MESSAGE FROM THE CHAIRMAN:

-SCOTT T. REEVES, MD, MBA

Life is Good

October is always an exciting month to be an Anesthesiologist. It is in October that we have our annual meeting of the American Society of Anesthesiologists. This year it is in our nation’s capital of Washington, DC. We will be having another record year of faculty attendance with many presenting original research, giving lectures, and leading workshops.

The other equally important event is that October also marks the beginning of our resident interview season. Over the past several months, I have had the opportunity to interact with 4th year medical students from MUSC and visiting students throughout the country who have been completing anesthesiology, critical care, or chronic pain rotations with us. Using the quality of our rotating students as an indicator, I expect this year’s crop of resident candidates to be outstanding. In advance I want to thank all the faculty, residents, and staff who will interview and take care of the logistics of interviewing over a 125 candidates for all the hard work needed to highlight our program.

Finally, I want to welcome Tom Epperson, MD, in his role as Medical Director at Rutledge Tower. In summary, my daughter, Carolyn, and I would like to emphasize that Life is Good in our department and Charleston!
RUTLEDGE TOWER’S NEW MEDICAL DIRECTOR NAMED: TOM EPPERSON, MD

After over a decade as the Rutledge Tower Medical Director, Dr. Charles Wallace has requested to step down as he gradually transitions to retirement. Charlie has been a very stable influence on our outpatient operating rooms and has developed a top notch service oriented approach to patient care. After a search of many excellent internal candidates and discussions with many key department, surgical and hospital leaders, Dr. Tom Epperson was selected as the new Rutledge Tower Medical Director.

Dr. Epperson did his undergraduate work at Radford University and his medical education and anesthesiology residency at Virginia Commonwealth University. He joined the faculty at MUSC in 2008. Tom has demonstrated his leadership ability serving as a Doctor of the Day at University Hospital since 2009 and on the department’s Executive Committee. His expertise in regional anesthesia will be an asset in his role at RT.
The department would like to thank Dr. Grayce Davis for her service on the MUHA Credentialing Committee. This important institutional committee is responsible for overseeing the credentialing process for all professional faculty and staff on campus including MDs, DOs, CRNAs, NPs, PAs, etc. Following the completion of Dr. Davis’ term in September, Dr. Nelson will assume this important role as the department’s representative at the October meeting. We wish him all the best.

**PROGRAMMING SPACE EXPANSION**

During the past several months, you might have seen or heard the construction going on in the Storm Eye Institute office suite located on the third floor. The department has remodeled unused space creating an IT laboratory for Michael McEvoy, the department's System Engineer. The department has seen numerous advancements in technology since Michael came aboard. This space will provide a quiet environment and allow sufficient space for future IT projects and team members.
Dear MUSC Medical Staff,

Recently the US Department of Health and Human Services announced a new award for transplant programs. These awards are based on outcomes, specifically post-transplant survival rates, transplant rates for deceased donors, and mortality rates after being placed on the waitlist. Only 23% of programs across the US received an award. In addition, of the 50 medical centers that offer at least 5 transplant programs, only 5 of these medical centers achieved an award in at least 4 programs.

MUSC is one of those five hospitals receiving bronze awards in the heart, kidney, liver, and lung programs!

This is more evidence of the tremendous quality of care delivered at MUSC everyday. Congratulations to the transplant team for such a prestigious outcomes-based award!

Thank you.

Patrick J. Cawley, MD
Chief Medical Officer & Executive Medical Director
MUSC Medical Center

Above is a picture of Dr. Eric Nelson, member of the Adult Heart and Lung team.

Below is a picture of Dr. David Stoll, Division Chief of the Liver and Kidney Transplant Team.
MEET THE NEW FACULTY

Michel Sabbagh, MD—Pediatric Anesthesia

Dr. Mike Sabbagh is thrilled to be joining the pediatric anesthesia group at MUSC. Dr. Sabbagh attended college at Coastal Carolina University and completed medical school at MUSC in 2006. Following an internship at MUSC and a year of research in the anesthesia department’s cardiothoracic research lab, he moved to the windy city to complete residency at Illinois Masonic Medical Center right outside Wrigley field. Michel relocated back to Charleston following a pediatric anesthesia fellowship at Children’s National Medical Center in Washington DC.

