#### DEPARTMENT OF ANESTHESIA AND PERIOPERATIVE MEDICINE



VOLUME 18, ISSUE 2 FEBRUARY 2024





#### **Inside This Issue:**

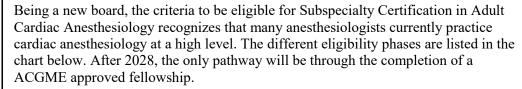
| Opening Statement  | 1-2 |
|--|-----|
| Cultural Awareness<br>Corner: Presidents Day   | 3   |
| Congrats Rita Meyers   | 3   |
| Safety Hero  | 4   |
| Welcome to the Depart-<br>ment   | 5   |
| Epinephrine and Phe-<br>nylephrine Infusion<br>Differentiator  | 5   |
| Research Corner  | 6   |
| Meet 2024 American<br>Hospital Association<br>Board Chair Joanne<br>Conroy, MD                           | 7   |
| Kim Kirby, CRNA Retires  | 7   |
| MUSC Catalyst News:<br>Could an Already ap-<br>proved drug cut down<br>on opioid use after sur-<br>gery? | 8-9 |
| AHA Heart Walk   | 10  |
| Grand Rounds   | 11  |
| I Hung the Moon  | 12  |

#### MESSAGE FROM THE CHAIRMAN: SUBSPECIALTY CERTIFICATION IN ADULT CARDIAC ANESTHESIOLOGY

-SCOTT T. REEVES, MD, MBA

The American Board of Medical Specialties approved a new board certification for Adult Cardiac Anesthesiology (ACA) in 2020 to recognize the evolution of the subspecialty. The first ACA certification examination was administered by the American Board of Anesthesiology (ABA) on December 2, 2023. The ACA certification is intended to distinguish experts in the core concepts of adult cardiac anesthesiology, such as imaging,

diagnosis, physiology, pharmacology, and management of adults with cardiac disease presenting for cardiac surgery or nonsurgical interventions.



I am very excited to announce that we now have nine faculty board certified in the subspeciality of adult cardiac anesthesiology. The include Drs. Rob Bowen, Dave Carroll, Alan Finley, John Foster, Loren Francis, Tim Heinke, Jared McKinnon, Maxie Phillips, and Toby Steinberg. Congratulations to each one of them for going through the strenuous examination process. Due to staffing requirements, not all cardiac faculty were able to sit for the initial examination. The department will have additional board-certified faculty by this time next year.













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#### **OPENING STATEMENT CONTINUED**

| Permanent Eligibility Criteria: Diplomates Who Have Completed an  ACGME-accredited CTA Fellowship  Have completed an ACGME-accredited CTA fellowship   | Temporary Pathway 1: Diplomates Who Have Completed a Non-ACGME-accredited Adult Cardiac Fellowship  Have completed at least 12 months in a non-ACGME-accredited CTA fellowship   | Temporary Pathway 2: Diplomates Who Have <12 months Adult Cardiac Fellowship Training  Have completed 0–11 months of adult cardiac fellowship training   |
|--|--|--|
| Hold current NBE Advanced PTE Certification OR  Have completed fellowship in last 24 months and hold testamur status for the NBE Advanced PTE Exam.  Please Note: Fellows graduating from a fellowship program in the current year who take the ADVANCED PTE Exam and achieve testamur status will be eligible for ACA certification.  | Hold current NBE PTE Certification   | Hold current NBE PTE Certification  OR  Hold current NBE Testamur Status for successful completion of the Advanced PTE   |
| If you meet the criteria listed above, you are eligible for ACA certification.   | If you meet the criteria listed above, you are eligible for ACA certification.   |  |
| IF NBE TESTAMUR STATUS FOR SUCCESSFUL COMPLETION OF THE ADVANCED PTE ONLY, THEN EITHER  OPTION 1: Have provided as an attending physician, anesthesia for a minimum of 50 patients undergoing cardiac procedures per year for two of the past three years  OR  OPTION 2: Have spent the following amount of clinical time dedicated to the anesthetic management of patients undergoing cardiac procedures:  • At least 7 hours per week for the past 6 years  • At least 10 hours per week for the past 4 years  • At least 13 hours per week for the past 3 years  • At least 20 hours per week for the past 2 years | IF NBE TESTAMUR STATUS ONLY, THEN EITHER  OPTION 1: Have provided as an attending physician, anesthesia for a minimum of 50 patients undergoing cardiac procedures per year for two of the past three years  OR  OPTION 2: Have spent the following amount of clinical time dedicated to the anesthetic management of patients undergoing cardiac procedures:  • At least 7 hours per week for the past 6 years  • At least 10 hours per week for the past 4 years  • At least 13 hours per week for the past 3 years  • At least 20 hours per week for the past 2 years | AND EITHER  OPTION 1: Have provided as an attending physician, anesthesia for a minimum of 50 patients undergoing cardiac procedures per year for two of the past three years  OR  OPTION 2: Have spent the following amount of clinical time dedicated to the anesthetic management of patients undergoing cardiac procedures:  • At least 7 hours per week for the past 6 years  • At least 10 hours per week for the past 4 years  • At least 13 hours per week for the past 3 years  • At least 20 hours per week for the past 2 years |
| For either option 1 or option 2 above, a minimum of 20 cases per year must have required cardiopulmonary bypass or other mechanical circulatory support  | For either option 1 or option 2 above, a minimum of 20 cases per year must have required cardiopulmonary bypass or other mechanical circulatory support  | For either option 1 or option 2 above, a minimum of 20 cases per year must have required cardiopulmonary bypass or other mechanical circulatory support  |

