



SLEEPY TIMES

VOLUME 11, ISSUE 8 AUGUST 2017



MESSAGE FROM THE CHAIRMAN: SUBSTANTIAL ACHIEVEMENTS

-SCOTT T. REEVES, M.D., MBA

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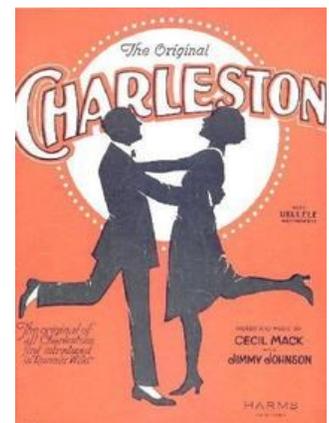
For another year, MUSC Health has received significant accolades from U.S. News & World Report. We were nationally ranked in six children's specialties with a new high ranking of #11 for our Cardiology and Heart Surgery program. In this edition of Sleepy Times, Eric Graham has highlighted our star ratings from the Society of Thoracic Surgery as well.



Charleston again has been recognized as the #1 city in the United States in which to vacation and #2 in the world according to Travel + Leisure Magazine.

I am also excited about the growing leadership opportunities available to our faculty with Dr. Alan Finley assuming the very important position of Ashley River Tower Medical Director. We are also adding statistical research support with the recruitment of Laney Wilson, PhD.

As we start FY18, the department has a lot to be thankful for and the year is shaping up to be great.



MUSC RANKED IN US NEWS & WORLD REPORT'S BEST CHILDREN'S HOSPITALS

Nationally Ranked Hospital in *10 Children's Specialties*

On behalf of the leadership team of MUSC Children's Health, we would like to announce the results of this year's U.S. News & World Report's edition of America's Best Children's Hospitals.

Once again, MUSC Children's Health has been recognized as the top children's hospital in South Carolina with a total of six pediatric specialties ranked in the top 50 programs across the nation. Cardiology & Heart Surgery earned a ranking in the Top 25, moving from the number twenty position to number eleven, with Neurology and Neurosurgery earning its first ranking as one of the top 50 programs. Other honorees this year include Cancer, Gastroenterology & GI Surgery, Nephrology and Urology. While this recognition highlights those six specialty areas, this achievement could not have been accomplished without the outstanding work by all of our care team members at MUSC Children's Health.

I would like to personally congratulate each of these teams for their continued dedication and commitment to the highest quality of pediatric care delivery, their tenacity in improving processes to reach our patient care goals, and their spirited determination to make this a great place to work. All of these attributes comprise the collective and ongoing efforts at MUSC Children's Health to further develop programs to serve children and families from across the state. As we prepare to ready ourselves for the MUSC Shawn Jenkin's Children's Hospital, remember that we are in this together as we build the future of pediatric health for all of South Carolina's children.

I am honored to work with each and every one of you, and congratulate you on this outstanding achievement.

#11-Cardiology & Heart Surgery

#28-Nephrology

#36-Cancer

#37-Urology

#45-Neurology & Neurosurgery

#47-Gastroenterology & GI Surgery

Mark Scheurer, M.D.

RESEARCH CORNER

Contents lists available at [ScienceDirect](#)



Journal of Clinical Anesthesia



Correspondence

Neuraxial hypothermia incidence misinterpreted



patient population. However, the correct presentation of the Frisch et al. data is important and notable.

Respectfully,
Julie R. McSwain, MD MPH

Bethany J. Wolf, PhD

Sylvia H. Wilson, MD

Department of Anesthesiology and Perioperative Medicine
Medical University of South Carolina

To the Editor:

We read with interest the recent systematic review by Shaw et al. [1]



Dr. McSwain



Dr. Wolf



Dr. Wilson



Ergonomics

ISSN: 0014-0139 (Print) 1366-5847 (Online) Journal homepage: <http://www.tandfonline.com/loi/terg20>

Diagnosing barriers to safety and efficiency in robotic surgery

Ken R. Catchpole, Elyse Hallett, Sam Curtis, Tannaz Mirchi, Colby P. Souders & Jennifer T. Anger



Dr. Catchpole



Dr. Reeves

JHQ Journal for Healthcare Quality

Proactive Safety Management in Trauma Care: Applying the Human Factors Analysis and Classification System

