



SLEEPY TIMES

VOLUME 19, ISSUE 10 NOVEMBER 2025



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MESSAGE FROM THE CHAIRMAN: WELCOME NOVEMBER

-Scott T. Reeves, MD, MBA

We are entering my favorite time of the year. The leaves are turning, and temperatures are dropping. From Saturday Night Live, I learned that normal folks call it Fall but highly educated individuals call it Autumn.

In a few weeks, hurricane season will officially be over. It was nice to not have to deal with a major storm in 2025.

We are also in the throes of resident interview season. GJ and education team has scheduled over 150 applicants that we will interview virtually over 11 days spaced throughout October, November and December. With October complete, we are over halfway done. I am excited about the quality of applicants again this year. Thank you to everyone who participates in the process.

Our annual department Christmas party will be held on Saturday, December 6. Please put it on your calendar.

I want to end this months *Sleepy Times* highlighting the Well-Being Initiative being led by Dr. Natalie Barnett which is summarized on page 2 and 3. Please plan to attend the department-wide Stress First Aid training session on December 2nd. This training is open to everyone. (faculty, residents, medical students, CRNAs, SRNAs, CAAs and administrative/research staff.)



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WELL-BEING UPDATES BY NATALIE BARNETT, MD

Well-being Collective and Center for Workplace Well-being

Over the past year, MUSC's Center for Workplace Well-being formally launched under the leadership of the inaugural Chief Well-being Officer, Heather Farley, MD. The center and previous efforts have also built the Well-being Collective, a comprehensive suite of resources related to well-being at MUSC. The mission of the center is to foster an environment that enables faculty, employees and learners to thrive. Dr Farley has recently transitioned into her dream job as the Vice President of Professional Satisfaction with the American Medical Association. The interim Chief Well-being Officer is Megan Hays, PhD who joined the team from the University of Alabama this past year and has a strong background in caregiver well-being and support.

Leadership and the Center team have recognized that well-being is not a one size fits all approach and has thus supported the development of the Well-Being Leads program. This enterprise-wide committee is led by Dr Whitney Marvin, the Medical Director for Well-being. The inclusive committee is comprised of Well-Being Leads from across the Charleston campus with representatives from each college and select pilot departments within the College of Medicine. These selected faculty are charged with bridging local departmental needs with institutional strategy and efforts.



colleagues and their patients and beneficiaries of their innovations.” We have already seen some of the initiatives from the tenet of Efficiency of Work! The GROSS (Getting Rid Of Stupid Stuff) program came out of this dimension and is one of the many strategies to promote safety, quality, effectiveness, positive patient and colleague interactions, and work-life balance through improvements in workplace systems, processes, and practices.

Each year, the Well-being Leads will identify, design, and implement a project for their respective college or department. These projects should represent significant opportunities for improvement in well-being identified through data-driven insights, resource alignment, and local knowledge and feedback. Since starting in this role, I have identified areas for potential improvement projects within the domains of Protection from Harm and Work-Life Harmony. Stress First Aid is an attainable first step to normalize and support mental health while prioritizing workplace physical and psychological safety. More information to follow below! Work-Life Harmony is also an ideal target for our department. There is an inherent need for strong boundaries between work and non-work time as well as schedule autonomy. Stay tuned for proposals to improve schedule flexibility, predictability and transparency.

WELL-BEING COLLECTIVE AND CENTER FOR WORKPLACE WELL-BEING BY NATALIE BARNETT, MD CONTINUED

Stress First Aid

As members of Team Anesthesia, we are subjected to substantial work-stressors. The ability to protect ourselves and our colleagues is of the utmost importance to improve professional fulfillment and decrease burnout. Stress First Aid is an evidence-based training model to enable the identification of stress reactions in oneself, colleagues and team members. Once trained, those individuals should be able to utilize tools such as the stress continuum and color decoding to check in with themselves and other members of their teams.

This system is also used to focus on how we can improve ourselves and our teams to be the best that they can be. Help us Grow the Green!



We will host Andrew Bacon, MSN, RN on December 2 for a special training session during our regularly scheduled grand rounds at 6:30AM. As of October 2025, our department has only 5 members trained in Stress First Aid. This training is open to everyone – residents, faculty, CRNAs, CAAs, and administrative staff.

Please make every effort to attend in person for this incredibly valuable training!

