retained faculty. That has clearly been a winning formula for us."

GYNECOLOGY

The gynecology program at MUSC Women's Health continues its strong showing in U.S News & World Report rankings as well, coming in at No. 18. Gynecologist David Soper leads that program. "To be considered a top–20 program out of nearly 5,000 medical centers nationally speaks to the commitment our team has to caring for patients and ensuring their safety," Soper says.

"This begins with patient scheduling, continues with nursing care and education and ends with optimal treatment by both nurse and physician providers. Our continued engagement in medical education and research allows a commitment to cutting-edge therapies and technologies which support excellent outcomes."

He says the program emphasizes making sure each patient is matched with the best doctor for her needs.

CANCER

MUSC Hollings Cancer Center finds



Photo by Sarah Pack

Gynecologist Dr. Autumn Edenfield talks with Mary Lee Cromer, a patient from Huger, South Carolina. The MUSC Women's Health gynecology program is ranked among the best in the country.

itself in elite company, too, ranking 24th among the top cancer centers in the country. David Mahvi, M.D., chief of the Oncology Integrated Center for Comprehensive Excellence at Hollings, said the rankings take into consideration the types of patients treated, the quality of care and the programs offered.

"In all these categories, we score exceptionally high. We treat the most complex patients, our survival outcomes are outstanding, and we offer programs that are important not only to the physical health of our patients but their needs overall as they navigate their treatment."

Hollings Cancer Center is a National

See Rankings on page 13

-MUSC Family Save the Date
Monday, Aug. 27
Join MUSC President
David Cole for a
First-Of-Its-Kind
Announcement

10:30 a.m., Drug Discovery Bldg., Room 110

Back to School
Professionals give practical advice for new year.

8

65-day journey in CVICU
Heart transplant patient
grateful for second chance.

- B Meet Blain Groat
- 4 Welcome back students
- 7 STEM like a girl

RESEARCH GRANT HIGHLIGHTS

Biochemistry and Molecular Biology

Alan Diehl, Ph.D.

Nuclear Accumulation of Cyclin D1 and Oncogenesis, \$1,597,780, from NIH/NCI, (2R01CA093237-16A1), August 1, 2014 to May 31, 2023

Cell and Molecular Pharmacology and Experimental Therapeutics

Anand Mehta, D.Phil.

Glyco-typer: An Antibody Capture Glycan Imaging Methodology, \$666,473, from NIH/NCI, (1R21CA225474-01), June 1, 2018 to May 31, 2020

Dermatology and Dermatologic Surgery Lara Wine Lee, M.D., Ph.D.

A Phase 3 Randomized, Double-blind, Placebocontrolled, Parallel Group, Multi-center Study To Evaluate The Efficacy And Safety Of Pf-04965842 Monotherapy In Subjects Aged 12 Years And Older, With Moderate To Severe Atopic Dermatitis, \$171,319, from Icon Clinical Research, Inc. (Pfizer, Inc.), (B7451012), May 24, 2018 to May 31, 2021

Lara Wine Lee, M.D., Ph.D.

An International, Multicenter, Randomized, Double-Blind, Parallel-Group Phase 2 Study Evaluating the Safety and Efficacy of Diacerein 1% Ointment Topical Formulation in Subjects with Epidermolysis Bullosa, \$118,002, from Medpace, Inc. (Castle Creek Pharmaceuticals, LLC), (CCP-020-301 DELIVERS), May 22, 2018 to May 31, 2020

Medicine

Carolyn D. Britten, M.D.

A Phase III Study of BBI-608 plus nab-Paclitaxel with Gemcitabine in Adult Patients with Metastatic Pancreatic Adenocarcinoma, \$309,715, from Chiltern International, Inc. (Boston Biomedical, Inc.),

(CanStem111P), May 23, 2018 to May 22, 2023

Daniel P Judge, M.D.

An Open-Label Extension and Safety Monitoring Study of Patients with Symptomatic Transthyretin Cardiomyopathy Who Have Completed the Phase II Study AG10-201, \$224,237, from Eidos Therapeutics Inc., (AG10-202 PO #1139 RQ # 29), May 21, 2018 to May 31, 2021

Don C. Rockey, M.D.

Stellate cells and cGMP, \$104,972, from Ironwood Pharmaceuticals, Inc., (HIP-2018-0374), June 11, 2018 to June 10, 2019

Gary Gilkeson, M.D.

A Phase II Sequential Dose-escalation Study Evaluating the Safety & Feasibility of Allogenic Umbilical Cord Derived Mesenchymal Stromal Cells for the Treatment of Adults w/ Treatment Refractory Lupus, \$756,000, from Lupus Fdn. of America, Inc., October 1, 2017 - September 30, 2022

J. Terrill Huggins, M.D.

A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate theEfficacy and Safety of BG00011 in Patients With Idiopathic Pulmonary Fibrosis, \$457,190, from Iqvia (Biogen Idec, MA, Inc.), (203PF203), May 29, 2018 to May 31, 2020

Leslie Lenert, M.D.

A Bayesian Nonparametric Collaborative Filtering Algorithm to Improve Health Care Decisions, \$185,000, from NIH/NLM, (1R21LM012866-01), June 1, 2018 to May 31, 2020

Michael B. Lilly, M.D.

MUSC/HCC Paul Calabresi Clinical Oncology

Training Program Plan, \$3,041,486, from NIH/NCI, (2K12CA157688-06), April 1, 2013 to March 31, 2023

Michael R. Gold, M.D., Ph.D.

Multiple cArdiac seNsors for mAnaGEment of Heart Failure, \$154,250, from Boston Scientific Corp., (C2041 MANAGE HF), May 8, 2018 to April 30, 2021

Patrick A. Flume, M.D.

A Phase 3, Open-label Study Evaluating the Long-term Safety and Efficacy of VX-445 Combination Therapy in Subjects With Cystic Fibrosis Who Are Homozygous or Heterozygous for the F508del Mutation, \$195,580, from Vertex Pharmaceuticals, Inc., (VX17-445-105), May 4, 2018 to April 30, 2020

Patrick A. Flume, M.D.

A Phase 3, Randomized, Double-blind, Controlled Study Evaluating the Efficacy and Safety of VX-445 Combination Therapy in Subjects With Cystic Fibrosis Who Are Heterozygous for the F508del Mutation, \$100,882, from Vertex Pharmaceuticals, Inc., (VX17-445-102), May 4, 2018 to April 30, 2019

The MUSC Catalyst News' Research Grant Highlights column showcases the MUSC research community's grant activities.

For more information about campuswide research awards, visit the Office of Research & Sponsored Programs at http://academicdepartments.musc.edu/research/orsp/reporting/.

MUSC news

Editorial Office

MUSC Office of PublicAffairs & 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.

MUWC Annual Scholarships: applications due Sept. 5

The Medical University Women's Club is offering its annual scholarships to MUSC students for the 2018–2019 academic year. More than \$18,000 in scholarship money is available. All full-time MUSC students (second year and higher) are eligible to apply. The deadline to complete and submit MUWC scholarship applications is Wednesday, Sept. 5 at 4 p.m.

For further information and a link to the online application, visit http://academicdepartments.musc.edu/womensclub/scholarship.htm. Completed applications should be submitted via email to muwcscholarship@gmail.com.

