In December, the department had the opportunity to have over a hundred members consisting of faculty, residents, CRNAs, anesthesia techs and staff participate in Just Culture training. Just culture has been adopted by MUSC as a framework for accountability; it is an algorithm-based approach, which balances human tendencies (such as human error and risky behavior) with fair and just accountability. A Just Culture supports a fair, balanced, and realistic approach to ensuring our people can produce the very best outcomes, always being mindful of how our system design affects our behaviors.

I think it is evident that as we continually strive to improve patient safety and our individual/team performances that we use tools such as Just Culture to help realize those goals. The Anesthesia Patient Safety Foundation (APSF) Perioperative Patient Safety Priorities were recently published. As noted below, it includes many things which the department has already implemented or is actively researching, such as medication safety (#4, Ken Catchpole’s recent NIH grant), numbers 6, 7, 10, 12 (AHRQ Clemson/MUSC grant), and burnout (#11, Grayce Davis). Just Culture helps us address #3, the culture of safety and recognizing the importance of teamwork and promoting collegial personal interactions to support patient safety.

Anesthesia Patient Safety Foundation (APSF) Perioperative Patient Safety Priorities:

1. Preventing, detecting and mitigating clinical deterioration in the perioperative period
2. Safety in non-operating room locations
3. Culture of safety: the importance of teamwork and promoting collegial personnel interactions to support patient safety
4. Medication safety
5. Perioperative delirium, cognitive dysfunction and brain health
6. Hospital acquired infections and environmental microbial contamination and transmission
7. Patient related communication issues, handoffs and transitions of care
8. Airway management difficulties, skills and equipment
9. Cost effective protocols and monitoring that have a positive impact on safety.
10. Integration of safety into process implementation and continuous improvement
11. Burnout
12. Distractions in procedural areas
**Opening statement continued ...**

Anesthesia is the first department at MUSC that has attempted to do Just Culture training department-wide. We should all thank Dr. Danielle Scheurer and her team for supporting the effort and spending days training us. It was also a huge logistical undertaking, and I want to thank Sarah Hameedi for managing the scheduling.

To solidify your recent training and to learn more, I encourage you to visit MUSC’s [Just Culture website](#).

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**Enterprise website transition**

*Website Transitions*

You may have already noticed the new look of the MUSC website. MUSC has transitioned our website to a new platform, or CMS (content management system). The Information Solutions team and web content administrators across campus have been working diligently to make this happen before the end of the year, and the final migration occurred last night.

Things look a little different, and you may find things in slightly different places. One of the many aspects of the new site is enhanced accessibility for vision impaired visitors.

You’re encouraged to have patience with this process and understand that there will be a time of transition. A website is always a work-in-progress, and it may take time to make tweaks and needed adjustments. If you have questions related to your area, please first reach out to the web contact for your unit.

Please see below for specifics of the migration from the digital team.

**MUSC Websites Launch December 10**

We completed the final step in the transition of our enterprise website (musc.edu) to our new content management system, Sitecore, December 10.

The URLs to access MUSC websites have changed from:

- academicdepartments.musc.edu to [web.musc.edu](http://web.musc.edu) for the enterprise pages on the website
- academicdepartments.musc.edu/education to [education.musc.edu](http://education.musc.edu) for the education and colleges section of the website, and
- academicdepartments.musc.edu/research to [research.musc.edu](http://research.musc.edu) for the enterprise research section of the website

This change in URLs ensures we provide a clear delineation for our external audience and also to organize our content according to industry best practices.

The MUSC Health website, for adult patients, will remain under [muschealth.org](http://muschealth.org), and MUSC Kids website, serving the needs of the pediatric patient population, will remain under [musckids.org](http://musckids.org).

We will do our best to ensure that redirects are in place from our other websites. However, if you notice any issues with redirects or any webpages after the go-live date, please compile a list and submit a support request at [https://musc.co/Digital-Request](https://musc.co/Digital-Request). Please email [webcmo@musc.edu](mailto:webcmo@musc.edu) if you have any questions.
CRNA And Faculty awards

On December 7, 2018, the College of Health Professions graduated 28 nurse anesthesia residents from the Division of Nurse Anesthesia. The event was held in Saint Luke’s Chapel and presided over by Zoher F. Kapasi, PT, Ph.D., MBA, Dean, College of Health Professions, Program Director Angela Mund, DNP, CRNA, and AFN faculty.