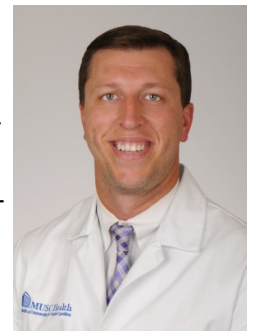
MUSC PERFORMS COMBINED HEART-LIVER TRANSPLANT BY DAVID CARROLL, DO

Recently, MUSC performed the first combined heart-liver transplant in the state of South Carolina since 2019. This historic case involved a patient with congenital heart disease, who had undergone a Fontan procedure in childhood due to single ventricle physiology. While she lived for many years in relatively stable condition, her liver began to suffer from chronic congestion, ultimately leading to cirrhosis.

Fortunately, the early recognition of both her worsening heart failure and evolving liver pathology prompted multidisciplinary collaboration. Teams from Adult Congenital Heart Disease, Hepatology, Cardiac Surgery, Abdominal Transplant, and Advanced Heart Failure began evaluating whether she could be a candidate for a combined heart-liver transplant—and whether such a complex operation was feasible at MUSC.

Following a comprehensive work-up, the patient was deemed an appropriate surgical candidate and was listed for transplant. Just a few weeks later, a suitable match became available. In the interim, extensive planning and coordination occurred among various specialties, including the Adult Cardiothoracic Anesthesia team (Drs. Loren Francis, Tim Heinke, and Alan Finley), the Liver Transplant team (Dr. David Stoll), and the Pediatric Cardiac Team (Dr. Marc Hassid). While limited literature exists on combined heart-liver transplants, successful execution requires exceptional teamwork and precise coordination across many specialties.

The heart transplant was performed overnight at Shawn Jenkins Children's Hospital by congenital heart surgeon Dr. Mac Felmy, and the anesthesia team of Dr. Gabrielle Fisher with CRNAs Marianna Polito and Milton Seymour III. This case presented numerous challenges, including a multiple-time redo sternotomy, dense adhesions, and significant coagulopathy. Despite these complexities, the new heart functioned well on moderate inotropic support, and the patient was transferred to the CTICU in the morning under the care of Dr. Carlee Clark. Due to the risk of right heart failure, potential need for ECMO, and ongoing coagulopathy, the patient's chest was initially left open. Meanwhile, the donor liver was being preserved on an ex-vivo perfusion system.



MUSC PERFORMS COMBINED HEART-LIVER TRANSPLANT BY DAVID CARROLL, DO CONTINUED

The patient had a period in the CTICU to receive some resuscitation and ensure a down trending lactate. Approximately 6 hours after the heart transplant was completed, the patient returned to the OR for the liver transplant. Dr. Grayce Davis and Dr. David Carroll represented the Liver Transplant Anesthesia team and Adult Cardiothoracic Transplant Anesthesia team along with CT Anesthesia fellow Dr. Stephanie DeFord and senior residents Dr. Ben Maxner and Dr. Zach Lee, while Dr. Diego di Sabato performed the liver transplant surgery. Also, given the potential impact of volume shifts on right ventricular function, the team proceeded with extreme caution. The liver transplant proceeded smoothly, and the patient returned to the CTICU with excellent function of both transplanted organs.

The following day, the patient's chest was successfully closed. Both allografts continue to function well, and the patient was extubated without complications. She continues to make a strong recovery.

This milestone case highlights the extraordinary level of care provided at MUSC. It also underscores the power of interdisciplinary collaboration, planning, and communication that made this complex, rare transplant a success—and a truly historic achievement.

ASA DAILY NEWS: RIGHT KNEE, LEFT KNEE, GOOD KNEE, BAD KNEE

When it comes to knee surgery, time is of the essence. Patients with shorter hospital stays typically have better outcomes, and physicians are measured on patient length of stay results.

In the Saturday session ["Fast-Tracking Knee Surgery in All Ages: An Evidence-Based Approach to Regional Anesthesia in These Patients."](#) speakers examined what, if anything, can be done to expedite postsurgical discharge and reviewed not able nerve block approaches that enhance recovery outcomes.

The world of anesthesia is evolving in large part to increased evidence on which blocks are more conducive to ambulating patients and new treatments that increase motor function. That's according to session moderator Meg Rosenblatt, MD, FASA, an Anesthesiologist at Mount Sinai Hospital in New York City.

Children require knee surgery for two reasons, said Santhanam Suresh, MD, MBA, FASA. They may be born with or develop a physiologic condition — such as cerebral palsy, arthrogryposis, or epiphyseodesis — which often requires ongoing surgeries throughout childhood. Or they could incur an injury like an ACL tear or patellar dislocation while playing sports. Either way, they often present with acute pain.

