MESSAGE FROM THE CHAIRMAN—HURRICANE DORIAN

SCOTT T. REEVES, MD, MBA

The department and Charleston had a very close call with Hurricane Dorian. This hurricane had devastating effects on the Bahamas, and fortunately for our area, the strength of the hurricane stayed mostly offshore. The department activated our weather emergency plan on Tuesday, September 3. Team A, composed of faculty, residents, CRNAs and anesthesia techs, entered both Ashley River Tower and the University Hospital on Wednesday morning, September 4. They remained there for the next 48 hours, until they were relieved by Team B on Friday morning. Both Team A and B did a fantastic job covering the operating rooms, labor and delivery suites, and intensive care units. We all owe them a debt of gratitude. In addition, I believe we are getting better at our staffing levels.

Our current weather plan remains in effect until the opening of Shawn Jenkins Children’s Hospital in October. Due to the increase of in-house call, an updated hazardous weather plan will be implemented at that time. Hopefully, we all have seen our storm for this year. Other pictures from the storm are continued on the next pages.
OPENING STATEMENT CONTINUED...
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The proper control of pain is one of the most important areas in health care. We still rely heavily on opioid narcotics for acute and chronic pain control despite growing evidence of their risks and lack of strong efficacy. In surgical populations, where opioid prescribing is common and often believed to be good practice, the amount and duration of post-operative opioid prescriptions are strongly related to subsequent opioid misuse, and perioperative opioid use is associated with increased morbidity and mortality. Total knee arthroplasty (TKA) is one of the most common orthopedic procedures performed. While knee pain is often a complaint that precedes TKA, the procedure itself is associated with considerable post-operative pain lasting days to weeks. Data suggest that adequate post-operative pain control in this population is an important factor in determining surgical outcomes, recovery time, and hospital length of stay. While the technology associated with the TKA procedure itself has developed rapidly in the past several years, post-operative pain management techniques have not changed substantially in several decades, and despite the currently employed pain-management strategies, patients still report considerable post-operative pain, and often struggle to complete post-operative physical therapy regimens. New analgesic strategies are needed that can be used adjunctively with existing strategies that have the potential to reduce reliance on opioid analgesia, and reduce post-operative pain.

Several novel brain stimulation technologies including transcranial direct current stimulation (tDCS) are beginning to demonstrate promise as treatments for a variety of pain conditions including perioperative pain. In a series of recent studies, the PI has shown that tDCS can reduce post-operative opioid use by as much as 43% while simultaneously reducing subjective pain ratings. This recent scientific work (and the work of others) suggests that stimulating pain-modulating areas of the human cortex with tDCS has the potential to yield meaningful analgesic effects and reduce post-operative opioid consumption with minimal risks or side-effects. Another non-pharmacologic approach to pain-management with minimal risks and good potential benefit is cognitive behavioral therapy for pain (CBT-P). CBT-P has consistently demonstrated solid empirical support as an effective treatment for chronic pain, but it is less well-studied in perioperative settings. Nonetheless, a few small studies have demonstrated that brief cognitive-behavioral interventions hold promise as adjunctive post-operative pain management strategies, but more work is needed. Interestingly, accumulating data from our group suggest that tDCS of the prefrontal cortex may augment the analgesic effects of cognitive-behavioral (CB) interventions for acute pain. When combined with a brief cognitive-behavioral intervention for acute pain, tDCS appears to enhance the analgesic benefits of the cognitive-behavioral intervention while improving participants’ subjective capacity to benefit from it. It appears that tDCS may be able to prime neural circuits that facilitate engagement of brain areas involved with pain-reducing cognitions and behavioral patterns. Thus, when cognitive-behavioral pain management strategies are taught to patients during tDCS, more analgesic benefit is observed than with either intervention alone. To date, no studies to date have directly investigated analgesic benefits of combining these approaches in the post-operative arena. The proposed study will be the first ever to (1) determine the independent effects of post-operative tDCS and a brief cognitive-behavioral intervention on post-operative pain, opioid use and functioning following TKA, (2) determine the effects of combining tDCS with a brief cognitive-behavioral intervention, and (3) determine longer-term outcomes of post-operative tDCS and a cognitive-behavioral intervention on pain, opioid use, quality of life, and functioning in TKA patients. This innovative, high-quality clinical trial has the potential to generate findings that could shift the modern paradigm of post-operative pain management to take advantage of recent neuroscience and behavioral-science developments.
SIMTUNES GRANT AWARDED

SimTunes has been notified by the Centers for Disease Control (CDC) and Prevention of the award of a Grant entitled “Simulation Education for Ebola Healthcare Worker Team Competency.” The grant runs from September 1, 2019 to August 31, 2021 and is for $1 million dollars.