Several practitioners were honored for their contribution to nurse anesthesia education:
- CRNA Clinical Faculty of the Year was awarded to Ray White, MSNA, CRNA, from University Hospital
- Physician Faculty of the Year was awarded to David Stoll, MD

In addition, practitioners from our anesthesia practices were awarded recognition:
- Lester Kitten, CRNA Clinical Faculty Award for ART
- Myra Frick, CRNA, Clinical Faculty Award for RT
Dr. Catchpole Lectures at Johns Hopkins

**ACCM Grand Rounds**

*Kenneth Catchpole Ph.D.*

Medical University of South Carolina

- **Date:** Thursday, October 18, 2018
- **Time:** 7:00 am
- **Location:** Hurd Hall
- **Speaker:** Kenneth Catchpole Ph.D.
  Endowed Chair, S.C. SmartState endowed Chair in Clinical Practice and Human Factors Anesthesia and Perioperative Medicine
  Medical University of South Carolina
- **Lecture Title:** Human Factors Engineering for Improving Safety and Performance in Surgical Care
- **Objective(s):**
  1. Explore what human factors science can tell us about safety and performance in the OR.
  2. Describe studies which use human factors engineering to enhance OR performance.
  3. Consider how human factors approaches might be applied to future challenges.
Hospitals Look to Innovation to Inspire Design: By Wylie Wong for healthtech magazine

Organizations prioritize foundational and end-user IT solutions to enhance the holistic patient care experience.

With Stanford University located in the heart of Silicon Valley, it’s no wonder that the new main building for Lucile Packard Children’s Hospital Stanford is designed with cutting-edge technology throughout.

New operating rooms feature large, high-resolution monitors and computers that allow medical teams better surgical site visibility, as well as real-time access to previous patient scans and other records, says Dr. Natalie Pageler, chief medical information officer of Stanford Children’s Health.

For minor procedures like MRI scans, the newly opened hospital provides children with virtual reality headsets to play games that can help reduce squirming, anxiety and the need for anesthesia.

And new private patient rooms, which include a sofa bed for parents to stay with their child, are equipped with two LG HDTVs and an iPad, giving every family member different options for entertainment or education. They can watch movies, play video games or access an online medical library that includes educational videos on their child’s medical condition.

“We wanted to make it one of the most technologically advanced, family-friendly hospitals around,” Pageler says. “There was a lot of consideration about how to employ technology in a way that would best support children’s health and development.”

Several drivers prompt hospitals to embrace the latest technology, including competition for patients and a desire to boost efficiency.

“We have all been patients and know how depressing the healthcare environment can be,” says IDC Health Insights Research Director Cynthia Burghard. “Hospitals increasingly are more focused on meeting patients’ needs and making them happy. Their margins are also getting smaller, so they need to figure out how to operate more efficiently and effectively.”
Lucile Packard Taps Tech for a Single View of Assets

Lucile Packard opened its new main building in Palo Alto, Calif., last December. The 521,000-square-foot, five-floor facility, which connects to the original hospital, adds 149 patient beds, bringing the total number of beds to 361.

An upgraded infrastructure, which includes a new onsite data center, supports the hospital’s state-of-the-art technology and runs the bulk of its applications, Assistant CIO Warren Chandler says.

To ensure appropriate bandwidth, the IT staff also deployed Cisco networking gear that provides 40-gigabit-per-second speeds at the core and 1Gbps to the desktop. Cisco access points blanket the premises, enabling ubiquitous Wi-Fi access, says Alan Laver, the hospital’s IT application services manager.

Pageler says the hospital features three types of technologies: cutting-edge clinical technology, such as hybrid operating rooms that include MRI machines and other diagnostic imaging equipment; technology designed to enhance the hospital experience for patients, families and staff; and patient room technology designed to entertain and educate patients.