Tara N. Cohen, Jennifer S. Cabrera, Tracy L. Litzinger, Kevin A. Captain, Michael A. Fabian, Steven G. Miles, Scott T. Reeves, Scott A. Shappell, Albert J. Boquet

CHARLESTON NAMED THE NO. 1 CITY IN THE U.S. AGAIN, NO. 2 IN THE WORLD BY DAVE MUNDAY FOR THE POST AND COURIER

Charleston is the nation's No. 1 city again, and No. 2 in the world, according to the readers of Travel + Leisure magazine. The recognition comes at a time when residents are increasingly worried about the peninsula's capacity to handle more visitors.

The [results of this year's survey](#) were released Tuesday morning. Readers were asked to rate cities they had visited on sights/landmarks, culture/arts, restaurants/food, people/friendliness, shopping and value.

This is the fifth consecutive year the magazine's readers have named Charleston the nation's top city. Charleston was the top city in the world last year. This year San Miguel de Allende in Mexico took the top global spot.

Two of Charleston's hotels, The Vendue and Zero George, ranked among [the top 15](#) in the country this year. The city's top restaurants also consistently get national attention, but restaurants were not included in these survey results.

"Charleston is that rare destination that, on paper, seems to have it all — and then totally lives up to the hype," the magazine says on its website.

The Charleston Area Convention and Visitors Bureau immediately posted the news on [its website](#) and [social media](#) feeds, with the invitation, "Plan your trip to the No. 1 city in the U.S."

"The No. 1 rankings continue to positively impact tourism, the number one economic driver to the Charleston area," the CVB said in a written statement.

The College of Charleston's Office of Tourism Analysis counted 5.1 million visitors in 2015, for an economic impact of \$3.7 billion and 41,000 jobs. The number this year is likely to be closer to 6 million, and the latest estimate of the economic impact is \$4.2 billion. Without a doubt, the tourism industry is a major employer.

The concern is how many more tourists the city can handle without sacrificing the charm that has made it such a popular a destination. There's also the concern that hotels and the businesses that cater to them are [driving up real estate](#) and rental prices.

Mayor John Tecklenburg has unsuccessfully tried to slow a wave of new hotel construction and is asking council at least to require developers to [include parking plans](#) in future hotels to minimize traffic problems.

USA Today noted concerns over the city's increasing popularity last month, in [an article](#) that led with the sentence, "We're flattered, but please stop."

The article cited worries not only over increasing traffic but rising rental rates and restaurant staffing shortages because of the tourist influx.

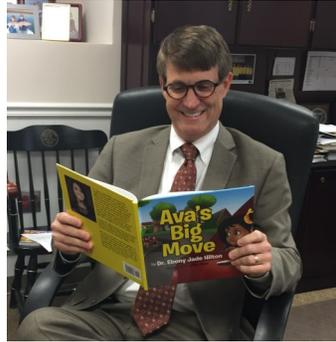
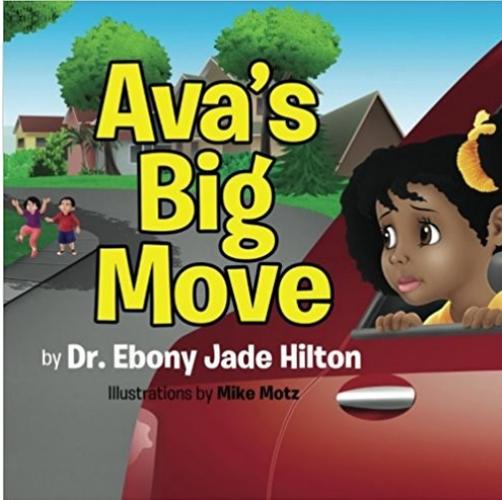
"The people who live here are frustrated and don't want to see Charleston continue to be number one on these lists," Jamee Haley, executive director of Lowcountry Local First, told the newspaper. "I want to see local businesses prosper in our community, but we must be careful of not killing the goose that laid the golden egg."

Actually, Charleston residents have been concerned about the effect of the growing tourist industry for quite some time. The city adopted its first tourism-management plan in 1978, becoming the first in the nation to do so. A 2015 update noted that the goal is to preserve "the equilibrium between residential life and tourism activity."