Dr. Sabbagh is joined by his wife Rachael, who has also recently become a member of the MUSC faculty as an attending in the department of general pediatrics. They live on James Island with their 11 month old son, Vincent. When not at work, Dr. Sabbagh enjoys surfing, cycling, cooking, and golfing. He is looking forward to working with residents and is excited to be joining the department.

MEET THE NEW STAFF

Michele King, MBA—Administrative Coordinator

Michele King joins the Anesthesia Department after working as a Transplant Program Assistant for Pre-Liver Transplant here at the Medical University of South Carolina for the last year and a half. Michele received her bachelor’s degree from the University of South Carolina with a double major in Marketing and Finance. After graduation, she decided to move to Charleston to continue her education and obtained a Master’s in Business Administration from the Citadel. She also received a Certificate of Healthcare Management from the Medical University of South Carolina. She earned both of these in May 2011.

Michele looks forward to the next chapter in her career as a member of the health care industry and is thrilled to become a part of the Anesthesia Team. She enjoys running, yoga, kickball, the outdoors, and traveling. She also spends a lot of her time with her family and friends while also enjoying all that Charleston has to offer.
We would also like to recognize Pat Tobin, CRNA who is celebrating 20 years of annual service.
In October, many of our faculty, residents and summer research medical students will be presenting at the ASA in Washington, DC. A sampling of presentation titles and duties are presented below. If you are attending the meeting, please try to attend our faculty session and offer support.

FACULTY
Carlee Clark  90 Minute Panel – ACLS in the Perioperative Setting
Real-life Cases (speaker)

Larry Field  Workshop - Ultrasound Applications for High Risk Perioperative Care (faculty)

Alan Finley  90 Minute Panel - Essentials of Cardiac Anesthesiology
Essentials of Coagulation Management (speaker)

Mark Hassid  Clinical Forum - Adult Congenital Heart Disease – When You Cannot Find a Congenital Cardiac Anesthesiologist
Major Abdominal Trauma Following Motor Vehicle Accident in an Adult with Repaired Tetralogy of Fallot (speaker)

Frank McGowan  Clinical Forum –Adult Congenital Heart Disease – When You Cannot Find a Congenital Cardiac Anesthesiologist
How Many, How Bad and How Do I Decide What to Do? (lead speaker)
Refresher Course Lecture – Congenital Heart Disease in the Adult Presenting for Non-Cardiac Surgery (moderator)

Matt McEvoy  90 Minute Panel - Updates and Controversies in ACLS With Case-Based Examples
Cardiac Arrest in Special Situations: Pregnancy, Accidental Hypothermia, Drowning, Local Anesthetic Toxicity, Anaphylaxis (speaker)
American Society of Anesthesiologists Annual Meeting Continued...

Eric Nelson  
Workshop - Pacing and ICD Workshop  
Programming and Hands-on Training (faculty)  
Workshop - Basic TEE Workshop  
Basic TEE Views: Anatomy and Image Orientation (faculty)

Scott Reeves  
90 Minute Panel – Anesthetic Management for Thoracic Aortic Surgery  
Valve-sparing Aortic Root Surgery (speaker)

John Schaefer  
Workshop - Clinical Difficult Airway Workshop and Airway Simulation (faculty)

Sylvia Wilson  
Poster Presentation - Regional Anesthesia and Acute Pain: Peripheral Nerve Blocks and Ultrasound (lead speaker)

RESIDENTS

Robert Harvey  
Medically Challenging Cases – Fascia Iliaca Block for Acute Pain Control in a Trauma Patient on Maintenance Buprenorphine/Naloxone Therapy (presentation abstract author)