The hospital uses radio-frequency identification and real-time location services to improve and speed up care, Pageler says. The IT staff placed RFID tags on employee badges and most hospital equipment, and installed 1,200 wired sensors on the ceiling throughout the building to help identify staff and track equipment.

As a result, when physicians and nurses walk into a patient room, their names and pictures pop up on the patient’s television screen. The technology also allows the care teams to quickly locate equipment by checking wall-mounted monitors.

“It’s not infrequent where we would need to use the ultrasound machine and say, ‘Has anyone seen it lately? Where is it?’ And we’d spend a ridiculous amount of time tracking it down,” Pageler says. “Now, we go to the map on the wall and go, ‘Oh, it’s in Room 32,’ which makes it so much more efficient.”

The hospital equips each floor with computers on wheels, and every morning, a team of clinicians brings the computer into patient rooms to discuss the day’s plans and answer questions from patients and their family members. The team uses the computers to access electronic health records, place orders for necessary medication and tests, and type in patient notes.

Physicians and nurses also carry iPhones with them for communication and to streamline patient care. Using a phone app, staff can make IP-based calls or securely text each other over Wi-Fi. The app also integrates with the nurse call system, as well as monitors that track patients’ vital signs, notifying care teams if an intervention is necessary, Laver says.

Campus-Wide Healthcare Transformation

Three-thousand miles east, NYU Langone Health’s Helen L. and Martin S. Kimmel Pavilion, a newly opened 830,000-square-foot, 374-bed facility that also houses Hassenfeld Children’s Hospital on 34th Street, features a bevy of technologies as well.

The pavilion is powered by NYU Langone Health’s existing data centers, and the IT staff splits applications into different virtual LANs for critical and noncritical devices, says Ruth Harris, senior director of NYU Langone Health’s Medical Center IT Enterprise Project Management Office. Harris worked with the construction team and was tasked with ensuring the correct implementation of all technology.

When new patients enter the hospital, they can register electronically through a tablet, and once admitted into their private rooms, they can access a 75-inch HD display — dubbed MyWall — at the foot of their bed through which they can order meals, Skype with family and friends, watch TV, read customized educational materials on their health condition or review the next steps in their care. Tablets allow patients to control MyWall, room temperature and overhead lights, as well as open or close the blinds, Harris says.

Hospitals Look to Innovation to Inspire Design continued...
Each patient also gets a digital medication drawer located outside their room that integrates with the hospital’s EHR system. Robots — part of a fleet of 31 machines programmed to perform separate jobs, such as delivering meals, linen and supplies, or removing hazardous waste — deliver the medication, and a biometric scanner allows nurses to open the drawer with their thumbs, on demand.

“Back in the day, our nurses had to chase down food trays or wear protective gear to get rid of hazardous waste,” Harris says. “This frees up our staff to focus on caring for patients and other key elements of their jobs.”

Additionally, clinicians are equipped with smartphones, which the hospital calls Clinical Mobile Companions. Through an app, doctors and nurses can securely text each other, access the EHR and order medication.

“All they can do on a computer, they can do on the phone,” Harris says.

The Operating Room of the Future

Researchers from Clemson University and the Medical University of South Carolina, meanwhile, have spent the past three years designing the operating room of the future, aiming to optimize safety and effectiveness.

Based on their findings, they designed a prototype operating room with 570 square feet of space. An ideal OR will deploy surgical booms from the ceiling to maximize floor space and support cord management, says Anjali Joseph, an endowed chair and professor in Clemson’s School of Architecture.

Other important features include large integrated video displays so surgical teams can access critical information, such as patient vital signs, medical records, videos of the surgical site and previous radiology images, she says.

“Situational awareness has been shown to improve patient safety,” says researcher Scott T. Reeves, professor and chair of anesthesia and perioperative medicine at MUSC. “By incorporating high-resolution monitors with timely critical information, situational awareness can be substantially enhanced.”