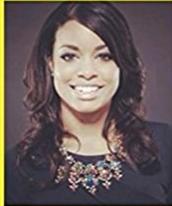


DR. EBONY HILTON'S NEW CHILDREN'S BOOK

Please congratulate Dr. Ebony Hilton on the publishing of her new children's book, "Ava's Big Move"!



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Dr. Ebony Jade Hilton was born the middle of three girls in a small town called Little Africa, South Carolina. As a child, books became her first love and were the window to the world outside of her tiny community. Reading these pieces dared her to dream big and to not fear the unknown because the answer was often found at the turn of each page. These life lessons stayed with her throughout her school years.

In 2013 Dr. Hilton became the 1st African American female Anesthesiologist to be hired at the Medical University of South Carolina since its opening in 1824.

She since then has found her passion in community outreach where she grew to recognize the importance of a character like Ava. She hopes to provide a face of resemblance for all those little girls, who like her, searched for themselves in the characters they grew to love.



Copyrighted Material

TAMMY LAMONT NAMED NEW RT CHIEF CRNA

Tammy Lamont has been selected as the new Rutledge Tower Chief CRNA! The department is very excited about adding Tammy to the RT leadership team. Tammy began her new role on June 25, 2017.



NEW ANESTHESIA TECH AT MAIN

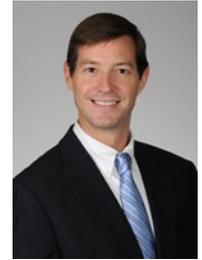


Please welcome Brian Byrne, the newest member of the Main OR anesthesia staff. Brian graduated from the University of South Carolina in May 2017 with a degree in Public Health. He looks forward to attending graduate school in pursuit of a Masters in Health Administration at some point in the future. In his free time, Brian likes to surf, fish, play soccer, and go to NASCAR races. Brian looks forward to learning the hands-on aspects of anesthesia and meeting the entire Main OR team.

SOCIETY OF THORACIC SURGEONS AWARDS MUSC 3-STAR RATING

Dear Pediatric Cardiac Team,

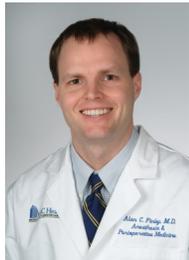
I'm thrilled to announce that once again we are a recipient of the **Society of Thoracic Surgeons 3-star rating for Congenital Heart Surgery Public Reporting** for Spring 2017. This denotes the highest category of quality and was awarded to only 11 out of 116 institutions nationally. MUSC ranks among the best congenital cardiac programs in the world because of our gifted surgeons and all of the skilled and dedicated individuals that make up our Heart Program. Congratulations to everyone!



Our outcomes are publicly reported on the STS website (the website still has last year's information but should be updated soon):

<http://www.sts.org/congenital-public-reporting-module-search>

Eric Graham, M.D.

DR. ALAN FINLEY NAMED NEW ART OR MEDICAL DIRECTOR

A native of South Carolina, Dr. Alan Finley was born in Charleston, but raised in Sumter. After obtaining his medical degree from MUSC, Alan and his wife Traci moved to Chapel Hill, NC where he completed an anesthesiology residency at the University of North Carolina. After residency, Alan moved to Atlanta, GA for a one-year fellowship in cardiac anesthesiology at Emory University. Upon completion of his training, Alan joined the department at MUSC and has been in Charleston ever since. Alan and Traci have three girls, Meredith (10), Hannah (10), and Caroline (7). Alan has now been at MUSC for 8 years and is looking forward to his new role as Medical Director of the Ashley River Tower Operating Rooms.

MEET THE NEW STATISTICIAN

Dr. Dulaney (Laney) Wilson is happy to join the Department of Anesthesia as an epidemiologist/statistical consultant. She is a Research Associate in the Department of Public Health Sciences. Laney grew up in Richmond, VA but moved to SC with her husband Bartt in 1991. She earned a BS in Biology from USC-Columbia in 1996 and a Master of Science in Public Health from the USC-School of Public Health in 1999. After moving to Charleston, she obtained a PhD from MUSC in 2009. Her research areas of interest are wide ranging and include traumatic brain injury, epilepsy, and radiation exposure. Much of her activity is focused on the use of existing data for novel analyses. Laney will be available for consultation on Tuesdays and Thursdays from 9 AM to 1 PM in room 326. Appointments should be made through Kim Pompey.