MEDICAL STUDENTS

Keith Carver  
A Prospective Randomized Controlled Trial: Transcranial Direct Current Stimulation (tDCS) in the Management of Acute Post-Spine Surgery Pain

Alex McGaughy  
Isoflurane Reduces Lifespan and Impairs Development in C. Elegans
PEDIATRIC MAJOR BLEED GUIDELINES: WHEN, WHERE, AND HOW TO ACTIVATE?
BY: CORY FURSE, MD

When: The Pediatric Massive Bleed Protocol can be activated for any pediatric patient who has instability in conjunction with evidence of massive hemorrhaging.

Where: The guideline may be implemented in One West, Pediatric ED, the OR, or PICU.

How: The Attending Anesthesiologist (in the OR setting) makes the determination that the Pediatric Massive Bleed Protocol needs to be implemented. The blood bank is given notification (792-2621) to activate the Pediatric Massive Bleed Protocol. As long as the order comes from an attending physician, the notification to the blood bank can be made by the charge nurse, CRNA, or resident physician. Information that is needed by the blood bank includes the patient’s age, weight, MR #, Trauma #, and gender.

Once activated, blood will be prepared and delivered in the volumes specified on the flow sheet. If there is not a current type and screen available then, uncrossmatched blood will be prepared and an attending order to infuse emergent uncrossed matched blood must be given. A type and screen should be sent on the patient and blood for transfusion will be type-specific as soon as possible. Should the patient’s location change, the charge nurse should notify the blood bank of the new location, and the protocol will continue there until an attending order is made for it to stop. Please do not forget to notify the blood bank when the massive transfusion is no longer needed.

A few other points to consider:

- All of our blood products at MUSC are leuko-reduced
- Blood for children up to 6 months of age is automatically irradiated
- Blood for children up to 4 months of age is less than or equal to 7 days old
- Washed blood (with a lower potassium) can be requested, but adds approximately 1 hour to the preparation time, and the blood must be used within 24 hours or disposed

Lastly, these guidelines were developed from a multi-disciplinary panel and are not intended as a substitute for your clinical judgment. The word guideline was chosen very specifically for the care of the patient, even though the blood bank institutes a protocol on their end.
PEDIATRIC MASS TRANSFUSION GUIDELINES


1. Consider warming patient and fluids Correct acidosis
2. Estimated Blood Volume 70-80 mL/kg
3. Unstable VS
   - Already received 40mL/kg Crystalloid
   - Evidence of massive hemorrhage
   - Continued Hemodynamic Instability
4. CRRT if available
5. Crystalloid 20mL/kg boluses until blood available
6. STABLE

Give PRBC 15mL/kg

Serial Exams and Labs

STABLE

Repeat PRBC 15mL/kg

UNSTABLE

Repeat PRBC 15mL/kg

NEW LABS
- CBC, PT, PTT, INR, Fibrinogen, Blood gas, Lactate, Ca++
- 1 STAT for blood gas, hematocrit, Ca++,
- K+

Platelets 15mL/kg

Repeat PRBC 15mL/kg

STABLE

Platelets 15mL/kg

Repeat PRBC 15mL/kg

NEW LABS
- CBC, PT, PTT, INR, Fibrinogen, Blood gas, Lactate, Ca++
- 1 STAT for blood gas, hematocrit, Ca++,
- K+

Repeat PRBC: FFP: Platelets Transfusion Ratio 3:2:2

STABLE

 serial 4/26/2011

Change nurse Notify blood bank 2-2871 re: Major Pediatric Bleed Protocal for patient's weight, sex, name or TV #. MRN, when the stat pack is ready blood bank should call phone #

40 Kg weight and under blood bank will send stat pack of 4 units of PRBC and 4 units of FFP. Over 40 kg weight blood bank will send stat packs of 8 units of PRBC and 8 of FFP.