What does differ between treating children versus adults is their skeletal immaturity, said Dr. Suresh, who is a Professor of Anesthesiology and Perioperative Medicine at Loyola University Medical Center in Chicago. Growth plates remain open for girls until they are 12 to 13 years old and in boys until they are 14 to 16 years old. This is an important consideration when forming an anesthesia strategy.

Dr. Suresh said a caudal nerve block should be used for knee surgery on infants or neonates, and it should be administered with ultrasound guidance. The approach for adolescents depends on location. If it is non-weight bearing, he recommends sciatic and femoral or adductor nerve block. If it is weight bearing, it should be anterior cutaneous canal nerve block or infiltration between popliteal artery and capsule of the knee (better known as iPACK).



From left to right: Sanjay Sinha, MD, Sylvia Wilson, MD, and Santhanam Suresh, MD, MBA, FASA

ASA DAILY NEWS: RIGHT KNEE, LEFT KNEE, GOOD KNEE, BAD KNEE CONTINUED**Two birds, one stone**

Session speaker Sanjay Sinha, MD, began by considering the totality of the surgical pain cycle. Traditionally, an anesthesiologist provides pain service during the onset of acute pain immediately following surgery. However, there lies an analgesic gap of subacute pain.

One must consider well in advance how to effectively manage pain during this translational phase and prevent chronic pain to enhance outcomes.

Dr. Sinha, who is an Anesthesiologist at St. Francis Hospital and Medical Center in Connecticut, said he believes the answer is neuromodulation. Although it cannot control subacute pain alone, he said it has proven to reduce pain scores when added to a single nerve block.

Unfortunately, it is inefficient and invasive to place a peripheral nerve stimulation (PNS) device leading up to surgery, as well as a nerve block before surgery. Dr. Sinha, who also cofounded Gate Science Inc., took this as a challenge to create an advanced technique that could deliver local anesthesia to block pain sensors at the molecular level and produce a signal to later block pain at the synaptic gate in the dorsal horn.

Independent studies of Dr. Sinha's system found that following total knee replacement (TKR), patients returned to baseline mobility in two weeks and exceeded baseline mobility in six weeks, with zero instances of falls, motor weakness, or infection. In cases where TKR subacute pain could not be managed with analgesics, the use of PNS reduced pain by 93%.

Dr. Sinha concluded that the future of pain management is the triple threat of multimodal medications, regional anesthesia, and neuromodulation.

Coverage is key

The third presenter, Sylvia Wilson, MD, dove deep into retrospective study and clinical trial data of nerve blocks. Dr. Wilson, a Professor in the Department of Anesthesiology and Perioperative Medicine at Medical University of South Carolina, said there isn't much to support improvement in length of stay because of the fixed psychological component. What can help, though, is to select an anesthesia approach that maximizes the complete nerve area.

A femoral nerve block, which primarily targets the saphenous nerve, is not sufficient, she said. Rather, targeting the anterior femoral cutaneous nerve provides coverage of the intermediate and medial femoral cutaneous nerves.

Evidence does support the use of iPACK in conjunction with adductor canal block (ACB), said Dr. Wilson, who reviewed a study that found iPACK alone (in comparison to ACB alone) can:

- Decrease opioid use at postop days one through three
- Decrease pain at postop days one through three
- Increase patient satisfaction at postop day one.

Dr. Wilson discussed other nerve block options, including genicular nerve blocks, periarticular injections, and local infiltration analgesia. Ultimately, she said anesthesiologists have an amazing armamentarium at their fingertips, but additional large-scale randomized controlled trials would be of great benefit to solidify and standardize recommended approaches.