WELCOME TO THE DEPARTMENT

Sarah Hameedi recently joined the department as the new Administrative Coordinator I, although you may recognize her from her former role as the NORA Scheduler. Sarah grew up in Atlanta, GA and moved to Greenwood, SC where she attended Lander University and obtained a degree in Business Administration. She moved to Charleston, SC and earned her Masters in Health Administration. Sarah has been with MUSC for three years and is excited to take on yet another new position within the department. Sarah and her fiancé, Pablo, have a 7 month old daughter named Finley. When she's not working and wedding planning, Sarah enjoys spending time with her family and cooking, and she can't wait for Clemson football!

Susan Watson is excited to join the department as the new Residency and Fellowship Program Coordinator. She has been a part of the MUSC family for the past three years, previously working in the Department of Psychiatry and Behavioral Sciences in the Chair's Office. Originally hailing from New Jersey, she graduated from North Carolina State University and has called Charleston home for the past four years. Susan enjoys yoga, going to the beach, cheering on the Carolina Panthers, being a certified storm spotter for the National Weather Service, and spending time with her two cats and newly rescued dog, Sam.



Please welcome Melanie Rubin, the department's newest research assistant. Melanie graduated from the College of Charleston in May 2016 with a B.S. in biochemistry and a minor in Spanish. She grew up in Ponte Vedra Beach, FL and knew she wanted to go to school near the water. Melanie hopes to go to medical school one day and eventually own a pediatric or cardiology practice. In her free time, Melanie enjoys going to the beach, doing yoga, and playing the ukulele and bass guitar with her brothers. She is thrilled to finally be here and is grateful for the opportunity to become a part of such a wonderful community!

NEW MUSC CHILDREN'S HEALTH LICENSE PLATE AVAILABLE

The newly approved license plate design for MUSC Children's Health (shown above) was designed by Chris Murray and the MUSC Brand Team who worked for months with leadership of Children's Health and SC Department of Motor Vehicles to arrive at the approved design. The new plate will be available on the DMV website in mid-August.

Two plate protectors will also be available: one to reflect MUSC Shawn Jenkins Children's Hospital and the other to highlight MUSC Children's Health.

2017 LOWCOUNTRY HEART WALK!

Healthy For Good™
Heart Walk.



The Anesthesia Sleepwalkers are back! Please [click here](#) to join our team and support our department as we raise money for this wonderful cause! This year's Heart Walk will be held on Saturday, September 30th at Riverfront Park in North Charleston. MUSC has set an overall goal of raising \$250,000 to help the AHA as they work to build a healthier Lowcountry. Our University teams will be working to raise \$60,000. We have the opportunity to make a tremendous impact – but to do so, we need your help! Please look for emails in the coming weeks for fundraising events. Thank you in advance for your support and generosity!

MALIGNANT HYPERTHERMIA UPDATES BY CARLEE CLARK, M.D.

A new, more concentrated form of Dantrolene has been developed and replaced our current Dantrolene supply as of June 2017. The new Dantrolene is 250mg/vial instead of 20mg/vial and takes only 5ml of sterile water to reconstitute. This will drastically improve our workflow and ability to treat malignant hyperthermia (MH) quickly. One vial will likely be enough to treat most patients 100kg or less (MHAUS recommended dose is 2.5mg/kg). Educational materials have been placed in the OR pharmacies and slides have been included on the departmental smartboards. The website for the new Dantrolene is <http://www.ryanodex.com/>. The Pharmacy will restock the MH bags and put the dosing and administration guidelines in each bag as well.