MUSC plans to use the design discoveries in four ORs next spring as part of its Children’s Ambulatory Campus and Musculoskeletal Institute.

Both NYU Langone Health’s Kimmel Pavilion and Lucile Packard Children’s Hospital Stanford have already incorporated some of those design elements, such as the large monitors, into their new operating rooms. The latter has gone one step further and created hybrid ORs that also house diagnostic equipment. One OR, for example, includes an MRI machine and angiography equipment, Pageler says.

If an MRI is needed before or after an operation, the surgical team can perform the scan in the same room, which can improve outcomes.

“If you need to do repeat imaging throughout the surgery, you can do that, and it enables the surgeon to have the best information to optimize the surgery. It also minimizes the time children have to be anesthetized,” she says.
ASRA Point of Care Ultrasound (POCUS) course

Drs. Sylvia Wilson, Kim Payne, Jennifer Matos, Emily Nelson and Renuka George attended the American Society of Regional Anesthesia's Point of Care Ultrasound (POCUS) course on Dec 1-2, 2018 in Chicago. They were joined by former MUSC resident, Dr. Abdu Alghendy, and enjoyed the lectures and hands-on teaching by some great ASRA lecturers, including Drs. Stephen Haskins, Jan Boublik, Eric Sloth and Nibras Bughara. They had the opportunity to scan multiple models and learned Focused Assessed Transthoracic Echocardiography (FATE), Focused Assessment with Sonography in Trauma (FAST) along with airway, lung and gastric ultrasound. The course was intensive but rewarding, and all applicants were tested on their skills at the end. Although they did work hard all day, they managed to brave the weather and explore Chicago in the evening and enjoy the local restaurants.

Ultrasound proves to be an invaluable tool for pre-, peri- and post-operative assessment. It can help guide clinical management of patients. Our attendings look forward to sharing their new knowledge and skills with the department to better serve our patients.

Staff holiday breakfast

Dr. Reeves treated the Administrative & Research Staff to breakfast at Miller’s All Day to help usher in the holiday season. Good food and lively conversation were enjoyed by all!
Holiday party 2018
HOLIDAY PARTY 2018 CONTINUED...
HOLIDAY PARTY 2018 CONTINUED...
**Toys for tots holiday drive**

Our donation box was overflowing this year! Thank you to everyone who participated!

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**Holiday Door decorating contest**

Here are the winners and participants of the 2018 Holiday Door Decorating Contest. Well done, everyone!

![Research Office, 1st Place Winner](image1)

![Laura Seebak Matthews, 2nd Place Winner](image2)
HOLIDAY DOOR DECORATING CONTEST CONTINUED...
HOLIDAY DOOR DECORATING CONTEST CONTINUED...
HOLIDAY DOOR DECORATING CONTEST CONTINUED...
Welcome to the department

Josh deGuzman is a new Anesthesia Tech at Main. Josh graduated from Clemson University Calhoun Honors College in May 2017 with a degree in Health Science and a minor in Life Science. He is from Spartanburg, SC and spent the past year working at Spartanburg Regional as a medical scribe in the Emergency Department. Josh is currently applying to medical school and hopes to matriculate here at MUSC. He is excited to be a part of the team and looks forward to learning and gaining more experience. In his spare time, Josh enjoys playing golf, fishing, working out, and going to Clemson football games.

New Babies in the department

Please congratulate Anthony Lehn and family as they welcome Finney Gordon! Finn was born on December 13, 2018 at 12:44 pm, weighing in at 7 lbs, 13 ounces and 21 inches long.

Please congratulate Alison Ellis and family as they welcome Jasper Noel! Jasper was born on December 19, 2018 at 4:47 pm, weighing in at 6 lbs, 9 ounces.
MUSC 2020 Wins

YOUR RECENT ACCOMPLISHMENTS
ADVANCING IMAGINE MUSC 2020

COMMITS TO PATIENTS AND FAMILIES FIRST | MUSC patients and families receive the best and most compassionate care anywhere.