2025 ANNUAL MEETING OF CAROLINAS & TENNESSEE ANESTHESIOLOGY



ASA 2025 – MUSC PRESENTATIONS – SAN ANTONIO – HENRY B. GONZALEZ COVENTION CENTER

Friday, October 10	Saturday, October 11	Sunday, October 12	Monday, October 13
10:55 AM – 12:10 PM	11:00 AM – 12:00 PM	8:80 – 9:30 AM	1:30-3:00 PM
Nicole McCoy – Soc. of Pediatric Anesthesia Session III: Pediatric Anesthesia Updates - Moderator Grand Hyatt Riverwalk – Lonestar DEF	Sylvia Wilson (presenter) Newer Blocks for Knee Surgery That Allow Early Discharge (PN107) [211, Meeting Level]	Travis Pecha (faculty) ASA Diagnostic POCUS Certificate Part 4 Workshop: Log Building – (WS803B) 214 AB, Meeting Level]	Sylvia Wilson (presenter) Emerging Technology in Regional Anesthesia Performance & Education (WS822) [214 CV, Meeting Level]
	1:30 – 2:30 PM	1:00 - 1:30 PM	
	Julie McSwain (presenter) Recommendations from the 2025 ASA Advisory on Periop. Care of Older Adults Having Inpatient Surgery – Periop. Use of Medications with Potential CNS Effects (ST111) [211 Meeting Level]	Andrew Fisher/Gabrielle Fisher Center Stage Presentation [Exhibit Hall, Booth 342]	
	2:45 – 3:45 PM	2:45 - 3:45 PM	
	Sylvia Wilson/ Katie Bridges (presenter) Amb Anes News: Review of Noteworthy Literature Published in Ambulatory Anesthesia – NORA Anesthesia (Bridges) Regional Anesthesia (Wilson) (ST103) [301 BC, Ballroom Level]	Katie Bridges (abstract moderator) Perioperative Medicine IV – Oral Presentation (OR17-4 [221 BC, Meeting Level] Pritee Tarwade (presenter) Periop Approaches to Prevention & Mgmt of Organ Dysfunction – CV Dysfunction: Exploration of Shock Beyond Hypovolemia (ST226) [302C, Ballroom Level]	
		3:30-5:00 PM	
		Pritee Tarwade (faculty) Basic POCUS & TEE in Critical Illness: Hands On Workshop (WS820) [214 AB, Meeting level]	
		4:00-5:00 PM	
		Katie Bridges (abstract moderator) Perioperative Medicine VII (EA17-7) [Exhibit Hall, Street Level]	

RESEARCH CORNER

INNOVATION

Fluid Crisis Management: Intravenous Fluid Conservation Strategies and Outcomes After a Natural Disaster

Carlee A. Clark, MD, Nicole C. McCoy, MD, Carey L. Brewbaker, MD, Bethany J. Wolf, PhD, Jennifer V. Smith, MD, Travis J. Pecha, MD, Robert A. Mester, MD, and Sylvia H. Wilson, MD

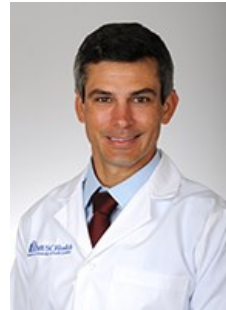
After significant damage to an intravenous fluid manufacturing plant during Hurricane Helene, fluid conservation was necessary, and many healthcare institutions delayed elective procedures to safeguard fluids. We present a perioperative intravenous fluid conservation strategy initiated at one tertiary care institution in response, and specifically reviewed 5 different perioperative sites with predominantly outpatient cases. Perioperative fluid conservation led to an overall 68% reduction in intravenous fluid utilization in one month. Compared with the 3 prior months, rates of intraoperative hemodynamic instability, postoperative nausea and vomiting, and recovery times were similar. (A&A Practice. 2025;19:e02051.)



Carlee Clark, MD



Nicole McCoy, MD



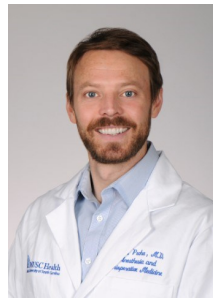
Carey Brewbaker, MD



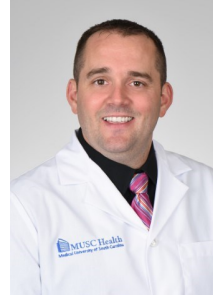
Bethany Wolf, PhD



Jen Smith, MD



Travis Pecha, MD



Robert Mester, MD



Sylvia Wilson, MD

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New Frontiers in Hypertrophic Obstructive Cardiomyopathy

[Ahmad Parniani, MD](#) • [David Carroll, DO](#)† • [Theodore J. Cios, MD MPH FASA FASE](#)✉

[Affiliations & Notes](#) ▾ [Article Info](#) ▾



David Carroll, DO

SUDDEN SHORTAGE OF IV FLUID REFOCUSSED ATTENTION ON IMPORTANCE, PROPER USE

Hurricane Helene left a trail of devastation and destruction last year, dumping [40 trillion gallons of water on the Southeast](#). It leveled houses, sent trees crashing and left millions without power.

It also threatened to cripple the U.S. health care system when it knocked out a key supplier of vital intravenous fluid.

The ensuing scramble taught health systems like the Medical University of South Carolina to reassess its use of IV fluids, lessons that continue today.

And for patients like Meagan Orton of Goose Creek, who depend on daily infusions, it was a reminder of how little control they have over life-giving measures.

At its peak a Category 4 storm, Helene tore through Florida, Georgia, South Carolina and North Carolina in late September 2024, killing over 200 people and causing devastating flooding in the mountains of North Carolina.