PAGE 3 SLEEPY TIMES

#### **CULTURAL AWARENESS CORNER: PRESIDENTS' DAY**

Have you ever wondered how Presidents' Day started? The piece below by Michael C. Lewis MD, Chair of the Department of Anesthesiology, Pain Management, & Perioperative Medicine at Henry Ford Health System helps answer that question.

On the third Monday of February, we celebrate Presidents' Day. While most people appreciate the day off of work, they may be surprised to learn that it is not always on a Monday. In 1971, Presidents' Day was moved to create more three-day weekends to increase productivity. At this point in the year, it was assumed that the invigorating outcomes of the winter holidays had diminished, and workers required an added holiday to recuperate.

The holiday's origins can be traced back to the informal celebration of George Washington's birthday as a holiday called Washington Day after his death in 1799. The construction of the Washington Monument in 1848 and the resolution allowing for the removal and internment of President Washington's body in the Capitol Building in Washington D.C. in 1832 led to more national festivities.

In the late 1870s, Steven Wallace Dorsey proposed that Washington's birthday should become a national federal holiday. President Rutherford B. Hayes signed it into law in 1879, joining the four existing national holidays previously approved in 1870. Although Congress rejected the proposal to change the name to Presidents' Day to honor both George Washington and Abraham Lincoln, the Uniform Monday Holiday Act proposed by Senator Robert McClory of Illinois in the late 1960s moved key holidays to Mondays to create more three-day weekends for workers. In 1971, President Nixon made the executive order to pass the Uniform Monday Holiday Act, which shifted Washington's Birthday, Columbus Day, Memorial Day, and Labor Day to Monday. With the date landing in the middle of Lincoln's and Washington's birthdays, it became known as Presidents' Day.

We wish everyone a Happy Presidents' Day!

Sincerely,

Michael C. Lewis MD, FASA

#### CONGRATULATIONS RITA MEYERS

Congratulations Rita on completing the DNP program. Rita graduated this past December with her Doctor of Nursing Practice from MUSC. Thank you for all your hard work and your continued dedication to our profession. You are a valued member of the Pediatric Anesthesia team at Shawn Jenkins, and we look forward to what the future holds for you.



PAGE 4 SLEEPY TIMES

#### SAFETY HERO: RHOMTEEN HOUSHIAR, CRNA

After induction of anesthesia and placing the patient in prone position, Phyllis O'Neal, RN in the OR recognized that there was smoke coming from the OR bed. The cord was making a metal connection to the platform and sparks and heavy smoke had formed. A bed was immediately brought into the room to move the patient off. In the process, the anesthesia circuit (with oxygen and anesthetic gas) fell into heavy smoke. Rhomteen Houshiar, CRNA in Charleston, immediately noticed and removed the oxygen source, which was at 100%; not recognizing this could have been a disaster for the patient and team members in the room. Both Phyllis' and Rhomteen's focus and attention in this case prevented a catastrophe.