- Free Virtual Visits During Storm Ensured Access to Care for All SC Citizens – MUSC Health Virtual Care, an online way to see a health care provider, launched in August, offers treatment for almost 80 medical issues. During Hurricane Florence, all South Carolinians were offered the promo code MUSCFLO in order to use the virtual care system at no charge in an effort to ensure all citizens could receive health care even if their local provider was closed during and after the storm. This innovative health care solution was used by about 150 people, around 90 of whom were new to MUSC Health.

- Nurse Leaders Played Important Role in Push for Innovative Health Care Policy Changes – MUSC team members representing the College of Nursing were on hand for Governor McMaster’s ceremonial signing of Bill S45 which expands the scope of practice for advanced practice nurses in our state. The legislation was designed to help address primary care provider shortages by expanding the health care services these specialized nurses are able to provide. Paula Brooks, DNP, FNP-BC, MBA, RNFA, director of Advanced Practice Nursing at MUSC, was acknowledged for being a leader in influencing this important change to health policy in our state.

FOSTER INNOVATIVE EDUCATION & LEARNING | MUSC is a recognized innovator in health sciences education & lifelong learning.

- Using New Therapies to Teach Critical Skills to Premature Babies – Teaching and learning are taking place not only in the classroom at MUSC, but also with some of our smallest patients. Researchers are testing vagus nerve stimulation to teach premature babies to take a bottle. A group of researchers and doctors at MUSC want to see if they can help babies develop proper oral feeding skills before leaving the hospital so they can avoid a feeding tube. The team has published the findings from the first five babies to participate and reports the early results are promising.

#STEMikeagirl – MUSC women scientists gave girls a taste of science careers at a recent STEM-oriented camp at the College of Charleston. STEM stands for science, technology, engineering and math. The girls donned lab coats and took part in a DNA extraction exercise using bananas. The free camp, called Girls Day Out, included participation from STEM-based industries around the Lowcountry, including Bosch, Boeing, Nucor, Google and the Space and Naval Warfare Systems.

BUILD HEALTHY COMMUNITIES | MUSC is a transformative health and wellness leader.

- Kids Eat Free 2018 Served Record Number of Meals – This summer, our USDA-sponsored Kids Eat Free at MUSC program served 5,870 meals to area children, the most meals provided since the program’s start at MUSC in 2015. Kids Eat Free ensures children have access to nutritious meals when school is not in session by providing breakfast and lunch in our cafeterias at no cost to the families or MUSC. We are the first hospital in the state to participate in a summer feeding program to combat food insecurity and childhood hunger.

- South Carolina Ports Authority, MUSC Launch Health and Wellness Partnership – MUSC and South Carolina Ports Authority have signed an agreement for MUSC Business Health to deliver on-site health care and wellness services to approximately 560 workers in the Charleston region. “This is what building healthy communities is all about,” said David J. Cole, M.D., MUSC president. “When we work with our state partners who share our vision for health, it enables us all to innovate and better meet the needs of our workers, friends, family and neighbors.”
MUSC 2020 WINS CONTINUED...

**EMBRACE DIVERSITY AND INCLUSION | MUSC is a national model for a diverse & inclusive community.**

- MUSC Honored with 2018 HEED Award – MUSC was named among 35 institutions honored in October with a 2018 Higher Education Excellence in Diversity (HEED) Award from INSIGHT Into Diversity magazine, the oldest and largest diversity publication in higher education. The Health Professions HEED Award process consists of a comprehensive and rigorous application that includes questions relating to the recruitment and retention of students and employees, best practices, continued leadership support for diversity and other aspects of campus diversity and inclusion.

- BRIHTE Program Launched to Support Emerging Leaders – The MUSC Department of Diversity, Equity and Inclusion has established the David J. and Kathryn Cole BRIHTE Leadership Academy. BRIHTE stands for Building and Retaining Inclusive High-potential Talent and Excellence. This yearlong enterprise-wide leadership training program is designed for professionals who self-identify as underrepresented minorities in health care professions. This development program is designed to identify and prepare participants for future leadership positions at MUSC.