One major loss was the Baxter International plant in North Cove, N.C., which supplies 60 percent of the IV fluids hospitals and patients depend upon in the U.S. The plant was knocked offline and roads and bridges that connected it to the world were damaged and closed temporarily.

It set off alarms in hospitals and surgery centers across the country as providers hoarded their supplies and many canceled elective surgeries.

At MUSC, those involved in anesthesia, who use IV fluid to help patients during surgery and control post-surgical complications, set out a strategy to reduce use by 60 percent in an effort to keep surgery centers open. The details and results of the successful strategy were published in a study in September.

It was not the first time hospitals have had to scramble for IV fluids. In 2017, Hurricane Maria devastated Puerto Rico and knocked out its power, leaving idle a Baxter plant that supplied much of the nation's IV fluids.

The crisis caused by Hurricane Helene had an "uncanny resemblance" to the one seven years earlier, [according to a paper](#) from St. Jude Children's Research Hospital in Memphis, Tenn.

What St. Jude found is some of its conservation measures from that previous shortage were still being followed, while others were just re-implemented, usually involving close monitoring of IV fluids given and relying on oral medications when possible to avoid hanging an IV.

MUSC's Department of Anesthesiology and Perioperative Medicine also took a wide-ranging approach across its hospitals and outpatient surgery centers. Part of that was focusing what supplies they had on making sure in-hospital surgeries, where patients are likely to be sicker and have more intensive procedures that could lead to fluid loss, were prioritized, said Dr. Nicole McCoy, an anesthesiologist and co-author of the study.

"We were being the most proactive at trying to reallocate resources or save, and where we were going to save was within our ambulatory surgery centers," she said, as those centers tend to have healthier patients and procedures that are less likely to result in a lot of fluid loss and complications.



Dr. Nicole McCoy demonstrates a regional anesthesia block in 2022 at the Medical University of South Carolina.

SUDDEN SHORTAGE OF IV FLUID REFOCUSED ATTENTION ON IMPORTANCE, PROPER USE CONTINUED

Patients were also encouraged to drink water or Gatorade up to an hour before arrival to help with their hydration going in. Providers were encouraged to use flush syringes or smaller IV bags if necessary. Those efforts resulted in a reduction of 68 percent — well above the goal, the study found.

But McCoy and others also carefully monitored patient outcomes a month out at five of the surgery centers that had the most restrictions and found some surprising results. Patients did not appear to suffer low blood pressure, which can happen from fluid loss, as a result of the new measures and despite getting anesthesia meds that can also lower blood pressure, the study found. They also did not have an increase of post-surgical nausea. Fluids are often added to help manage that potential nausea or vomiting, and patients did not appear to suffer from getting less, McCoy said.

MUSC providers met to discuss the results and “how surprised we were on how well everyone at the ambulatory surgery centers were doing with a lack of IV fluids,” she said.

The restrictions allowed MUSC to continue with its surgeries at a time other health systems were canceling theirs, which was good for both patients and the health system, McCoy said.

“It's good for patients that need those surgeries, but also is impactful to the financial outcomes of the hospital system,” she said.

The new guidelines led to some rethinking about how they practice.

“Before, everybody got a liter of IV fluids,” she said. It was how people were trained: “You start an IV, you hang the bag of fluid,” McCoy said. But during the conservation period “everybody just started to get used to not having to hang IV fluids,” she said. “And so it just became standard practice. And I think, once that was ingrained in all the providers that they didn't necessarily have to hang an IV bag of fluids, then it just became standard practice.”

The shortage eased as the Baxter plant came back online, but it wasn't until August that [the Food and Drug Administration declared that it was over](#).

But for patients like Orton, those effects linger.

Last year, as the supply shut down, she could not get her orders filled, despite urgent pleas with several companies. Orton is managing a number of challenging health problems, from [vascular Ehlers-Danlos syndrome](#) to an autoimmune disorder to [postural orthostatic tachycardia syndrome](#), where even slight movement can drop her blood pressure suddenly and result in fainting. She uses an IV fluid known as Lactated Ringer's Solution to keep those symptoms in check and prevent her health from spiraling downward.

She was down to a few bags when [The Post and Courier ran her story](#).

Days later, a state representative and the South Carolina Department of Public Health [got to work on her behalf](#) after seeing the story and her home health pharmacist found a week's supply after hearing her tale.

Though she felt saved, it also reminded her of how fragile the system can be for patients like her.

“When it comes to health care in our country, I have no control over what is deemed ‘necessary’ or ‘essential’ for medical interventions used to keep me alive, much less preserving just the quality of my life,” she said. “There is no mechanism available to plead my case as a patient.”