PAGE 5 SLEEPY TIMES

#### WELCOME TO THE DEPARTMENT



Gwen Croce, CRNA

Please welcome our new CRNA at Shawn Jenkins, Gwen Croce. Gwen comes to MUSC from New Jersey where she worked for West Jersey Anesthesia Associates for six years. Her undergraduate and graduate work in Anesthesia were both done at Drexel University in Philadelphia. In her time away from work she enjoys being outdoors, cooking and baking, gardening, and DIY projects around the house with her husband Chris, and her children Lena (5), Wesley (3) and Max (1). They are also expecting their newest member of the family in July. They are making progress on their new home on Johns Island and looking forward to their new life here in Charleston.

#### EPINEPHRINE AND PHENYLEPHRINE INFUSION DIFFERENTIATOR

The 100 ml bags of epinephrine will have silver foil sealing the infusion bag access port starting with this batch that is coming from compounding. Phenylephrine infusions will continue to have the blue foil seal. Please see the attached pictures. This is to help differentiate the epinephrine infusions from the phenylephrine infusions. Occasionally these infusions are confused resulting in the wrong drug being administered to the patient.





PAGE 6 SLEEPY TIMES

#### RESEARCH CORNER

**CASE REPORT** 

# Particulate Gastric Contents in Patients Prescribed Glucagon-Like Peptide 1 Receptor Agonists After Appropriate Perioperative Fasting: A Report of 2 Cases

Phillip Ryan Wilson, MD, Kathryn H. Bridges, MD, and Sylvia H. Wilson, MD

Glucagon-like peptide 1 (GLP-1) receptor agonists have surged in popularity for the treatment of both diabetes mellitus and obesity. While GLP-1 reduces proximal gastrointestinal motility and delays gastric emptying, the impact of these medications on adequate fasting before surgery is not clear. We present 2 cases of particulate gastric contents after following appropriate presurgical fasting in diabetic patients taking GLP-1 receptor agonists and review current literature regarding perioperative implications of these drugs. (A&A Practice. 2023;17:e01712.)



Ryan Wilson, MD



Katie Bridges, MD



Sylvia Wilson, MD





Original Article

## Anaesthesia cart standardisation expedites supply retrieval: A simulation study with patient safety implications

Journal of Perioperative Practice 2023, Vol. 33(5) 128–132 © The Author(s) 2022 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/17504589221135193 journals.sagepub.com/home/ppj



Carey L Brewbaker D, Robert A Mester, Dulaney A Wilson, Kaylee Massman, Clinton F Pillow and Sylvia H Wilson



Carey Brewbaker, MD



Rob Mester, MD



Dulaney Wilson, PhD



Clinton Pillow, MD



Sylvia Wilson, MD

PAGE 7 SLEEPY TIMES

## MEET 2024 AMERICAN HOSPITAL ASSOCIATION BOARD CHAIR JOANNE CONROY, MD

Joanne Conroy, M.D., is CEO and president of Dartmouth Health, which is the only academic health system in New Hampshire and serves rural and urban residents in both New Hampshire and Vermont.

Prior to joining Dartmouth Health, Conroy served in several hospital leadership roles, including as CEO of Lahey Hospital & Medical Center in Burlington, Mass. and chief health care officer for the Association of American Medical Colleges in Washington, D.C. An anesthesiologist, she earned her medical degree at the Medical University of South Carolina (MUSC), where she held multiple academic and administrative leadership positions.

Watch the video to learn more about Conroy's background, key priorities as AHA chair and message to the field.