When malignant hyperthermia (MH) has been diagnosed, it's important to treat it immediately.¹ MH is characterized by the uncontrolled release of calcium from the sarcoplasmic reticulum into the myoplasm.²

THE SIGNS OF MH INCLUDE¹:

**truncal and/or masseter muscle rigidity | increasing end tidal CO₂ | tachycardia
high body temperature | acidosis | rhabdomyolysis | hypercarbia | hyperkalemia**

RECONSTITUTING AND ADMINISTERING RYANODEX[®] (dantrolene sodium) for injectable suspension IN LESS THAN 1 MINUTE.^{3,4}

STEP 1



- Add 5 mL sterile water for injection (without bacteriostatic agent) to each 250 mg vial of RYANODEX[®]

STEP 3



- Draw the reconstituted suspension into the syringe
 - based on a 50 mg/mL concentration to achieve the MHAUS recommended loading dose of 2.5 mg/kg
 - for example, 3.5 mL RYANODEX[®] (175 mg dantrolene sodium) would provide a loading dose for a 70 kg patient

STEP 2



- Shake the vial until the medication is mixed thoroughly
 - should take no more than 10 seconds
 - suspension should be a uniform orange color

STEP 4



- RYANODEX[®] should be administered by intravenous push
- RYANODEX[®] can be administered either
 - into the intravenous catheter while an intravenous infusion of 0.9% sodium chloride injection, or 5% dextrose injection, is freely running; or
 - into the indwelling catheter—after assuring its patency—without a freely running infusion. Flush the line to assure that there is no residual RYANODEX[®] remaining in the catheter

INDICATION

RYANODEX[®] (dantrolene sodium) for injectable suspension is indicated for the treatment of malignant hyperthermia in conjunction with appropriate supportive measures, and for the prevention of malignant hyperthermia in patients at high risk.

MALIGNANT HYPERTHERMIA UPDATES CONTINUED...

DOSAGE SCHEDULE TO TREAT MH

- Based on recommended loading dose of 2.5 mg per kg¹
- Chart calculated using 250 mg vials of RYANODEX[®] (dantrolene sodium) for injectable suspension reconstituted with 5 mL of sterile water for injection USP (without a bacteriostatic agent)³
- In case of emergency, contact the 24-hour MHAUS Hotline at 800.644.9737

RYANODEX[®] DOSAGE CHART³

Patient's weight in kg	Patient's weight in pounds	Number of 250 mg vials to open	mg dosage needed	mL of reconstituted RYANODEX [®] to administer
5	11	1	12.5 mg	0.25 mL
10	22	1	25.0 mg	0.50 mL
15	33	1	37.5 mg	0.75 mL
20	44	1	50.0 mg	1.00 mL
25	55	1	62.5 mg	1.25 mL
30	66	1	75.0 mg	1.50 mL
35	77	1	87.5 mg	1.75 mL
40	88	1	100.0 mg	2.00 mL
45	99	1	112.5 mg	2.25 mL
50	110	1	125.0 mg	2.50 mL
55	121	1	137.5 mg	2.75 mL
60	132	1	150.0 mg	3.00 mL
65	143	1	162.5 mg	3.25 mL
70	154	1	175.0 mg	3.50 mL
75	165	1	187.5 mg	3.75 mL
80	176	1	200.0 mg	4.00 mL
85	187	1	212.5 mg	4.25 mL
90	198	1	225.0 mg	4.50 mL
95	209	1	237.5 mg	4.75 mL
100	220	1	250.0 mg	5.00 mL
105	231	2	262.5 mg	5.25 mL
110	242	2	275.0 mg	5.50 mL
115	253	2	287.5 mg	5.75 mL
120	264	2	300.0 mg	6.00 mL
125	275	2	312.5 mg	6.25 mL
130	286	2	325.0 mg	6.50 mL
135	297	2	337.5 mg	6.75 mL
140	308	2	350.0 mg	7.00 mL
145	319	2	362.5 mg	7.25 mL
150	330	2	375.0 mg	7.50 mL

Labeled dose range of 1 to 10 mg/kg with a maximum cumulative dose of 10 mg/kg. If the physiologic and metabolic abnormalities of MH continue, administer additional doses.³

IMPORTANT SAFETY INFORMATION

RYANODEX[®] (dantrolene sodium) for injectable suspension is not a substitute for appropriate supportive measures in the treatment of malignant hyperthermia (MH), including:

- Discontinuing triggering anesthetic agents
- Increasing oxygen
- Managing the metabolic acidosis
- Instituting cooling when necessary
- Administering diuretics to prevent late kidney injury due to myoglobinuria (the amount of mannitol in RYANODEX[®] is insufficient to maintain diuresis)

Precautions should be taken when administering RYANODEX[®] preoperatively for the prevention of malignant hyperthermia, including monitoring vital signs, avoiding known triggering agents,

and monitoring for early clinical and metabolic signs of malignant hyperthermia that may indicate additional treatment is needed.