Doctors also “are constantly constricted and frustrated that they too are often unable to push back on behalf of their own patients' needs,” Orton said.

It could all happen again, and “in today's political climate and our precarious foreign relations, even within our allies, I would be even more fearful that we would not have access to external solutions” should that need arise, she said.

FROM SHORTAGE TO SUCCESS: HOW MUSC ANESTHESIA TEAM NAVIGATED IV FLUID CRISIS

As we mark the first anniversary of flooding from Hurricane Helene that devastated parts of North Carolina, the [anesthesia department](#) at the Medical University of South Carolina is sharing how it responded to one effect of that flooding: the disruption of the IV fluid supply chain.

“The culture in anesthesia is to be prepared for everything,” said [Carlee A. Clark, M.D.](#), lead author of [the MUSC study published](#) in A&A Practice. The journal is for doctors working in anesthesia and pain medicine, focusing on short, peer-reviewed articles on innovative treatments and solutions.

The anesthesia team was prepared for an IV fluid supply shortage. Previous publications have produced basic recommendations on how to conserve fluid. But implementing them at a large academic medical center came with different challenges than smaller sites faced. The MUSC Health-Charleston Division has nearly 80 locations across seven hospitals where patients receive anesthesia services.



On Sept. 30, 2024, Hurricane Helene damaged the North Carolina manufacturing plant that supplies 60% of the intravenous fluids in the United States.



Dr. Carlee A. Clark

And that wasn't the only concern. While some other health care facilities delayed elective surgeries to make scarce IV fluids available for essential operations, MUSC Health didn't want to delay any operations unless it had to.

So when flooding damaged the Baxter manufacturing plant, which supplies more than half the IV fluids in the U.S., Clark and her colleagues wanted to keep patients safe, keep operations on track if possible and document their findings to share with colleagues who might find themselves in similar situations.

They set a goal last year of quickly reducing IV fluid use before and after surgery by 60%, starting Oct. 1. “We responded immediately by referring to our NPO guidelines and asked our patients to continue oral hydration with clear liquids until two hours before their procedures,” Clark said. NPO is an abbreviation for a Latin term that means nothing by mouth.

“Patients presented for their procedures better hydrated” than if they'd stopped drinking liquids the night before, like they'd normally do.

“We created an algorithm for inpatient and outpatient procedures and surgeries to assist our teams when making resuscitation decisions. Our study focused on our ambulatory [outpatient] centers where we probably had the largest reduction in fluid administration,” Clark said.

The research focused on five MUSC Health sites:

- A children's surgery center.
- An adult surgery center that does eye procedures, such as cataract removal.
- An adult surgery center that does orthopedic procedures.
- A hospital-based surgery center that does a range of procedures.
- An endoscopy center, where tubes with cameras let doctors see inside the body, often the digestive tract.

They found they didn't need IV fluids automatically prepared for certain patients and procedures. That was one opportunity for conservation.

Some patients got what Clark called a “flush” instead of a full bag of IV fluids. A flush is typically a smaller syringe of an IV fluid solution that is used after medications are given in the IV. Using small flush syringes instead of full IV fluid bags was an additional way to conserve fluids during the shortage.

FROM SHORTAGE TO SUCCESS: HOW MUSC ANESTHESIA TEAM NAVIGATED IV FLUID CRISIS CONTINUED

“We thought about: ‘What’s the case they’re having? Where are they having surgery? What are their comorbidities? How are we going to change this?’ We responded quickly and did not cancel any procedures.”

After a month, MUSC Health reviewed the data to see if the strategy was having any negative effects. It looked at several markers, including whether patients needed medication to treat hypotension during surgery, suffered from nausea and vomiting after surgery and how long they stayed in the recovery room after the procedures.

The conclusion, as stated in the published study: reducing the use of IV fluids “was not associated with significantly increased rates” of related problems.

Now that the IV fluid shortage is over, Clark said her team is applying some of the lessons learned to its regular procedures. “In the past, we approached each patient with the same fluid resuscitation plan, typically starting with a one-liter bag of IV fluid in the holding room. Now, we use different-sized bags in different areas. We changed our practice after learning during the fluid crisis. The change was not driven by cost but, rather, by making appropriate choices for patient care while conserving fluids and decreasing waste.”

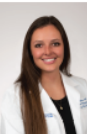
Doctors also encourage patients, when appropriate, to hydrate at home before surgery. Clark said it works – and it makes patients feel better when they arrive for procedures. “Patients are happier.”