**ADVANCE NEW KNOWLEDGE AND SCIENTIFIC DISCOVERY | MUSC’s discoveries change the future of health care.**

- MUSC Researchers Study Potential Treatment for Metastatic Breast Cancer – A team of Hollings Cancer Center researchers received a three-year, $1.2 million grant from the U.S. Department of Defense to test a potential therapeutic antibody that could block breast cancer growth with fewer side effects, opening up potential for future drug development. The study aims to find better ways to treat metastatic breast cancer that could replace current therapies, some of which have life-threatening side effects.

- Data Scientist Helps Researchers Pinpoint the Microbiome’s Role in Disease – Alexander Alekseyenko, Ph.D., associate professor of biomedical informatics in the Department of Public Health Sciences, studies microorganisms and how they affect health. He was recently awarded $1.3 million project grant. One of the project goals is to develop interactive tools to allow a biomedical researcher not well-versed in statistics to conduct such analyses correctly on his or her own.

**AWARDS AND RECOGNITION**

- MUSC Recognized as a Re-designated Baby-friendly Birth Facility – This international recognition is sponsored by the World Health Organization and the United Nations Children’s Fund. This global initiative sets the standards for the best possible breastfeeding support for mothers and their babies.

- MUSC on List of 100 Great Hospitals in America 2018 – Becker’s Hospital Review has included MUSC Health on the 2018 edition of its 100 Great Hospitals in America. The hospitals included on this list have been recognized nationally for excellence in clinical care, patient outcomes and staff and physician satisfaction.

- Nurse Honored with Rising Star Award – Neonatal nurse Katherine Vincent, MSN, APRN, received the 2018 Neonatal Nurse Practitioner Rising Star Award from the National Association of Neonatal Nurses and National Association of Neonatal Nurse Practitioners for her contributions to the growth of the profession in the early stages of her career.
GRAND ROUNDS FOR THE MONTH OF JANUARY

January 1, 2019
No Lecture—Happy New Year!

“Morbidity & Mortality Conference”
January 8, 2019
Renuka George, MD, Assistant Professor
George Guldan, MD, Associate Professor
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina

“Faculty Meeting”
January 15, 2019
Scott Reeves, MD, Professor & Chairman
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina

“Emergence Delirium”
January 22, 2019
Grace Wojno, MD, Assistant Professor
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina

“ERAS Protocols”
January 29, 2019
Nihar Patel, MD, Associate Professor
Department of Anesthesiology
Baylor College of Medicine
I HUNG THE MOON

Please don’t forget to nominate your co-workers for going ‘Beyond the Call of Duty.’ I Hung The Moon slips are available at the 3rd floor front desk and may be turned in to Tammie Matusik. Thank you!

Check out our website at:
HTTP://WWW.MUSC.EDU/ANESTHESIA

Intern Lecture Series
January 10—Anesthesia for GI Surgery, Dr. Bridges, SEI 314
January 24—Endocrinology, Dr. Tobin, SEI 314

CA 1 Lecture Series
January 2—Anesthesia for Patients with Endocrine Disease; Anesthesia for Patients with Neuromuscular Disease, Instructor TBA, CSB 429
January 9—Maternal & Fetal Physiology; Obstetric Anesthesia, Dr. Marotta, CSB 429

CA 2/3 Lecture Series
January 7—Neonatal Surgical Emergencies, Dr. Rovner, Moodle
January 14—Physiology of the Neonate, Dr. Ellis, Moodle
January 21—Pain Management & Regional Anesthesia in Pediatrics, Dr. Moore, Moodle
January 28—Visiting Professor Lecture—All Residents, Dr. Patel (Baylor)

Grand Rounds
January 1—Happy New Year, No Lecture
January 8—Morbidity & Mortality Conference, Drs. George & Guldan
January 15—Faculty Meeting, Dr. Reeves
January 22—Emergence Delirium, Dr. Wojno
January 29—Visiting Professor Lecture, Dr. Patel (Baylor)

Imagine 2020 Strategic Plan

We Would Love to Hear From You!
If you have ideas or would like to contribute to Sleepy Times, the deadline for the February edition will be January 18, 2019.