SimTunes is a Charleston LLC and a product of the South Carolina Smart State Program that recruited John Schaefer, MD to Charleston, who holds the Lewis W. Haskell Blackman Endowed Chair for patient safety at MUSC and co-founded the company. SimTunes is co-owned by Heyward Coleman, MBA.

This Small Business Innovation Research (SBIR) grant addresses the acute need for a timely, inexpensive method to train healthcare workers to perform duties safely in the setting of Ebola or other high risk infectious diseases. SimTunes has created an educational product named Medical Unit Specialized Simulation Training (MUSST).

MUSST contains: 1) internet based self-study of the scientific background for high stakes infectious disease with special emphasis on the diagnosis, infectivity, transmission of the Ebola virus; 2) a novel rapidly learned train the trainer internet self-administered module for hospital instructors to learn how to teach and grade the course; 3) CDC, Occupational Safety and Health Administration (OSHA) and World Health Organization (WHO) guideline based safe practice protocols for 11 common simulated tasks for nurses, physicians and other healthcare workers; and 4) an objectively quantitative automated scoring and data acquisition system that immediately grades and ranks performance of learners with unique analytical tools so that hospital leaders can insure their staff is competent.

The product is unique in the internet delivery, proprietary digital grading tool, original database analytics, mastery training and incorporation of High Reliability Team process. Long-term, MUSST will standardize education, monitor preparedness and insure safe practices across the country keeping our healthcare workers safe and competent as they work to contain deadly infectious diseases.

The current project is designed to compare MUSST with other teaching modalities, discover how often the teaching should be repeated (learning decay), compare the effectiveness of MUSST learning in a sophisticated setting (MUSC) and a frontline hospital in Uganda, and to find out how long it takes SimTunes to create a course for another high stakes viral disease.

The project is led by Jerry Reves, MD, MUSC Emeritus Dean, and Distinguished University Professor. Co-investigators are Lacey Menkin-Smith, MD, Assistant Professor in the MUSC Department of Emergency Medicine, Catherine Tobin, MD, Associate Professor in the Department of Anesthesia and Perioperative Medicine at MUSC, and Dulaney Wilson, PhD, Research Instructor in MUSC Public Health Sciences Department.

Upon completion of the program, SimTunes expects to have the educational product available for worldwide use. MUSST will standardize education, monitor preparedness and insure safe practices across the country keeping our healthcare workers safe and competent as they work to contain deadly infectious diseases. The long term goal is to provide greater safety for healthcare workers and therein reduce the spread of deadly viral diseases worldwide.
DEPARTMENT EVENTS AND UPDATES

Dr. Stephanie Whitener will be taking over as Medical Director of the Medical/Surgical Intensive Care Unit at ART. She is currently the program director for the MUSC anesthesia critical care fellowship. She participates in simulation education for medical students on the anesthesia rotation, as well as Intern 101. Stephanie teaches moderate sedation to other attending physicians, fellows, and residents at MUSC. She is currently working on a quality improvement project for intraoperative ventilation. Stephanie is looking forward to her new role as MSICU medical director and hopes to continue the excellent work already ongoing within the unit.

The department also wants to thank Dr. Larry Field for his leadership as MSICU Medical Director since the opening of ART. He has done a nice job and desires to transition more to his Division Chief role.

Dr. Patrick Britell is excited to take on new challenges as the Director of Trauma and Burn Anesthesia. Pat is originally from Los Angeles, CA. He has been at MUSC for the past 5 years since completing his residency at The University of Miami/Jackson Memorial Hospital in Miami, FL. Pat’s additional training included fellowships and board certification in both Critical Care Anesthesiology and in Neurocritical Care. His experience at Ryder Trauma Center and as an Anesthesiologist in the US Army will be assets to him in his new role. Since becoming director, Pat has been working on developing a set of best practices for burn anesthesia going forward and looking at ways to mitigate heat loss in transport and in the OR. Pat has been married to Dr. Ashley Britell (Internal Medicine) for the past 11 years and they have three children. In his free time, Pat likes to run, play golf, and has recently taken up fishing.

Dr. Robert Harvey has been named the new Director of Equipment for the Department of Anesthesia and Perioperative Medicine. Robert joined the department in 2011 as a resident. After finishing residency in 2014, he went on to complete a fellowship in regional anesthesia and acute pain. Subsequently, he joined the faculty as a member of the transplant team, where he still serves. In his new role, Robert will work with staff from across the department to help organize and standardize our equipment and supplies. Additionally, he looks forward to working as a liaison between vendors and the department regarding new equipment acquisitions.
ADMINISTRATIVE STAFF ATTENDS R.A.D. CLASS

Recently, MUSC Charleston Public Safety officers taught Rape Aggression Defense (R.A.D.) self-defense classes, which were made available to female care team members. This free self-defense program focused on education and awareness tactics geared toward improving personal safety. The course provided realistic self-defense options for each attendee’s strengths and limitations through a lecture, group discussion, and demonstration of self-defense techniques. Several members of the Department’s administrative staff attended, including Kim Pompey, Joana Pereira, and Laura Matthews (pictured). Sadira Abu-Arja and Tammie Matusik also attended (not pictured).