She hopes that publishing her team’s research can help others who work in anesthesia and pain management. Her colleagues involved with the publication include [Nicole C. McCoy, M.D.](#); [Carey L. Brewbaker, M.D.](#); [Bethany J. Wolf, Ph.D.](#); [Jennifer V. Smith, M.D.](#); [Travis J. Pecha, M.D.](#); [Robert A. Mester, M.D.](#); and [Sylvia H. Wilson, M.D.](#)

Their research is also helping at MUSC Health, where people getting outpatient procedures aren’t the only ones who can drink liquids the morning of. So can some patients who are hospitalized, thanks to the IV fluid shortage study.

Now that the research is complete, Clark said credit is due to everyone working in the perioperative areas. “The teamwork and collaboration between the perioperative nursing teams, our pre-op clinic, the surgeons and our anesthesia team members was impressive. I’m proud of how quickly everyone got into the mindset of ‘Let’s figure this out together.’”

CA3 CLASS 2026-2027 FELLOWSHIP MATCH RESULTS

CA-3 Class 2026-2027 Fellowship Match Results							
	Alex Berghorst Pediatric Anesthesia Fellowship, Phoenix Children's		Harris Burton Pediatric Anesthesia Fellowship, Emory		Daniel Couper Cardiothoracic Anesthesia Fellowship, Wake Forest		Brenden Drerup Chronic Pain Fellowship, MUSC
	Drew Gianos Cardiothoracic Anesthesia Fellowship, Duke		River Harnes Pediatric Anesthesia Fellowship, Children's National Hospital		Austin Hogan Pediatric Anesthesia Fellowship, Cincinnati Children's		Tyler Kalajian Chronic Pain Fellowship, Stanford
	Rachel Liedberg Cardiothoracic Anesthesia Fellowship, MUSC		Ben Maxner Cardiothoracic Anesthesia Fellowship, MUSC		Michael Reynolds Cardiothoracic Anesthesia Fellowship, MUSC		Caroline Schlee Pediatric Anesthesia Fellowship, Johns Hopkins

Congratulations to the twelve members of the CA-3 class who matched into Fellowships!

WELCOME TO THE DEPARTMENT

Hi everyone! I grew up in Charleston, so it feels wonderful to be back home after a small stint away. I went to Clemson for undergrad and then stayed close to home for medical school and residency at MUSC, before heading to Boston for a critical care fellowship at Brigham and Women's Hospital. I am happy to be back with my husband Patrick, our one-year-old daughter, Lily, and our husky, Griff. We spend our weekends chasing Lily around, watching Clemson football, and soaking up as much sunshine as possible. When I get a little time to myself, you can usually find me at a hot yoga class. I am excited to join our ICU team (staffing in the CVICU), as well as the general teams at UH and ART.



Cecilia Taylor, MD



Jessi Stockinger, MD

I am happy to be back at MUSC after completing my fellowship in Obstetric Anesthesiology at Duke University. Originally from Salzburg, Austria, I was raised in a small farming town outside of Asheboro, NC. I completed medical school at the Brody School of Medicine in Greenville, NC and then my residency at MUSC. In my free time, I love spending time with my wonderful husband, Bernard, and our menagerie of pets — our dog, Willow, and our cats, Jack and Dorothy. I'm excited to work alongside everyone as part of the OB team, as well as the comprehensive teams at ART and UH. I'm overjoyed to rejoin the MUSC family!

Hi everyone - I'm Rebecca Bonaroti, and I'm coming to you from Pittsburgh, PA. I'm originally from Texas, lived in New York for a while, and then did all my training in Pittsburgh. My husband, David, and I moved here two months ago with our 5-month-old son, Luca, and one ill-tempered cat. So far we've made it our mission to eat all the oysters we can, soak up the sunny weather, and take the stroller to every county park we can find. We are thrilled to be in Charleston and at MUSC, and I look forward to working with all of you!



Rebecca Bonaroti, MD

WELCOME TO THE DEPARTMENT CONTINUED



Brandon Sykes, CRNA (RT)

I was born in Augusta, GA and grew up in Aiken, SC. My family is from the western side of KY; so, I am a born and raised KY wildcat fan. My dream was to play basketball for UK and then the NBA but that did not come close to happening! But I am happy to be working in the medical field caring for other people. I have a sister who actually had three kidney transplants here at MUSC. I did nursing school at Charleston Southern and graduated from MUSC's AFN program in 2020. I now live in North Charleston with my pup named Ivory!



Michael Jennings, CRNA (UH)



Alyssa Cleveland, CRNA (RT)

My name is Alyssa Cleveland but many of you know me as Aly. I've been a CRNA here at MUSC since 2009, but originally from Texas. I am transferring over to Rutledge Tower from Shawn Jenkins where I have been doing mostly peds cardiac. I can't wait to see some old friends and make some new ones!