03-1715444-1

MEET BLAINE



Blaine Groat

College

College of Pharmacy, third year

How are you changing what's possible at MUSC

As president of the universitywide honor council, I am privileged to be working alongside students from all six colleges as we build the foundation for an interprofessional organization that promotes trust and integrity across campus.

Family and Pets

Wife, Erna, a second—year pediatric pharmacy resident at MUSC, and our Yorkie, Sophie

A unique talent you have

In my free time, I write code for custom—designed websites and manage my own servers.

What should MUSC students and faculty know

Please take a half-hour to read the new Honor Code at musc.edu/honorcode. If you have any questions or want to report a violation, there are email links, plus links to the new Maxient reporting system.







FREE HAIRCUT

WITH ANY COLOR APPOINTMENT New clients only, ends 9/30/18

Located at 125 Cannon St

Parking provided behind salon
Charleston, South Carolina 29403
843-577-7595

salon@tabularasacharleston.com



Letter from the Office of the PROVOST

Dear MUSC Students,

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

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



Saladin

With many significant events in the last year revealing sexual abuse, harassment and discrimination across sectors that include the entertainment industry, the Catholic church, and universities, I want to restate emphatically MUSC's commitment to providing a safe environment and fair treatment for all our students. Title IX mandates equal access to education that is free of discrimination or harassment, and this imperative is deeply embedded in MUSC's values. Our Title IX Office has recently been expanded to ensure that we have the resources to tackle this complex issue, and we will always strive to provide the best possible learning environment in which you may succeed and thrive.

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

I look forward to an exciting year with you as each of you writes the next chapter of your personal story and as we work together to create a better MUSC.

Lisa K. Saladin, PT, P.hD., FAPTA Executive Vice President for Academic Affairs and Provost

Excerpts from President Cole's welcome letter:

"We look forward to having you as part of the MUSC family.

As you get settled, I want to update you on a few campus improvements.

□ Whether you are on campus every day or only occasionally as a student enrolled in one of our nationally recognized online programs, please visit Innovation Station, our new Apple—authorized campus store. The store is poised to be a hub for innovation, and it is a catalyst for collaboration and integration. With its location in the heart of this campus, on the first floor of our library, our hope is that it will help bring people together in new ways. □ In addition, we have another exciting installation around campus with last year's launch of our Holy Spoke MUSC Health bikes, which aligns

A letter from the SGA President

Dear Fellow MUSC Students,

To everyone who is joining us for their first year — congratulations and welcome! It can be overwhelming to be in a new place facing all new challenges, but take a moment to reflect on how hard you have worked to get here. It may feel like you're only just setting foot on your journey, but you're actually already standing on a summit.

To everyone who is returning for another year — welcome back! Some of you enjoyed a break over the hot summer, while some of you stayed long hours in the hospital, lab, or clinic. You're getting closer and closer to your goal of graduating and contributing to the field of medicine, whether clinically or scientifically.

As you may already know, our university is made up of six colleges, each training students for many different careers within medicine. The Student Government Association (SGA) is the unified voice of students across all of the colleges. Our role is to increase the quality of the student experience at MUSC by being the direct

link between our students and the administration. We also offer a variety of social, cultural, educational, and recreational programming throughout the year, as well as many service opportunities. All of our programs and events are open to every student here at MUSC.

I encourage you all to utilize your representatives on SGA to share your ideas, experiences, and frustrations. This year, our executive initiatives are centered around Diversity and Inclusion, Communication and Interprofessionalism.

We would love your help if you are passionate about one of these areas. If instead, you have initiatives of your own, we are here to help with those as well. Please don't hesitate to reach out. I hope to see you all around campus, and good luck with the upcoming academic year!

Celeste Jilich MUSC SGA President College of Medicine, 2019 sga@musc.edu\

with our strategic goal to build healthy communities. We're excited to see that the bike corals are in several locations on campus for use by our MUSC family and others. Visit www.charlestonbikeshare.com to learn more.

- ☐ Imagine MUSC 2020 is our institutional strategy for the future. I hope this isn't the last time you hear about it during your time here, as it is the foundation in achieving our vision to lead health innovation for the lives we touch. You will see flags and banners about it on campus, and you can learn more at imaginemusc.com. Our five strategic goals are:
- Foster Innovative Education and Learning
- Advance New Knowledge and Scientific Discoveries
- Embrace Diversity and Inclusion
- Commit to Patients and Families First
- Promote Healthy Communities

As we implement these initiatives, you will notice changes in the way teaching and learning are taking place. We are planning the integration of classroom and experiential opportunities so that students from all professions have greater opportunities to learn from and with one another. Our faculty and staff are committed to excellent teaching and inclusion of all of our students, whether on campus or at a distance through technology."

A guide to getting kids ready to head back to school

From sleep to snacks to gun safety, doctors offer advice

By Helen Adams

adamshel@musc.edu

As kids across the Lowcountry have head back to school, MUSC Children's Health experts have some advice for getting classes off to a healthy and safe start.

DONT SKIMP ON SLEEP

"We know kids don't get enough sleep, especially teenagers," says pediatrician Anne Andrews. "Getting back into the habit of getting a solid 10 to 12 hours of sleep a night, depending on the age, so they can be rested for school is super important."

MUSC Health dietitian Molly Jones says not getting enough sleep is associated with obesity and poor eating habits. "Think about your morning routine. Is it hard to wake your child or teen up in time for school? Are mornings rushed and breakfasts often forgotten?" she asks.

"Start the school year off right by setting some guidelines that will help ensure a good night's sleep and less stress in the morning. Establish a bedtime routine now. Turn electronics off at least 30 minutes before bedtime and keep TVs, computers, tablets and other screens out of the bedroom altogether."

Focus on food

"Plan for breakfast the night before," advises Jones. She suggests:

- ☐ Boiling eggs in advance and pair them with fruit for a graband-go option.
- ☐ Washing and cutting strawberries, peaches or mangoes to serve as easy toppings for Greek yogurt or cottage cheese.
- ☐ Using muffin tins to bake mini omelets that can be stored in the fridge and microwaved for 30 to 40 seconds.
- ☐ Combining low-fat milk, oatmeal, vanilla Greek yogurt, cinnamon and diced apples and refrigerating it overnight.

When it comes to school lunchtime, "Meal skipping is a common concern for a lot of children, especially teens," Jones says. "Talk to your child to determine why they may be skipping meals, whether it's dislike of school food, not enough time to eat, they don't like eating in front of others, other kids make fun of the food they bring from home or whatever the reason. Allow them to help you come up with possible solutions. Some families find it helpful to review school lunch menus in advance, circling the days your child plans to eat at school and planning ahead for the days your child wants to bring lunch from home."

And it's not just getting the child to eat lunch that's important. What's in that lunch may be linked to how well a student does in school. A recent study found healthy school meals led to better achievement test scores.

On the days a child brings lunch from home, Jones suggests:

DIY Lunchables: Cut meat and cheese into small squares and pack them along with whole grain crackers and a few sides

such as sweet bell peppers and fruit.

- ☐ Roll-ups: Roll slices of deli meat around string cheese. Serve with a pickle, pita chips and a side of guacamole or hummus.
- ☐ Kebabs: Use a popsicle stick or toothpick to skewer fruits like grapes, strawberries, sliced pineapple or kiwi and vegetables like cherry tomatoes, sliced cucumbers or bell peppers. Pair the kebabs with a scoop of chicken salad and pretzels.