O(+) PRBC for males

- O(+) PRBC for females

- Platelets pheresed will send 1 unit of platelets with 2nd and 2nd stat packs.

Make sure type and cross match has been sent but until this is completed the blood bank can send emergent uncrossed matched blood. Attending physician must sign the Transfusion Service Test and Blood Component Request Form to authorize use of uncross matched blood.

Patient location: OR, stat pack delivered to OR lab and blood bank will call OR charge nurse (6-8306) to obtain OR room phone number.

Patient location PICU: Blood bank will call PICU Charge Nurse at (9-8222)

Patient location Peds ED blood bank will call Peds Ed charge nurse (6-8011)

Patient location One West ED: Blood bank will call ED charge nurse (6-6017)

If patient changes location the sending area charge nurse will notify blood bank with patient location.

Discontinuing MBP: Blood bank will continue to prepare and send stat packs until decision made by attending physician to discontinue. Charge nurse should then immediately notify blood bank.

> 3 stat packs Attending Physician to determine ratio of blood products for further stat packs to be sent.

Refer to Major Pediatric Bleed Protocol for Blood Bank

Consider:
1. Aminocaproic acid Bolus 100mg/kg, maximum 8 grams over 30 minutes followed by 30mg/kg/hour if continued bleeding.
2. Cryoprecipitate 4mL/kg if fibrinogen <100mg/dl despite FFP 30mL/kg
3. Factor VII a 90 microgram/kg if continued bleeding for > 3 blood volume replacements.

For Ca++< 1.0 mmol/L Calcium gluconate 30-50 mg/kg or Calcium Chloride 10-20 mg/kg

PRBC’s 15mL/kg normally will increase hgb ~ 5g/dL

PRBC’s 45mL/kg with FFP 15mL/kg and Platelets 15mL/kg constitutes ~ 1 blood volume
Work at the Medical College (1949-1958)

Shortly after I arrived in Charleston, Fred Kredel, Bob Walton and I went to see Dr. Lynch about my teaching schedule. Dr. Lynch told us that he viewed anesthesiology as a subdepartment which facilitated surgery and that he wanted to continue with the traditional departments of Surgery, Medicine, OB/GYN and Pediatrics.

He suggested that I should teach a little in Pharmacology, work in the dog lab to debark the dogs and help with Walton’s heart work on the contractile force. This would give me $200.00 per month from the Pharmacology budget.

Dr. Lynch told Fred Kredel to relinquish a few hours of this Surgical Curriculum, and this would give me $200.00 per month from the Surgery budget. Thus, my basic appointment on the faculty would be funded in this manner. I was appointed as Assistant Professor of Surgery (Anesthesiology).

I had no problems, with either the Pharmacology duties or the Surgical teaching duties. As time went on, I was able to expose the students to an adequate amount of instruction both clinical and didactic.

I do not remember how this came about, however, I was introduced to the Ventilator Center by Dr. Lynch himself. He had heard that I was trained in breathing matters and someone had suggested to him that I would be of help herein. I found that this joint venture between the school and the hospital was funded by a government grant which was never adequate. I was told that the Medical College would provide my services, at no additional compensation to participate in the care of polio ventilator patients. I had been offered a job in New York in a ventilator center previously.

We had thirteen “iron lungs”, and most of these were previously in use for paralytic polio patients. Each patient had to be ventilated by mask and bag while nursing care was given—once each day. The nurse anesthetists were assigned to this task, but they had to be paid “overtime”. Each one was afraid of contracting polio. In general everyone hated this task. I discovered that, if I could be found, I was called to perform this task. Since I had very little private anesthesia, this task gave me a full day of work with no compensation.

As the private work increased (I needed the money desperately), I had to find some method of getting out of this, so I was able to buy a Mine Safety Appliance (MSA) positive pressure ventilator and teach the nurses in the ventilator center to use it. This was the beginning of our Respiratory Therapy Department, and it led to such research opportunities as whether we should use air or oxygen for ventilation and the relationship of positive pressure ventilation to our observed decrease in atelectasis and pneumonia in the Center. Eventually, the Center was closed, and I was able to work on Dr. Boone’s patients with our early Puritan Ventilator (I.P.P.B for emphysema).