I am originally from Sao Paulo, Brazil but just moved here from North Carolina where I have spent most of my life. I graduated from UNCG in 2022. My husband and I just relocated to Charleston a few months ago with our son Gianluca and our dog Pippin for my husband's job. We love to travel, ride our bikes and eat foods from all different parts of the world!



Tania Bardsley, CRNA



Laura Sweet, CRNA (RT)

I am Laura Sweet. My husband and I have two girls, Ava and Stella. I enjoy family, friends, traveling, outdoors, running and reading. I graduated from MUSC and am so happy to continue my career here.

PATIENT LETTER FEATURING DR. DAVID CARROLL AND COURTNEY MATHEWS, CRNA

Dear Dr. Cawley,

I would like to bring your attention to the outstanding treatment I received from your staff during my recent procedure at MUSC Health.

I'm sure you receive a lot of letters repeating this theme, but the attention I received is simply the best I've ever received! Call it intrinsic Southern hospitality, or credit it to your corporate training programs, but the attention and care I received were simply wonderful □ Morgan, the procedure room RN's care and attention was off the charts, not to mention her tolerance for my corny jokes before the procedure.

Holly, my prep and recovery nurse, who was amazing with her bedside manner keeping me calm and making sure I was as comfortable as could be, under the circumstances.

Caitlyn, the charge nurse, who's expertise and experience was obvious as she stayed on top of everything and impressed the dickens out of me with her omniscient knowledge answering every question I could throw at her.

Courtney, the nurse anesthetist, was yet another of your amazing staff that quietly demonstrated her skills in the operating room, including the funny farewell bid to my consciousness when I recall her saying, "Have a nice nap". Too funny!

The anesthesia doctors, like **Dr. Carroll**, are yet more star performers on your staff. With a wonderful bedside manner, and obvious depth of knowledge, Dr. Carroll was instrumental in claming my nerves as I awaited my procedure. It also didn't hurt that he was a Baltimore Orioles fan, and effortlessly connected with me!

And then, of course, there's the Man. Dr. Payne, who performed my colonoscopy, is the epitome of professionalism. While I pride myself with keeping things light-hearted, Dr. Payne's demeanor served to remind me that the procedure was really no laughing matter, while at the same time appreciating my nervous banter. After reviewing his photos in the "After Visit Summary," I was supremely impressed with his ability to scope out the smallest aberrations in my colon that even the crew of the 1966 sci-fi classic "Fantastic Voyage" could not have detected!.

Please accept my heartfelt thanks for such a skilled crew, and my hat's off to you for whatever the 'secrete sauce' is with your management style to keep such highly skilled, upbeat and motivated individuals on the MUSC Health staff!



**Hazardous
Weather Plan**

[Click here for the
updated Hazardous
Weather Plan](#)

GRAND ROUNDS—NOVEMBER 2025

**“Extracorporeal Cardiopulmonary Resuscitation;
an underutilized rescue modality ”**

Greg Squires, MD, Assistant Professor

November 4, 2025

**Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**



“Anesthesia Research Symposium ”

Sylvia Wilson, MD, Professor

November 11, 2025

**Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**



**“From Collaboration to Impact: Building Better
Research Together ”**

Everette Keller, MS, PhD Candidate

November 18, 2025

**Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**

HAPPY
Holidays

November 25, 2025

Thanksgiving Week—Happy Holidays!

DEPARTMENT OF ANESTHESIA AND
PERIOPERATIVE MEDICINE

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[CHECK OUT OUR WEBSITE](#)

Future Events/Lectures

CA 1 Lecture Series

11/5—Anticholinergic Drugs; Cholinesterase Inhibitors & Anesthesia for Patients with Neuromuscular Disease - Carey Brewbaker

11/12—Respiratory Physiology: The Effects of Anesthesia & Anesthesia for Patients with Respiratory Disease - Rishi Patel

11/19—Acid-Base Balance; Renal Physiology & Anesthesia - Jared McKinnon



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Twitter:



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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

Dr. Moore was excellent. He explained all of the pharm with efficiency and gave us very real scenarios to practice through.

Dr. Moore once again did a fantastic job giving us a quick yet very informative overview of ACLS. I would change nothing about this

Drs. Madi Geating and Zach Harper—Thank you for going out of your way to help during an incredibly challenging liver transplant! - Dr. Brenden Dreup



Holiday Party
Saturday, December 6, 2025
Carolina Yacht Club

[ONE MUSC 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 December edition will be November 18, 2025.