After school, skip the sweet and salty snacks. "Reframe your family's mindset and offer a mini-meal after school when your child is likely the hungriest. A mini-meal should include a protein and fruit, vegetable or other complex carbohydrate. It may be similar to the food you offer at dinner, but in a smaller portion," Jones says.

"Plus, when quality foods are offered at every eating event, it can take the pressure off of dinner. Imagine no more bargaining with your child to just eat two more bites of vegetables."

MEDICATION PREP

Now is also the time to make sure any medications such as asthma rescue inhalers and EpiPens in the school nurse's hands. Andrews says some parents think that since their child hasn't had a problem with asthma or allergies over the summer, they don't need to take medication any more.

"The consequences can be very serious. We see lots of kids who come into the emergency department and who are admitted into the hospital with severe asthma exacerbation who have been feeling well all summer and haven't had any colds in a while, so it's off their radar. They haven't been taking their daily controllers, and they get back to school and pick up a new virus and get seriously sick."

TRANSPORTATION TALK

Another MUSC Health pediatrician, Elizabeth Mack, says moms and dads need to take their kids' mode of transportation seriously, especially if it's something like a hoverboard, skateboard or bike.

"Put a lid on it," she recommends. As in: Make sure the child wears a safety helmet.

Kids who ride hoverboards and skateboards to school also need elbow and kneepads plus wrist guards, Mack says. "The most injured body part is the wrist, followed by forearms and head."

And if it's a bike your child opts for, make sure it's not too big. "Oversized bikes are dangerous. They need to be able to sit on the seat, have hands on handlebars and have the balls of both feet on the ground – not just one."

AVOIDING ILLNESS/WHEN TO KEEP A CHILD HOME

Andrews encourages parents to remind their kids to wash their hands with soap and avoid drinking or eating from other kids' meals.

And when a child does get sick, keep him or her home.



Photos provided

Backpacks should never be heavier than 10 to 20 percent of a child's body weight, according to the American Academy of Pediatrics.

"Don't send them to school when they have a fever even if it has come down with ibuprofen. You're just going to spread those germs to kids in their classroom. I'd say no fever or vomiting for 24 hours."

See School on page 15





\$1,425,000 MLS# 18020482

Beautiful Custom Built Home on over half acre lot in prestigious

Daniel Island Park. A welcoming full front porch leads you through the
double mahogany front doors and into a spacious foyer, where you
are greeted with recently refinished heart pine floors, crown molding
and upgraded trim throughout. This open plan offers a spacious formal
living room, large traditional dining room, a casual family room with
fireplace, and a gourmet island kitchen with Viking refrigerator, gas
cooktop and granite countertops. 5 br, 5 ba, 1 half bath, 4436 sqft.

Visit www.edhunnicutt.com for more info.



Call Ed Hunnicutt for more info:

843.270.0292

©arolina One

TEACHING THE PHARMDAMENTALS



Photo by Anne Thompson

Ten Charleston County high school students participated in MUSC's College of Pharmacy's new PharmDamentals Program. The daylong program featured a panel discussion, Q&A session with MUSC pharmacy alumni and students, lunch and an interactive laboratory experience. The program is designed to engage underrepresented minority students interested in science, technology, engineering, math and health care.



AVAILABLE FOR RENT DOWNTOWN!

7 SIMONTON MEWS | \$4,500/MONTH





4-STORY, PET FRIENDLY TOWNHOME LOCATED **IN MORRIS SQUARE!**

- , 3 BEDROOMS
- 2 ½ BATHROOMS
- APPROX. 2,280 SQ. FT.
- 2 CAR GARAGE

FOR MORE INFORMATION. PLEASE CONTACT:

KARA COVILLE 843.718.9626

www.cbchomeloans.com/arthur-anderson 845.863.4001

REAL DISCOUNTS



Our Heroes

Qualifying **Heroes**











Firefighters

Enforcement

Workers/EMS



The Homes for Heroes Program is a way for us to say "Thank You" to you and other Heroes like you, who serve our nation and communities every day.

Examples:

HOME PURCHASE PRICE	CHECK
\$250,000	\$1,750
\$500,000	\$3,500
\$750,000	\$5,250

BUY A HOME and receive a check from Homes for Heroes in the mail. **SELL A HOME** and receive reduced real estate service fees at closing. FINANCE a mortgage and receive reduced lending fees.

LOCAL BUSINESS AFFILIATES provide special hero discounts.



Arthur Anderson, Senior Loan Officer NMLS 332117

CBC National Bank Mortgage 845.863.4001

Arthur.Anderson@CBCNationalbank.com

Matt Cuchelo, Real Estate **Coastal Premier Prime Properties**

843.806.8272

MCuchelo@LowCountryLuxuryLiving.net

DEBBIE FISHER | BROKER-IN-CHARGE

285 Meeting Street, Charleston, SC 29401 | 843.990.9047 | www.handsomehomes.com

Women scientists give girls a taste of science careers

#STEMlikeagirl

By Leslie Cantu

cantul@musc.edu

Research is fun.
That's the message that Carol
Feghali-Bostwick, Ph.D., and devoted
women volunteers wanted girls to get at a
recent STEM-oriented camp at the College
of Charleston. STEM stands for science,
technology, engineering and math.

And the girls did have fun. Outfitted with lab coats and gloves, they mashed up bananas into a simple solution of materials found around the house and extracted the banana DNA. They even got a banana DNA-extraction recipe to take home so they could replicate the experiment with family and friends.

The free three-day camp, called Girls Day Out, included participation from many STEM-oriented industries around the Lowcountry, including Bosch, Boeing, Nucor, Google and the Space and Naval Warfare Systems Command (SPAWAR).

Because of Charleston's mix of industries, most people here tend to think first of technology and engineering when they think STEM, but the MUSC group from the Women Scholars Initiative, College of Medicine Center for ARROWS and SCTR showed the girls that science is a viable career as well. Not only did the girls get to do a hands-on activity, but they got to meet

women scientists – every person leading the activity was a woman, each with a Ph.D.

Feghali-Bostwick, the SmartState and Kitty Trask Holt endowed chair and professor of medicine in the Division of Rheumatology and Immunology, said she wants girls to see research science as an attainable goal. Girls Day Out was geared toward girls entering eighth and ninth grades — the ages when interest in science tends to drop off for girls, according to studies.

"That's the age where they start questioning if they can do it," said Feghali-Bostwick, who also serves as chair of the Women Scholars Initiative.

She credited the new WSI community outreach committee, chaired by Kristine DeLeon-Pennell, Ph.D., with organizing the banana DNA extraction activity.

Lindsay McDonald, Ph.D.; Lillianne Harris Wright, Ph.D.; Iuliia Polina, Ph.D.; Diana Lee-Chavarria, education program manager at SCTR Institute; and Rachel Simmons, WSI and Center for ARROWS program coordinator, worked the event while Daria Ilatovskaya, Ph.D., also helped with planning.

The girls got to take home some MUSC swag, including cute pens with a hashtag that reminds them to #STEMlikeagirl.

The committee wants to do more to introduce girls to research science. Talks are in progress about developing programming with the Girl Scouts or in local schools.



Photo by Girls Day Out

As part of a banana DNA extraction activity, a student pours a banana solution into a tube. After drizzling alcohol down the side of the tube, the DNA separates as a white layer between the lower cell debris and the upper clear alcohol layer.