#### KIM KIRBY, CRNA RETIREMENT

Kim Kirby's exceptional nursing career began in August 1993. As a newly graduated RN, Kim worked on 10 East which was then MUSC's surgical oncology unit. One year later, Kim transferred to the surgical, trauma, neuro ICU (all one big unit back in the day) where she worked until her acceptance into MUSC's Anesthesia for Nurses Program. In 2001, she seamlessly transitioned into her new role of CRNA at MUSC and was a constant fixture in the pediatric NORA and MRI settings. Additionally, Kim was a key member of the adult/pediatric cardiac team and functioned as CRNA staff scheduler. After 30

years of distinguished service, Kim retired from her SJCH full-time position on December 15th, 2023. We are so thankful that Kim plans to continue to work PRN and look forward to periodically seeing her at SJ. On January 6th, our SJCH staff and families enthusiastically celebrated Kim and her outstanding career at her retirement party.

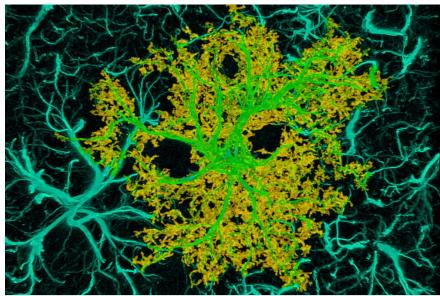


PAGE 8 SLEEPY TIMES

## MUSC CATALYST NEWS: COULD AN ALREADY APPROVED DRUG CUT DOWN ON OPIOID USE AFTER SURGERY?

Researchers in the Department of Anesthesia and Perioperative Medicine at MUSC have found that an FDA-approved drug may help to decrease pain after surgery. In the pilot study published in Pain Management, spinal surgery patients who received Nacetylcysteine (NAC) during surgery in addition to standard pain control treatments reported lower pain scores and requested fewer opioids after surgery than patients given a placebo.

Opioids are often given for a short time after surgery to treat pain. Although effective, their potency can wain and addictive potential can be dangerous without careful supervision by a health care provider. As such, physicians welcome the opportunity to limit opioid use in managing pain.



An astrocyte, a type of non-neuronal cell, in the rodent cortex. The outer boundary of the cell is shown in yellow; the cell "skeleton" in teal. Image courtesy of Dr. Michael D. Scofield of MUSC.

"Can we stop giving opiates completely? Likely not. Can we decrease the amount patients need? We should try," said <u>Sylvia Wilson, M.D.</u>, the Jerry G. Reves Endowed Chair in Anesthesia Research in the Department of Anesthesia and Perioperative Medicine and a principal investigator of the study.

"Can we stop giving opiates completely? Likely not. Can we decrease the amount patients need? We should try."

-- Dr. Sylvia Wilson

Wilson has worked for years on efforts to improve pain management and limit opioid usage after surgical operations. As it turns out, a collaboration with a basic scientist within her own department could offer a solution.

#### A productive partnership

Wilson began to work closely with <u>Michael Scofield, Ph.D.</u>, the Jerry G. Reves Endowed Chair in Basic Science Anesthesiology Research and a senior author of the published study. Scofield has conducted labora-

"This project is really an elegant synthesis of basic science and clinical research, using things we find have efficacy in the laboratory and taking them to the clinic."

-- Dr. Michael Scofield

tory research on NAC, an anti-inflammatory drug that is used to treat acetaminophen poisoning, mushroom poisoning and liver damage. Researchers, such as Scofield, have also studied its effects on the nervous system, especially in the areas of addiction and pain perception. Wilson's clinical goals and Scofield's research on NAC made them ideal collaborators. "This project is really an elegant synthesis of basic science and clinical research, using things we find have efficacy in the laboratory and taking them to the clinic," said Scofield.

Wilson believes that partnerships between physicians and basic scientists can spur clinical advances. She credits the supportive environment within the department fostered by Chairman Scott Reeves, M.D., and former College of Medicine Dean Jerry G. Reves, M.D., for making such partnerships possible.

PAGE 9 SLEEPY TIMES

## MUSC CATALYST NEWS: COULD AN ALREADY APPROVED DRUG CUT DOWN ON OPIOID USE AFTER SURGERY?

#### Promising trial insights

The research team chose spinal surgery patients for its pilot study because these patients often experience chronic pain before surgery and are more likely to be exposed to higher levels of opioids before, during and after surgery. During surgery, patients received a standard regimen of anesthesia in addition to a dose of NAC or a saline infusion. Information on patients' pain and opioid consumption was then collected.