NEW BABY IN THE DEPARTMENT

Please congratulate Alyssa Decker and family as they welcome Anabella Rae. She was born on September 14, 2019, weighing in at 8lbs 8oz and 20.5 inches long.
WELCOME TO THE DEPARTMENT

Dr. Clinton Pillow is excited to be returning to MUSC following a three year stint in private practice in Nashville, TN. He was born in Bowling Green, KY, and received his undergraduate degree in biology from Western Kentucky University. Clinton then proceeded to medical school at the University of Kentucky before being lured away to MUSC for residency. He is joined by his wife, Kathryn, who is very happy to be returning to the great city of Charleston. They are new parents to 7-month-old son, Colin, who seems to be enjoying his new life at the beach. In his spare time, Clinton enjoys fishing, traveling, cheering for University of Kentucky athletics, and spending time with his newborn son.

Please welcome David Redden to the Department! David is a second-year Master of Health Administration student and will be interning with the administrative staff through the fall. David is originally from Charleston, SC, and a graduate of Clemson University, where he earned his bachelor’s degree in Biological Sciences. After graduating from Clemson, David worked as a Physical Therapy Aide for St. John’s Medical Center in Jackson Hole, WY, before returning to MUSC for graduate school. While in Jackson Hole, David developed many new hobbies including white water rafting and snow skiing. In his free time, David enjoys water sports, hiking, and reading.

Dr. Burke Gallagher is eager to join the MUSC anesthesiology team. His education began at Brown University where he was an English major, had his own radio show and played on the lacrosse team. Following college, he made the decision to pursue medicine and attended a post-bacc program at the University of Pennsylvania and continued on to Ross University on the Island of Dominica. Following a few years of general surgery residency at the University of Texas in Houston, he saw the light and transferred to the anesthesiology program at UT. Burke lives with his wife, Renuka, and two cats (Ser Pounce and Princess Buttercup) in Hampton Park Terrace. He enjoys gardening, cooking, reading, traveling and any outdoor activities. A Philadelphian by birth, he compulsively follows the Eagles and Sixers, but after nearly a decade in the South, he has begun to say ‘y’all.”
WELCOME TO THE DEPARTMENT

Kathryn (Kate) Smith joins the Department as a CRNA at UH. She was born and raised in Peoria, IL. Kate went to the University of Missouri for nursing school and moved to Charleston on a whim in 2011 with her best friend. She worked at MUSC on 9 East and STICU prior to starting the Anesthesia for Nurses Program at MUSC, graduating in 2017. Kate worked for Trident Anesthesia Group prior to joining the MUSC anesthesia team. She is really excited to be back at MUSC! In her free time, Kate likes to hang with her Berne-doodle puppy, Tiger (named after Mizzou’s mascot, but Kate’s husband says he’s named after Tiger Woods and his Master’s comeback this past year), and putz around the water with her husband in their old boat.

Please welcome Juliana Mello, CRNA at UH, to the Department. Juliana is from Rio de Janeiro, Brazil. She became an RN in 2010 after attending Thomas Jefferson University in Philadelphia, PA and worked at Jefferson Hospital for 2 years. Juliana moved to South Carolina in 2011 and joined MUSC, where she worked in PCICU and joined the Anesthesia for Nurses Program, graduating in 2017. Juliana’s first CRNA job was at McLeod Health in Florence, SC. She lives on Daniel Island with her two daughters, Giselle (8 years old) and Mia (5 years old), along with her two tuxedo cats, Fred and Ginger. Fun fact: Juliana used to be a professional ballerina in a major classical ballet company in Brazil.

Dr. Ilona Reznitsky, new CRNA at UH, received her bachelor’s in nursing degree from Pace University, NY, in 2011. After extensive clinical practice in various intensive care units, Ilona entered Quinnipiac University, CT, to receive her Doctorate in Nursing Practice in the Nurse Anesthesia Program. She graduated in May 2019 and recently moved to Charleston with her fiancé. She enjoys traveling and spending time with her new puppy Ziggy (@ziggymadood). Ilona is looking forward to beginning her anesthesia career and is excited to be putting her skills and knowledge to use.