Six MUSC women volunteered on a Saturday morning to show participating girls what research science is all about.

Photos by Rachel Simmons

For more information about the Women Scholars Initiative and the Center for ARROWS, visit www. academic departments. musc.edu/arrowinitiative



Dr. Kristine DeLeon-Pennell, chair of the new community outreach committee for WSI, checks the progress of a student's experiment.

Sixty-five day journey gives heart transplant patient a second chance

MUSC program recertified in March

By Mikie Hayes

hayesmi@musc.edu

There was a celebration in the ICU on June 21. Everyone was high-fiving and hugging each other. The news was big — there was a heart for James. And that morning, James Dewees finally left the CVICU after 65 days bound for the transplant operating room.

"It was like Christmas. The nurses were so excited and kept telling him, 'This is it,' as they prepared to wheel him out," his wife Bridget said. "He went out of there smiling and waving at everyone. His faith was the strongest I had ever seen it. Everybody was so happy for him."

Perhaps no one more than Bridget. It just so happened they would celebrate their 28th wedding anniversary that weekend, and once again, she was confident they would spend their future together.

Doctors discharged James 10 days after the successful surgery. Today, the Dewees family is on a mission to educate the public about heart health and organ donation.

But getting to that point wasn't easy. Nor was it fast. Spending 65 days in the MUSC Health ICU was a major feat in and of itself, said Thomas Di Salvo, M.D., chief of Cardiology. "A lot happens up there, and James just kept his cool. He was the model patient."

Not bad for a man who had no time to wrap his mind around the fact that he would not be going home that day in April. James came to MUSC Health for a heart catheterization and doctors said he had to stay — that he needed a heart transplant.

His journey began in 2010 when doctors informed him he was in congestive heart failure – a condition where the heart cannot pump enough blood to meet the body's needs. Eventually, it can lead to the need for a new heart. James just never thought that would be his reality.

In 2011, he had a near-death experience while singing at a wedding rehearsal. He had just finished his second song at a church in West Ashley, when out like a light he went in front of more than 60 people.

"My heart started beating really, really fast,

and then it just stopped. I had an arrhythmia that led to sudden cardiac death."

Nurses in the wedding party tried to resuscitate him, as did emergency responders, Bridget said, but to no avail.

"The EMS wanted to pronounce me dead. I wasn't breathing," James explained. "They said I had no heartbeat. No pulse. My complexion turned blue. My stomach inflated to the size of a pregnant woman."

Finally, in the ER, they were able to revive him. But with the ordeal having lasted a good 40 minutes, doctors shared grim news with Bridget — there was only a 5 percent chance of his coming out of it.

"The doctors prepared me that he could be brain dead. They prepared me for the worst," Bridget recounted. "But he woke up two days later and asked why he was there and where I was," she said gleefully.

James came to MUSC Health, and Terry O'Brien, a cardiologist who specializes in treating heart failure and arrhythmias, followed his care. In early 2017, James' heart condition worsened. Forty days spent in and out of the hospital that year provided signs his condition was worsening. His ejection fraction – an important measurement used to determine how well a heart is pumping out blood with each beat – hit a low of 16 percent. It was an indication that his heart failure was severe. He also had tremendous fluid buildup. At one MUSC Health appointment, Van Bakel immediately admitted him, and James had 30 pounds of fluid removed over a period of six days.

Even though physically James never looked bad, Bridget said, in June 2017, they sent him to the MUSC Health advanced heart failure team.

That's when they started talking transplant. In August, they added him to the transplant list. Still, James wasn't having any of it. Laughing, Bridget recalled the time he asked, "If they call with a heart, how many times can I decline a transplant!"

That casual attitude changed on April 18 when he came in for his visit. He hadn't felt well for a couple of weeks. James had accompanied Bridget, an assistant vice president for institutional effectiveness at Claflin University, to a professional



Photo by Anne Thompson

Heart transplant recipient James Dewees and his wife Bridget were guests of Dr. Thomas Di Salvo and Dr. Patrick Cawley at the Aug. 10 MUSC Board of Trustees meeting.



James and Bridget Dewees with MUSC's Dr. Benny Van Bakel a week after James' heart transplant at MUSC Health.

Photo provided

conference. There, he started throwing up fluid. He was dizzy and weak. It scared her, and she prayed they could make it home.

At that appointment, doctors told him he could not leave that day without a left ventricular assist device (LVAD) or a new heart. Still, he tried to talk them into letting him go home. What he heard was a resounding no.

"The whole team came running into the room in their white coats," Bridget said. "Dr. Van Bakel told him, 'You are not leaving here. If you leave here, you might not make it in this shape.' It was that serious."

It was going to be a huge transition, but James approached it prayerfully and methodically. He trusted Van Bakel and the team, and he was ready to feel good again. James was on board.

"James took some convincing," said Van Bakel, medical director of the cardiac transplant program from 1991 to 2017, who has seen his share of resistant patients and those referred too late in their disease to be viable candidates for transplant.

"Once I got on board, I was on board. It took me shifting my mindset and how I thought about the whole process of transplant. My faith was increased, and I started focusing on the goal. I was ready for the journey," said James.

See Transplant on page 12

Dental Medicine pushes envelope with robot in teaching, innovation

'Hanoko' is one of 13 worldwide robots and first of its kind in North, South America

By CINDY ABOLE

aboleca@musc.edu

The James B. Edwards College of Dental Medicine at the Medical University of South Carolina has become the first dental school in the country to have a Dentaroid teaching robot. "Hanoko" made its debut on Friday, Aug. 10, during a ribbon-cutting ceremony and demonstration to a large group of dental faculty, alumni and guests.

The crowd included Pat Cawley, M.D., chief executive officer of MUSC Health and vice president for Health Affairs; Lisa Saladin, P.T., Ph.D., executive vice president for Academic Affairs and provost; students; MUSC Board of Trustees members James Lemon, DMD and Paul Davis, DMD; and representatives from Nissin Dental Products of Japan and Kilgore International — the project's donors.

Nissin and Kilgore made the Dentaroid robot a gift, valued at \$250,000, to the College of Dental Medicine. Mike Gregory, president of Kilgore International, said he was excited to be present at the robot's debut and demonstration.

"This is a big day for Kilgore International, Nissin Dental Products and MUSC. This is the first robot of its kind to be placed at a dental school in North and South America. MUSC's College of Dental Medicine is a leader in innovation, digital technologies and in other areas. We have been a partner with MUSC's dental school for 25-plus years,

so for us to be able to showcase this unique product in one of the country's top dental programs is very exciting," Gregory said.

Dental Medicine Dean Sarandeep Huja, D.D.S., Ph.D., said in a way, Kilgore and Nissin are 'parents' to MUSC's Dentaroid. "We are proud that the James B. Edwards College of Dental Medicine is the recipient of the very first dental robot in this part of the world. It's a landmark day for U.S. dental schools and for MUSC."

As the popularity of robots grows within manufacturing and other areas worldwide, the demand for innovation and cutting-edge technology has brought robots and high-fidelity manikins into medical-simulation training, robotic surgery and some medical-skills training. Leaders at the College of Dental Medicine hope the same will be true in dental education.