The administration of dantrolene sodium is associated with loss of grip strength and weakness in the legs, as well as drowsiness, dizziness, dysphagia, dyspnea, and decreased inspiratory capacity. Patients should not be permitted to ambulate without assistance until they have normal strength and balance. Care must be taken to prevent extravasation of RYANODEX[®] into the surrounding tissue due to the high pH of the reconstituted RYANODEX[®] suspension and potential for tissue necrosis.

References: 1. Emergency therapy for malignant hyperthermia [poster]. Effective September 2011. Malignant Hyperthermia Association. www.mhaus.org. 2. Rosenberg H, Sambughin N, Riaz S, Driksen R. Malignant hyperthermia susceptibility. NCBI Bookshelf. Posted January 31, 2013. <http://www.ncbi.nlm.nih.gov/books/NBK1146/?report=printable>. Accessed June 30, 2014. 3. RYANODEX [package insert]. Woodcliff Lake, NJ: Eagle Pharmaceuticals, Inc.; 2014. 4. Data on file. Eagle Pharmaceuticals, Inc.

GRAND ROUNDS FOR THE MONTH OF JULY



**“Morbidity & Mortality Conference”
August 1, 2017
George Guldan, M.D., Associate Professor
Ryan Gunselman, M.D., Associate Professor
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**

**“Innovation”
August 8, 2017
Christopher Skorke, M.D., Assistant Professor
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**



**“State of the Department Address”
August 15, 2017
Scott Reeves, M.D., Professor & Chairman
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**

**“History of the Department”
August 22, 2017
Calvert Alpert, M.D., Professor
Dept. of Anesthesia & Perioperative Medicine
Medical University of South Carolina**



**“The Supersizing of Anesthetizing: Clinical
Challenges of Obesity”
August 29, 2017
Douglas Hester, M.D., Associate Professor
Division of Multispecialty Adult Anesthesiology
Vanderbilt University Medical Center**



DEPARTMENT OF ANESTHESIA AND
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CHECK OUT OUR WEBSITE AT:
[HTTP://WWW.MUSC.EDU/ANESTHESIA](http://www.musc.edu/anesthesia)

Future Events/Lectures

Intern Lecture Series

August 10th—Pain, Dr. Hillegass, SEI 314

August 24th—Dysrhythmias,
Dr. Nelson, ART 3037

CA 1 Lecture Series

August 2nd—Airway Management,
Dr. Hassid, SEI 314

August 9th—Anesthesia Machine & Technology,
Dr. R. Harvey, SEI 314

CA 2/3 Lecture Series

August 7th—Abnormalities of Cardiac
Conduction & Cardiac Rhythm PBLD,
Dr. Guldán, Moodle

August 14th—Adrenal Dysfunction PBLD,
Dr. Sabbagh, Moodle

August 21st—Airway Management—ART Call
Orientation, ICU Fellows, CSB 429

August 28th—Visiting Professor Lecture—All
Residents, Dr. Hester (Vanderbilt), CSB 429

Grand Rounds

August 1st—Morbidity & Mortality Conference,
Drs. Guldán and Gunselman

August 8th—Innovation, Dr. Skorke

August 15th—State of the Department Address,
Dr. Reeves

August 22nd—History of the Department,
Dr. Alpert

August 29th—Visiting Professor Lecture,
Clinical Challenges of Obesity, Dr. Hester
(Vanderbilt)



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 Kim Pompey. Thank you!

Mike Morris, Anesthesia Tech—For coming in early on the 1st day of rad-onc cases at Hollings Cancer Center. He wanted to make sure everyone had what they needed and knew where to go! Thanks!

Jaime Sayers, Anesthesia Tech—Always being a team player. He goes above and beyond on a daily basis and is very knowledgeable and dependable. Thank you!



Holiday Party 2017
Friday, December 1, 2017
Carolina Yacht Club



[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 September edition will be August 25, 2017.