In the 48 hours after surgery, patients who were administered NAC via IV infusion (150 mg/kg) received 19% fewer opioid doses on average than patients who received saline. NAC patients also reported lower pain scores and took a longer time to request pain medication after their sur-



gery than the saline patients. The researchers were especially encouraged to see that the beneficial effect seemed to last longer than the NAC was expected to remain in the body.

"We've seen the impact of giving this medication persisting, and I think that's significant," said Wilson.

"We're not seeing a rebound effect when that medication wears off."

This extended effect on pain perception mirrored previous findings from Scofield's laboratory research. "For heroin addiction, we had seen in NAC preclinical studies that protection against relapse vulnerability is long lasting," said Scofield. "Certainly, the hope is that it's something that has a long duration."

#### **Looking to the future**

Next, the research team wants to investigate whether the findings can be translated to other procedures. They are currently enrolling patients undergoing minimally invasive hysterectomies in a larger trial. As more patients are enrolled, the researchers will be able to conduct more in-depth statistical tests to improve their understanding of the effects of NAC on surgery-associated pain. This will help them to set the stage for future clinical trials of NAC during surgery.

"To change practice, you need many large clinical trials with different settings, different types of surgeries to show that you're going to cause benefit, not harm," said Wilson. "We want to show good clinical efficacy, but also safety in that situation."

#### Reference

Wilson SH, Sirianni JM, Bridges KH, Wolf BJ, Valente IE, Scofield MD. The impact of intraoperative Nacetylcysteine on opioid consumption following spine surgery: a randomized pilot trial. Pain Manag. 2023 Oct;13(10):593-602. doi: 10.2217/pmt-2023-0061. Epub 2023 Oct 25. PMID: 37877260; PMCID: PMC10694787

PAGE 10 SLEEPY TIMES

#### AHA HEART WALK



#### Register Today!

By participating in the Heart Walk, you're joining Heart Walk Heroes from across the nation raising funds for lifesaving science. Science that can teach us all how to live longer and be Healthy For Good.

When you walk with us, you, yes you, are kind of responsible for saving lives. And if that doesn't make you want to do a victory dance right here and now, well, we don't know what will.

2024 Lowcountry Heart Walk

Charleston, SC

Saturday, Feb 24, 2024 Check-in 8am



Join the MUSC Anesthesia Sleepwalkers **HERE!** 

PAGE 11 SLEEPY TIMES

#### **GRAND ROUNDS- FEBRUARY 2024**



"TBD"
Mourad Senussi, MD, Assistant Professor
February 6, 2024
Department of Medicine
Baylor College of Medicine





"Artificial Intelligence in Anesthesia"
Andrew Fisher, MD, Assistant Professor
Gabrielle Fisher. MD. Assistant Professor
February 13, 2024

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



"TBD"

Jaime Martinez Santos, MD, Assistant Professor February 20, 2024 Department of Neurosurgery

**Medical University of South Carolina** 



"Awake Spine Surgery Under Spinal Anesthesia: Practical Considerations, Outcomes, and Establishing an Awake Spine Program"

Shaun Gruenbaum, MD, PhD, Associate Professor

**February 27, 2024** 

Department of Anesthesiology and Perioperative Medicine

Mayo Clinic College of Medicine and Science

PAGE 12 SLEEPY TIMES

### DEPARTMENT OF ANESTHESIA AND PERIOPERATIVE MEDICINE

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#### I HUNGTHE 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

#### CHECK OUT OUR WEBSITE

#### **Future Events/Lectures**

#### **Intern Lecture Series**

#### **CA 1 Lecture Series**

1/3—Anesthesia for Patients with Neuromuscular Disease—Katie Hatter

1/10—Anesthesia for Patients with Kidney Disease—Tara Kelly

#### CA 2/3 Lecture Series

Per Rotations



Follow us on Facebook, Instagram, and Twitter:





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Graduation Friday, June 21, 2024 Founders Hall

Holiday Party Saturday, December 7, 2024 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 March edition will be February 18, 2024.