Monica Cayouette, D.M.D., associate professor and chair of the Department of Oral Rehabilitation, and Walter Renné, D.M.D., professor and assistant dean of innovation and digital dentistry, led the quest to get the dental robot.

In 2013, the two dentists met with Gregory at Kilgore International in Michigan. Kilgore makes dental study models, manikin systems and supplies used in dental education. It has a long relationship with MUSC's dental school. Kilgore and MUSC expressed their mutual interest to join forces in a collaborative effort.

See Robot on page 14

Joining College
of Dental
Medicine Dean
Sarandeep Huja;
from left, are
Mike Gregory,
Kilgore Intl.; Koji
Yokoe, Nissin
Dental Products;
Dr. Paul Davis
and Dr. James
Lemon, MUSC
BOT members;
and Dr. Monica
Cayouette.





Photos by Sarah Pack

Modern, chic, sophisticated

Dental students, faculty and visitors meet the College of Dental Medicine's newest addition, a high-fidelity Dentaroid robot called Hanoko. Hanoko was made possible through a partnership between Nissin Dental Products in Japan, Kilgore International and MUSC.

Bee Street Lofts



WALK to MUSC and all medical facilities Gorgeous amenities including gym, club house, and two courtyards with grills. Granite counters, stamped concrete floors, 10ft ceilings, and more!

2bd/2ba 1,477 square feet \$450K



BEST priced condo Downtown!

Contact:

Helene Barrett 843-422-4545 helene@thepulsecharleston.com



Candy stripers get firsthand experiences in health care

Teen volunteers assist staff across campus

By Leslie Cantu

cantul@musc.edu

It's something seen in very few hospitals around the country nowadays – the red and white pinafore of the candy striper. But walk the halls of MUSC during the summer, and you're bound to spot a pinafore-clad teen, delivering supplies, helping visitors navigate the maze of buildings, bringing water to patients, answering phones or pushing the ever-popular courtesy cart with coffee and snacks for staff and patients' family members.

While most hospitals have started calling teens "junior volunteers" and placing them on a once-per-week schedule similar to adult volunteers, MUSC continues to operate its summer candy striper program. Teens ages 14 to 18 commit to working 8 a.m. to 4 p.m. for three weeks and have the opportunity to see how the departments, clinical and non-clinical, contribute to making the hospital run.

"As an academic medical center, we really feel it's our mission to provide this type of program to the community," said Kelly Hedges, program manager for volunteer services.

Most of the teen volunteers are interested in health care as a career, and some find new interests during the program as they discover the various career fields within the hospital.

"I like to see the change of their perception of what they think health care is and what it actually is," said Melissa Kubu, the program coordinator who oversees the candy stripers. "They get to see how much it takes to run a hospital and the collaboration that it takes for that to happen. They get to see the diversity in what an organization this big offers."

Adelaide Brady, 16, was one of this year's candy stripers. The rising School of the Arts junior was a patient at another hospital when she was younger, so she knows the feeling of being hospitalized and wants to give back to others now. One of the fascinating things about her summer was seeing a hospital from the other side, she explained.

"I'm having a lot of fun," she said.

Each candy striper has regular morning and afternoon assignments. Adelaide helped with administrative work in neurology in the morning, where she got to see what the residents do and how their days are structured. She's interested in neurology as a career herself.

In the afternoons, she moved to the sixth floor of Ashley River Tower, where she helped the nurses and answered patients' call hells.

Her duties in the afternoons included answering patients' call bells and fulfilling requests, such as for ice.

Sixty-seven teens applied for the program this year, and 32 were accepted. They have to provide proof of their GPAs as well as recommendation letters, then go through an interview process, Kubu said. For many, it's their first time interviewing for anything. Though candy striping is volunteer work, it's





Volunteer Adelaide Brady's duties in the afternoons included answering patients' call bells and fulfilling requests, such as for ice.



Photos by Sarah Pack

Candy striper Catalina Roa answers phones in the orthopedic unit.

"They [candy stripers] get to see how much it takes to run a hospital and the collaboration that it takes for that to happen. They get to see the diversity in what an organization this big offers."

Melissa Kubu

very much a job, Kubu said, and the teens learn people skills and professionalism. Both boys and girls can be part of the program.

Catalina Roa, 17, is a senior at Wando High School. She's always liked medicine, she said. She watches doctor shows with her mom, looks at surgery videos on YouTube and has taken medical classes at Wando. She wants to be a trauma surgeon, although she's also interested in orthopedics.

She found out about the candy striper program by looking for volunteer opportunities on MUSC's website and realized it would be a great opportunity to get a feel for the hospital environment and give back to the community.

She spent her mornings in the Child Life Atrium at MUSC Children's Health and her afternoons at the main hospital on the orthopedic unit, where she restocked supplies, walked with patients, answered the phone and brought ice water to patients.

She enjoyed it so much that only two weeks into her summer commitment, she had arranged to become a year-round volunteer.

"Now I can get into the hospital all year round, which to me is fun. I love being in the hospital," she said.

Besides their regular work assignments, the candy stripers also get enrichment activities. This year, they took a tour of the MUSC Shawn Jenkins Children's Hospital, which is under construction, and toured Meducare operations, including riding in an ambulance and visiting a helicopter.

Kubu said she loves to hear the teens' stories at the end of each shift, whether it's about watching how a nurse communicates with a patient or how grateful a family member was for being escorted from one building to the next.

"My favorite part of the kids being here is their enthusiasm," Hedges said.

Hedges and Kubu said seeing the young volunteers is nostalgic for many patients, some of whom will share that they were candy stripers, too.

"It creates talking points just from the red and white pinafore. The red and white pinafore is iconic. And it creates a memory that's a pleasant memory in a place that might not be pleasant," Hedges said.

WHITE COAT CEREMONIES MARK NEW BEGINNINGS



Photo by Anne Thompson

The College of Medicine welcomed 180 new students at the Aug. 12 White Coat Ceremony held at the North Charleston Performing Arts Center. The students were presented with their white coats, stethescopes and humanism pins by medicine faculty. A part of the ceremony was the student's recitation of the medical student oath, starting their time at MUSC.



Photo by Jonathan Coultas

First-year pharmacy student Kira Adkins is presented with her white coat by Dean Philip Hall, right, and Dr. Yuri Peterson at the College of Pharmacy's ceremony on Aug. 16. A total of 68 new students were welcomed.

608 Stoneboro Court

Charleston, SC 29412



4 bedrooms, 2.5 Baths. Excellent condition! Minutes to Downtown, hospitals and shopping. Hardwood floors: foyer, formal dining room, family room and large eat-in-kitchen. Granite kitchen countertops and island. Very nice stainless appliances all convey. Upgraded lighting. Split bedroom plan offers privacy. Master bedroom suite with trey ceiling, features a walk in closet, spa tub, separate shower, his and her sinks and good storage. Landscaped grounds, mature trees and plantings, wood privacy fenced backyard. Extra tall garages for hanging bikes, ladders & tools. Quiet cul-de-sac street. Montessori school close by. Sellers can close quickly. It's mint!

Imogene C. Thomas

Carolina One Real Estate 873 Orleans Road, Ste 102 Charleston, SC 29407-5753

843-860-2247

ithomas@carolinaone.com www.imogenethomas.com

License #: 28658





"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



TRANSPLANT

Continued from Page Eight

Van Bakel credited his focus and tenacity. "Once James was convinced of the need for transplant, he put his entire being toward that one goal. I never saw him waver."