Michael Colpoys will be joining the Department as a new anesthesia tech at Shawn Jenkins Children’s Hospital. Michael comes to the Department from the Adult Emergency Department where he was an ED Tech for three years. Born and raised in Georgia, Michael is the youngest of three with two older sisters. He graduated from the University of Georgia in 2014 and is currently applying to medical school. Outside of work, Michael likes to play music, watch college football, and get outdoors.
NEW FACULTY ROSTER

Carey Brewbaker  
General

Sung-Wook Choi  
Pediatrics

Kirsten Dahl  
General/Regional Fellow

Andrew Fisher  
General

Burke Gallagher  
General

Jocelyn Kerpelman  
Critical Care

Andrew Klein  
Regional/General

Abhi Madamangalam  
OB/General

Nicole McCoy  
Pediatrics

Jared McKinnon  
Critical Care/CT

Gabrielle Musci  
Pediatrics

Travis Pecha  
General

Clinton Pillow  
General

Hannah Vega  
General/Regional Fellow

Anne Wanaselja  
General
DEPARTMENT'S FIRST POINT OF CARE ULTRASOUND WORKSHOP
BY RENUKA GEORGE, MD

If proof was ever needed that we have enthusiastic and dedicated faculty in the Department of Anesthesia, it could be found on Saturday morning as 20 faculty members gathered at Gazes Auditorium to learn all the different ways they can use ultrasound to better care for patients and promote resident education. Point of Care Ultrasound is fast becoming a valuable tool in the practice of anesthesia, be it in the pre-operative setting, in the middle of a case, or the evaluation of the post-op patient. On Saturday, we learned about using ultrasound to evaluate difficult airways, objectively measure NPO status and perform basic transthoracic echo (TTE) and lung exams.

Dr. GJ Guldan emceed the show while Drs. Travis Pecha and Jared McKinnon educated our group on cardiac evaluation using TTE. Dr. Jeff McMurray made lung ultrasound look easy and Dr. Renuka George showed how to perform a definitive airway and gastric ultrasound evaluation in a matter of minutes. The faculty in attendance were quick to pick up their ultrasound skills and all are excited to use them in the near future.

Ultrasound capability goes beyond just a Saturday course; it requires knowledge of both normal and pathological anatomy, which views to use, and how to interpret the information obtained. We encourage those interested in these ultrasound courses to review the materials provided both before and after the course in order to optimize use in the future. We hope to make this the first of many ultrasound courses for both faculty and residents. Just remember, ultrasound use is a skill that takes practice - use it or lose it!
THE CAROLINAS ANESTHESIOLOGY 2019 ANNUAL MEETING SEPTEMBER 13-15, 2019

The South Carolina Society of Anesthesiologists (SCSA) annual meeting was recently held at the Grove Park Inn in Asheville, North Carolina. Dr. Katie Bridges, 1st Vice president of the SCSA, was one of the program chairs. The meeting was well attended by faculty and residents. This meeting has a very robust educational side program for the residents, and the department was fortunate to be able to send the CA 1 class. At the conclusion of the meeting, Laura Roberts assumed her role as President of the SCSA, with Katie Bridges becoming President Elect.

Far left: Kevin Walker, MD, FASA, immediate past president; Joshua Smith, MD, FASA 2nd Vice President; Katie Bridges, MD, FASA, President-Elect; and Laura Roberts, MD, FASA, President

David Mayer, MD
2019 NC Program Chair
UNC School of Medicine
Chapel Hill, NC

Kathryn (Katie) Bridges, MD
2019 SC Program Chair
Medical University of South Carolina
Charleston, SC
GRAND ROUNDS FOR THE MONTH OF OCTOBER

“Faculty Meetings”  
October 1, 2019  
Scott Reeves, MD, Professor & Chairman  
Dept. of Anesthesia & Perioperative Medicine  
Medical University of South Carolina

“Morbidity & Mortality Conference”  
October 8, 2019  
Devin Antonovich, MD, Resident  
Renuka George, MD, Assistant Professor  
Dept. of Anesthesia & Perioperative Medicine  
Medical University of South Carolina

“ASRA Practice Advisory on Neurologic Complications Associated with Regional Anesthesia”  
October 15, 2019  
Joseph Neal, MD, Professor  
Department of Anesthesiology  
Virginia Mason Medical Center

“Update on L.A.S.T.”  
October 22, 2019  
Jackson Condrey, MD, Assistant Professor  
Dept. of Anesthesia & Perioperative Medicine  
Medical University of South Carolina

“Comprehensive Review of Liposomal Bupivacaine”  
October 29, 2019  
Eric Bolin, MD, Associate Professor  
Dept. of Anesthesia & Perioperative Medicine  
Medical University of South Carolina
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!

Holiday Party 2019
Saturday, December 7, 2019
Carolina Yacht Club

Resident Graduation
Friday, June 26, 2020
Founders Hall

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 November edition will be October 18, 2019.