The Residency Program

All of my memorabilia concerning the Residency Program and the Respiratory Therapy Program were lost in a house fire in 1976. I must depend on your knowledge for the dates and persons herein. The factors which caused us to look at the establishment of Resident Training program were:

1. Dr. Lynch began to get up there to teach certain courses in the School of Nurse Anesthetists. To receive certain accreditation, the school must have an Anesthesiologist on the staff and in an advisory capacity to review deaths, etc.

2. Expansion of Roper Hospital and the addition of new operating rooms produced a shortage of anesthesia personnel.

Continued on next page….
I suggested to Fred Kredel that we establish a Resident Training Program, and he took this idea to Dr. Lynch. Bob Walton also agreed; we could use his lab for investigations and teaching!

I refused to go to Florence, and I began to look around for another position. I interviewed at the University of North Carolina and was accepted (with Volpitto’s recommendation). When Dr. Lynch heard of this, he gave me a faculty promotion to Professor and agreed to the Residency Training Program. My friend, Dr. Dave Davis, went to UNC.

Two years later, I was overjoyed to find that Dr. Brian Sword (developed to-and-fro CO2 absorber for obstetrical use), a good friend of mine, had been selected to review the Residency Training Program. He was impressed with our opportunity to use Walton’s lab and he wrote this in his report to the Board of Examiners: “If this program can be separated from Surgery, can add another Anesthesiologist to its staff, and will take advantage of its research opportunities, I believe that it may become one of our outstanding programs in the country.” “Especially do I wish to point out the pioneering heart surgery accomplishments at the Medical College of South Carolina.” “We must support these surgeons.”

When Dr. Lynch read my “carbon copy” of the report, he immediately told me to obtain another anesthesiologist (Dr. John Doerr); he established us as a full and separate department (the first of these other than the four) and he gave us a budget to finance this change.

All things appeared to be going well, and we had excellent personnel (Residents) in the program. I could point with pride to each of the Residents!

More to come next month…

Figure 1 (above): The Iron Lung is an airtight metal cylinder enclosing the entire body up to the neck and providing artificial respiration when the respiratory muscles are paralyzed, as

Figure 3 (to the right): Puritan Ventilator (I.P.P. B for emphysema) is responsive to patients and offers superior comfort, delivering sensitive, precise breaths to critically ill neonatal through adult patient.

Figure 2 (to the left): This CO2 absorber contains strong bases that can extract labile protons from anesthetic molecules, resulting in the production of Co2.
GRAND ROUNDS FOR MONTH OF OCTOBER

“Cerebral Blood Flow Autoregulation: Inside and Outside the OR”
October 2, 2012
Christos Lazaridis, MD
Medical University of South Carolina– Department Neurosciences
Assistant Professor

“AIMS and Perioperative Outcomes”
October 9, 2012
Daniel Sessler, MD
Michael Cudahy Professor and Chair
Department of Outcomes and Research
Cleveland Clinic

“Substance Abuse”
October 23, 2012
Peter Kalivas, PhD
Medical University of South Carolina– Department of Neurosciences
Distinguished University Professor

“Anesthesia and Neurocritical Care”
October 30, 2012
Dorothea Rosenberger, MD, PhD
Medical University of South Carolina– Department of Anesthesia
Associate Professor
I HUNG THE MOON
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 receptionist or Kim. Thanks so much!!

Bennett Cierny, CA3 Resident—Thanks for pitching in to help me get my case started.

Save the Date!

Holiday Party: December 1, 2012
Location: Carolina Yacht Club.

Resident Graduation: June 21, 2013
Location: Francis Marion Hotel

October 2012 Standard of the Month

Show respect for all employees regardless of their position in the hierarchy of the organization.

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, 2012.