ROOM 8 - NO NEGATIVITY ZONE

Bridget said the MUSC Health doctors, nurses and staff in the CVICU and hospital loved James. He'd won their affection with his kindness and optimism, and they wanted him to succeed.

"James loved everyone, and they loved him. And we knew God was with us. Right outside of his room — Room 8 — there was a work of art titled the 'praise house.' When I saw that, I said, 'James turned his room into a praise room.' He would read the Bible and encourage others and always had music playing, making others feel good."

Even as challenging things happened around him in the ICU — patients passing, family members grieving, machines beeping — he remained positive.

"I wasn't going to question. I was just going to stay focused on what we needed to do. I didn't allow anyone to come into my atmosphere negative. I kept my attitude positive. I focused on scriptures, and I kept it in check. I made sure everybody felt good when they came in my atmosphere."

James works at Boeing as a "Lean" practitioner, a process improvement expert, but ministry has always been a huge part of his life. "He's a minister, an on-staff minister," Bridget said. "He has had a relationship with God since his youth."

Every step of the way, through the ups and downs, James clung steadfastly to his faith. "A lot of times when things go well – people are like, 'Thank you God,' but when you go through your trials – that's the real test."

The 11 weeks from appointment to discharge were in many ways a test for the entire family. They all had to shift their thinking and their schedules.

Day after day, Bridget drove 50 miles to work each way, then helped her 16-year-old son Justin with homework and projects, dealt with family issues and maintained the household. Living in Jedburg and working in Orangeburg added to the strain. She was able to work from the hospital a couple of days each week, and every weekend, she and Justin packed up and stayed downtown to be with James. She wanted things to feel as much like home as possible during his 65-day journey. Her brother created a GoFundMe page, and friends from all over supported them generously.



Justin, James and Bridget Dewees on their first outing since James' heart transplant. They celebrated all three of their August birthdays in Savannah, Georgia. They credit God and MUSC for saving James' life.



James Dewees rings the transplant bell, signifying reaching an important milestone.

ORGAN DONATION

Almost two months post-transplant, James is doing great — fit, active, elated to be healthy and alive. He and his wife still do not know who James' heart donor was, but they are eternally grateful to the donor.

"If it wasn't for that family," James said, and paused as he reflected on the donor's heart now beating in his chest. "What they did was so special. I am told the heart wasn't the only thing they'd given," he said. "They saved several lives. We can't thank them

"What they [the donor family] did was so special. I am told the heart wasn't the only thing they'd given. They saved serveral lives. We can't thank them enough."

James Dewees

enough."

This experience changed their minds about organ donation. James said that when he got out of the hospital, one of his main goals was to bring awareness to the importance of people donating their organs. Today, they are ambassadors, talking to friends and people in the community.

On Aug. 10, James and Bridget were Di Salvo's guests at the MUSC Board of Trustees meeting, where James shared his experience with MUSC's transplant program.

Before James spoke, Di Salvo apprised the board of the program's expansion. He detailed efforts the division made over the past two years to rebuild its team, like adding five additional heart failure transplant specialists to the existing three, to provide patients with nationally competitive outcomes after heart transplantation.

"Our results are slightly better than 90 percent survival after one year," he said. Since 2017, the program has performed 22 heart

transplants, including eight so far in 2018.

He also said that in March, the Centers for Medicare and Medicaid Services recertified the MUSC Health heart transplant program. CMS identified zero deficiencies during its visit, which Di Salvo characterized as a rare event and a testament to the effort and work that went into comprehensively reviewing all aspects of the program.

Di Salvo explained that South Carolina is last in the number of patients per capita who are on the transplant waiting list, due in large part to the fact that patients with advanced heart failure need referrals to centers like MUSC Health early, before the disease progresses too far. That doesn't happen often enough in South Carolina.

"I wouldn't be here today if it wasn't for this heart transplant," James told the trustees. "This program is very important. It's not something to take lightly. It really does work."

Later, James took a moment to praise the team that gave him his second chance. "I wouldn't be here without the expertise and care I received from Dr. Van Bakel and the entire AHF team and all the amazing nurses and staff who were there for me and pulling for me."

He also summed up the importance of timing. "We just want to encourage other people with heart problems to get on it early. It's all about education, knowledge. That's what's going to get people to understand the whole process. I was successful because I got in at the right time. I didn't allow my kidneys or other organs to start failing. Dr. Van Bakel knew there was a window where you would feel good enough to go through the surgery. Then there's a window when you're struggling to get through it. You can't put it off. We just thank God that we were able to see God's timing and meet the right doctors at MUSC."

James and Bridget share their strategies for coping during challenging times with all who can benefit. To follow them and their journey, visit www.facebook.com/lazarusexperience.

For information
on
MUSC Health's
Advanced Heart Failure
Program,
visit http://www.
muschealth.org/heart/
services/heart-failuretreatments/index.html.

MUSC Board of Trustees Meeting

UPDATE

MUSC and the Medical University Hospital Authority (MUHA) Board of Trustees held their regularly scheduled meeting to review the institution's progress in fiscal year 2018, which ended June 30. In his annual report on the state of the enterprise, MUSC President David I. Cole, M.D., FACS, said, "As the leading academic health center in South Carolina, MUSC continues to deliver outstanding health care, educate the future, and change what is possible through innovation."

☐ Raymond N. DuBois, M.D., Ph.D., dean of the MUSC College of Medicine, updated the board on the college's new FLEX curriculum, which includes a new three-year medical degree track, the state's first and only program that permits a select cohort of mature, academically gifted students to earn their M.D. in three years instead of four.

"Over the past 100 years, the practice of medicine has changed dramatically, but the curriculum and the programs for training our medical students haven't adapted to those dramatic changes," DuBois said. "Some of us think it's time to make significant changes. This accelerated program can decrease a medical student's debt by up to 20 percent."

After extensive investigation and collaboration with other medical schools that employ the accelerated education and training option, MUSC received approval for the flexible curriculum and the three-year program. With the new FLEX curriculum starting this fall, the College of Medicine will admit the majority of its medical students on the traditional four-year track, with a group of students eligible for the three-year M.D. track. About a dozen medical schools across the country offer a three-year M.D. option.

In recent years, U.S. student loan debt has increased by more than 250 percent, equaling more than \$1.4 trillion. The average medical student graduates with nearly \$200,000 of debt. Factor in additional costs for undergraduate debt and multiple years of postgraduate training before entering practice, and a physician can be saddled with hundreds of thousands in debt before they can even practice in their chosen field.

"A substantial amount of money and time can be saved by avoiding a full year of medical school tuition, fees, and living expenses. Accelerated students match into residency positions here at MUSC, which

defrays the costs associated with traveling all over the nation to interview and complete away rotations at other institutions," DuBois said. "We realize this accelerated path isn't appropriate for or available to everyone, but for those students who are able to meet the competencies in less time and have already settled on a specialty, this is an extremely attractive option."

☐ Thomas Di Salvo, M.D., director of the Division of Cardiology, updated the board on the state's only heart transplant program, noting that during the past two years, the division has rebuilt its team.

Di Salvo noted, "Heart failure prognosis remains poor in South Carolina, actually worse than cancers combined, except for lung cancer. South Carolina is dead last in the number of patients per capita who are listed and awaiting (heart) transplantation.

Di Salvo introduced one of the program's most recent heart transplant patients, James Dewees and his wife, Bridget.

"This has been a journey," Dewees said. "For several years, I had been dealing with congestive heart failure. Last year, I had a percentile of 29 percent of my heart in good standing. Normal is about 55. Once I got over the fear of going through that process, as you can see it was well worth it. I wouldn't be here today if it wasn't for this heart transplant... This program is very important. It's not something to take lightly. It really does work. Please, let's do whatever it takes to make sure that MUSC gets the support that they need to accomplish this goal... Two days after the surgery, I'm walking. Four days after the surgery, I was transferred out of ICU. Ten days after the surgery, I was walking out of the hospital. That to me is phenomenal... I was totally blown away... I'm thankful to MUSC and the staff. Everyone worked very well to make sure I was on the right track." [Read more about their journey and MUSC's heart transplant program on page 8 in this issue]. ☐ The board also unanimously passed a

resolution to commend Gerrita Postlewait. Ed.D., who has been the Charleston County Superintendent of Schools for more than three years. "We appreciate all of the work Dr. Postlewait has done to engage community partners like us in her efforts to dramatically increase the number of students ready to step into STEM-related careers, as well as her

See **UPDATE** on page 15

RANKINGS Continued from Page One

Cancer Institute-designated cancer center, which means the federal government sees it as an important site of scientific leadership, resources and research. In recent years, Hollings has ramped up its focus on patients' needs beyond cancer treatment, connecting patients with financial, palliative care and psychiatric consultations as needed.

"I think our providers and support staff at Hollings Cancer Center deserve recognition for the tireless work they do for our patients," Mahvi says. "Cancer is a devastating word for patients to hear every time they come to Hollings. What they find when they walk in the door, though, is a group of people who are only there to make their lives better."

ORTHOPEDICS

The booming MUSC Health Orthopedics team ranks 37th in the U.S. News & World Report list of best orthopedic programs. It has undergone a huge expansion in recent years, says Vincent Pellegrini, M.D., who leads the program as chairman of the department.

"We have every single one of the subspecialties in orthopedics covered with at least two faculty," Pellegrini says. "The renewed emphasis on education, discovery and innovation is what separates MUSC orthopedics from other programs and attracts national recognition to our

faculty."

The orthopedics team treats everything from spine, foot, ankle, hand and wrist problems to bone cancer. Its doctors stay busy, Pellegrini says, and that's the way they like it. "We have increased our practice by more than double in the last five years. We offer all of our patients an appointment within 48 hours of when they call."

NEPHROLOGY

The MUSC Health Nephrology team, which treats kidney disease, is highly ranked as well, coming in at No. 46. Joshua Lipschutz, M.D. directs the Division of Nephrology. He says the ranking is in part a reflection of the respect his team members have for each other and their patients. "It's really a cohesive group."

That group's work, in conjunction with the transplant surgery team, has made MUSC Health the 10th largest kidney transplant center in the country, Lipschutz says. "We do almost 300 kidney transplants a year."

The nephrology division was also a test center for a pivotal study on a treatment for autosomal dominant polycystic kidney disease, which affects 500,000 Americans. "It's the first-ever treatment for the fourth most common cause of kidney failure and the most common potentially lethal genetic disease. We're up and ready to prescribe it."

Perry V Halushka 2018 MUSC Research Day

will be held Friday, NOVEMBER 2, 2018

Keynote Speaker: Steven Houser, PhD, FAHA November 2, 2018 Poster and Oral Sessions: November 2, 2018 Abstract Deadline: Friday, September 21, 2018 @ 11:59 PM No abstracts will be accepted after this date

Links to submit an abstract as well as information about poster and oral presentations can be found by following the Research Day link on the College of Graduate Studies home page Or copy/paste: http://academicdepartments.musc.edu/grad/

MUSC Research Day 2018 is open to all students, postdocs, residents, fellows, and research specialists at MUSC and students, postdocs, residents, and fellows at other institutions who have participated this past year in programs of research at MUSC.

One abstract per presenter is allowed and team presentations are NOT allowed. Oral and poster formats are available.

Please direct any questions regarding MUSC Research Day 2018 to Dr. Steven Kubalak at: kubalaks@musc.edu

ROBOT

Continued from Page Nine

Then it was on to Japan, where Cayouette and Renné talked with representatives of the manufacturing company Nissin to discuss a collaboration. The pair also met with Koji Yokoe, Nissin's president, who gave the project the green light. It was then Hanoko was essentially conceived.

A few months ago, the Dentaroid was introduced at the American Dental Education Association meeting. Following that meeting, the MUSC College of Medicine arranged to ship the robot to Charleston.

Since then, Cayouette; Renné; two dental research students, Spencer Fair and Gray Thomas; plus a robot support and maintenance team have worked to understand Hanoko's capabilities.

They say the interactive robot is fairly lifelike, both visually and texturally. The advanced verbal communication system and various body movements of its head, mouth, tongue and left arm make working with the robot similar in a lot of ways to working with a real patient.

The robot, combined with a newly established teachingobservation area that features cameras, recording devices, computers and an instructor control panel, creates a highfidelity teaching tool for the school's dental programs, students and faculty.

But Hanoko's primary role will be for use in dental education and training, as a tool to instruct and educate dental students. The robot will be incorporated into MUSC's dental curriculum to train students and test their dental skills.

Currently, Cayouette is managing the Dentaroid's use in a pilot study, focusing on oral medicine, dental simulation and restorative dentistry. She's working with faculty to incorporate



Photo by Sarah Pack

Hanoko, the Dentaroid interactive robot, was the result of a joint project between dental product manufacturers Kilgore International, Nissin Dental and MUSC College of Dental Medicine.

the Dentaroid in all areas of dentistry and hopes to collaborate with other leaders throughout MUSC.

Cayouette and Renné can also see the Dentaroid playing an important role in helping to test students' dental clinical competencies through the Objective Structured Clinical Exam. The effort will provide an objective, standardized method of training that can reduce the time and costs associated with using live patients in training.

"This OSCE-based training falls in line with both the Council on Dental Accreditation and now the American Dental Association's 2020 vision for the National Dental Licensure Examination development. By including the Dentaroid robot in our dental curriculum development, we hope to help support the ADA in their efforts to someday eliminate the patient-based licensure examinations," Cayouette said.

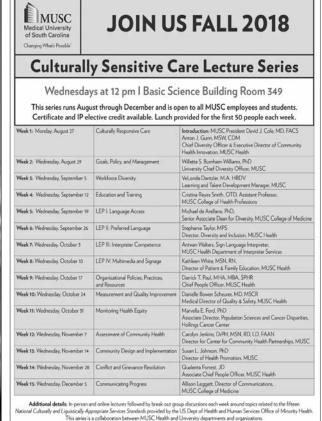
Huja talked about the value of innovation in dental education. "Change is occurring in dentistry at a very rapid pace and dentists and dental practitioners are seeking to deliver health care through oral wellness," Huja said.

"In other words, dentists should become care team leaders not just serve as apex providers. The College of Dental Medicine seeks clinical integration for our students, practitioners with internal and external partners. Venture capital interest in dentistry remains very high, and with knowledge and teamwork, we will be able to meet and address any challenge."

He also thanked Lemon and Davis for their work at MUSC, Saladin for her unwavering support for the College of Dental Medicine and Cawley for his role in helping the college work with MUSC Health as partners. Huja said he hopes the college will improve its clinical efficiency and learn from MUSC Health.

Cayouette said the possibilities for dental simulation education are limitless with the Dentaroid. "The future is bright for dentistry with this new technology."





Must register in advance to receive credit through MyQuest (Employees) or Enrollment Managen

SCHOOL

Continued from Page Five

BULLYING

The federal government estimates between one in three and one in four American students say they've been bullied at school. Mack says parents need to screen for it through conversations. "Ask your child, 'How are things going at school?' 'What do you think of the other kids in class?' 'Does anyone get picked on?' Maintain open lines of communication and ask regularly."

And help the child understand how to respond to a bully. "Teach them when and how to ask for help. Look that person in the eye, don't break eye contact. Stand tall and confident and stay calm. Walk away rather than continue to engage. And then to make assertive statements like, 'Please do not talk to me like that. Why would you say that sort of thing?""

GUN SAFETY

Andrews encourages parents to talk with curious kids about gun safety and other parents about gun storage. "You have to be open and talk to your kids about guns. It is important for parents to stress that it's the adults' responsibility to keep kids safe from

guns and store guns appropriately. Tell your kids if they see something on social media, if they see something a friend or classmate posts that concerns them, they need to tell a responsible adult."

She says the guns used in school violence generally come from family members or friends. "And they're stored improperly."

With that in mind, she suggests parents speak up. "When we talk to parents before play dates about our own kids' allergies or asking if there are pets or a pool, one of those questions needs to be, 'Is there a gun in the home?' You need to know. Then I follow that up with, 'How is the gun stored?' Anything short of locked, unloaded, separate from ammunition is not good enough for me," Andrews says.

"We need to normalize that conversation. We know guns are out there."

HOME ALONE?

Finally, Mack says parents should think carefully before having a child come home from school to an empty house. "The commonsense rules depend on the child's developmental age and stage. Safe Kids recommends no child younger than 12 be left alone. In general, 12 is the lower limit that's developmentally acceptable."

UPDATE

Continued from Page Thirteen

work with us to bring health care and clinics to schools in her district," said MUSC/ MUHA board Chairman Donald R. Johnson II, M.D. "The Board of Trustees decided to recognize her for these efforts, which include an unprecedented level of collaboration with community partners, educators, students, and their families. We are encouraged by her leadership and strategy to improve the readiness of Charleston County's bright and capable young minds, and we wish her continued success," Johnson sai

- ☐ In the area of philanthropy, MUSC ended FY2018 with a total of \$74,315,183, exceeding its goal by more than \$4.7 million. Of that amount, 30 percent (\$22.3 million) was designated to help build the new MUSC Shawn Jenkins Children's Hospital, scheduled to open in late 2019. Donors also showed especially strong support for Hollings Cancer Center (\$11.4 million), which is working to raise money for cancer research and patient care, and for the university's College of Medicine (\$11.2 million), which is leading a campaign to raise scholarship funds.
- ☐ The 16-member board voted to elect Charles W. Schulze, CPA, as chairman and James Lemon, DMD, as vice chairman. Each

officer will serve a two-year term. A native of Greenwood, Schulze began his first term as an MUSC trustee in 2002 as the lay representative from the 3rd Congressional District. A retired shareholder of a regional accounting and consulting firm, Schulze currently practices and is an expert in financial forensics. An oral and maxillofacial surgeon by training, Lemon is a native of Barnwell and has lived in Columbia for more than three decades. Elected to the MUSC board in 2014, he serves as the medical professional representative from the 2nd Congressional District.

☐ In other business, the board reviewed and affirmed the fiscal year 2019 budgets for both MUSC (university) and MUSC Health (health system). When combined, the MUSC and MUSC Health FY2019 operating budgets equal more than \$2.6 billion. MUSC operates in alignment with the operating calendar of the state, with each new fiscal year beginning July 1 and ending June 30.

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

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

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

Aug. 27 - Segment #1 Topic: Finding Cures for Rare Childhood Diseases

Guest: Dr. Stephen Duncan

Dr. Stephen Duncan, professor and chairman of the Department of Regenerative Medicine and Cell Biology, will provide an update about research relating to finding cures for rare childhood diseases.

Aug. 27 — Segment #2 Topic: Autism Spectrum Disorder and

Guest: Dr. Laura Carpenter

Adolescents

Dr. Laura Carpenter, professor of pediatrics in the College of Medicine, will discuss autism spectrum disorder in the adolescent years.

Sept. 3 — Segment #1 Topic: Helping Children Cope after National Tragedy Guest: Dr. Rochelle Hanson

Family and Child Program with the

Dr. Rochelle Hanson, director of the

National Crime Victims Research & Treatment Center at MUSC, will discuss what parents can do to help their children cope after a national tragedy or acts of violence in the world.

Sept. 3 — Segment #2 Topic: Hand, Foot and Mouth Disease

Guest: Dr. Terry Dixon

Pediatric Infectious Disease specialist Dr. Terry Dixon will talk about a common childhood illness - hand, foot and mouth disease.

Sept. 10 – Segment #1 Topic: Diagnosis and Treatment of Hypertension

Guest: Dr. Daniel Lackland

MUSC Stroke Research and Education Center director Dr. Daniel Lackland shares the latest guidelines related to the diagnosis and treatment of high blood pressure.



PLEASE EMPTY YOUR DESK-SIDE RECYCLING BINS

AT THE END OF YOUR SHIFT EMPTY INTO EITHER

PAPER OR "PLASTIC, GLASS, METAL" BINS

THESE SMALLER BINS ARE NOT SERVICED

recycle@musc.edu

Offering Personal Legal Representation Regarding:



- ✓ Wills, Trusts and Estate Planning
- ✔ Probate Administration
- ✓ Guardianships and Conservatorships
- ✔ Asset Protection

Free Initial Consultation at Your Home or Business



260 W. COLEMAN BLVD, STE B • MOUNT PLEASANT, SC 29464 SETH@LEVYLEGALSC.COM • (843) 400-4510

CELEBRATING FACULTY EXCELLENCE



Photo by Anne Thompson

Honored at the Aug. 21 MUSC Faculty Convocation are first row: Drs. Elizabeth Pilcher, from left, Cynthia Dodds, Gretchen Seif, Carol Feghali-Bostwick, Donna Kern, Provost Dr. Lisa Saladin; middle row: Drs. Minoo Kavarana, Shahryar Chowdhury, David Shirley; back row: Dr. David Cole and Drs. S. David McSwain and Donald West. Not pictured is Dr. Patrick Woster.

List Your Home With Tapp And Receive FREE Staging



Tapp Palmer 843-408-9456

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 MUSC Children's Hospital. Partner with Tapp to exceed your real estate goals while helping the children at MUSC.



How do Iletire the way I want?

Confidence starts with a plan

Georgia French FP FP

SrlVice President--Wea thlMgmtll 843-856-6630ll georgia.french@ubs.comll

SrIVice President--Wea th IMgmt II 843-856-6631 II mark.r.french@ubs.com II

The French Team

UBS Financial Services Inc.

900 Is and Park Drive

Suite 201

Danie IIIs and, SC 29492-17567 II 843-849-1180 II 800-726-1180 II

ubs.com/team/french[]

