MESSAGE FROM THE CHAIRMAN:

As I write this month’s opening statement for Sleepy Times, we are celebrating Nurse Anesthetist week (January 20-26). The department is very blessed to have such an excellent group of CRNAs that allow us to further our departmental missions. One recent example sticks out in my mind. Heather Highland, CRNA, and I recently had the opportunity to participate in a 17.5 hour case on a weekend. Needless to say, it was very difficult and intermittently required substantial resources in addition to the two of us to assist in the blood component therapy replacement alone. I had an amazing team of professionals who quickly came to our aid during the ordeal, including Drs. Tim Heinke, Kyle Bauer, and Will Hand; perfusionist, Alicia Sievert; and anesthesia techs, Larry Banks, Marshall Kearney, and Rob Ingram. It was also my first significant experience without the resources of our OR lab and blood bank.

The operating rooms were being challenged with multiple transplants occurring at once along with other emergencies and resources being allocated in a very responsible fashion to take care of our sickest patients. Due to the OR case load, Heather came in to start the case with me and remained to the end, and her dedication was amazing. Webster’s dictionary defines teamwork as the “cooperative effort by the members of a team to achieve a common goal.” We should all be proud to have such an amazing and dedicated anesthesia care team at MUSC.

Inside this issue:
- New babies in the
- Director of Educational Research for Healthcare Simulation SC
- 2013 International Meeting for Simulation in Healthcare
- Congrats Dr. Harvey, Medical Director of Quarter
- National Nurse Anesthetists Week
- Ambulatory Surgery Wins Patient Satisfaction Banner
- Resident Bowling Competition
- Christmas Research, ACRM
- Operating Room Efficiency Efforts
- The Lariat
- College of Medicine Core Competencies
- Grand Rounds
- I Hung the Moon

National Nurse Anesthetists Week
Promoting a Noble Profession
January 20-26, 2013
Gregory E. Gilbert was hired as the Director of Educational Research for Healthcare Simulation South Carolina (HCSSC) in November 2012. He currently holds joint appointments in the Department of Anesthesia and Perioperative Medicine and the College of Nursing as Assistant Professor. HCSSC is a statewide organization specializing in the design of simulation centers and the development and delivery of simulation activities including a specific methodology providing simulation experiences to the masses at lower operating costs. Dr. Gilbert’s role as Director of Educational Research with HCSSC is to develop the HCSSC statewide research agenda to include design and implementation as well as developing tools to support collaborative research activities.

Dr. Gilbert holds a Bachelor of Arts degree in psychology from Baylor University, a Master of Science in public-health degree in biostatistics and epidemiology from the University of South Carolina, Doctor of Education from Argosy University and is accredited by the American Statistical Association as a Professional Statistician®. Before joining HCSSC, Greg worked for four years in the Center for Disease Prevention and Health Interventions for Diverse Populations at Ralph H. Johnson Veterans Administration Medical Center (RHJ VAMC) as a biostatistician. He still holds an appointment at the RHJ VAMC in nursing and is actively involved in research with numerous investigators at VAMC and the VA’s Consolidated Mail Outpatient Pharmacy in North Charleston.

Dr. Gilbert’s other interests include cooking, playing softball, shooting skeet and trap, and spending time with friends. He is involved with his church and enjoys spending time with his wife of 23 years, Sharon, and their 11-year-old son, Geoff.
Our Simulation Research Team made a big splash this January at the 2013 International Meeting for Simulation in Healthcare. Three abstracts were presented from research completed this summer. Louise Alexander (COM4), Sam Gado (COM2), and Ric Sedlak (COM4) all presented abstracts in the ‘Research Abstract’ category. Louise presented an abstract entitled "Effect of a Novel Cognitive Aid on Adherence to Guidelines in the Management of Medically-Unstable Patients," Ric presented an abstract entitled "Effect of a Designated Reader and Cognitive Aid on Resident Performance During Simulation of Perioperative Emergencies." Finally, Sam, who was awarded the Dr. JG Reves Medical Student Anesthesia Research Fellowship this past summer, won 3rd place in the Research Abstract category. This is quite an honor given the fact that there were over 100 research abstracts presented at the meeting. Sam worked with Dr. Horst Rieke on a project entitled "Simulated Arterial Blood Pressure Feedback Improves Chest Compression Quality in a Single Rescuer Model." Kudos to our students!
Medical Director of the Quarter: Susan Harvey, MD

Dr. Susan Harvey was recently named Medical Director of the Quarter by MUSC’s Center for Clinical Effectiveness and Patient Safety. The award is presented to one of more than 150 Medical Directors each quarter in recognition of demonstrable leadership and achievement in promoting quality customer service, patient care, and patient safety. Dr. Patrick Cawley, Executive Medical Director and newly appointed Chief Executive Officer (CEO), presented the award to Dr. Harvey at the Medical Executive Committee on January 16th. Dr. Harvey was specifically recognized for her leadership of hospital-wide sedation practices and commended for a perfect score for sedation practices by the Joint Commission (JC) during the recent accreditation visit. This was the first JC review to focus on the extensive sedation-related changes implemented in 2011 by the Centers for Medicare and Medicaid (CMS). Dr. Cawley also recognized Dr. Harvey for leadership in the quality domain of efficiency for data-driven Operating Room management.

National Nurse Anesthetist Week, January 21-25, 2013

The department recognized our CRNAs for their hard work and dedication to our patients and department with a lunch in their honor at each location. We want to express our gratitude to them for they truly are an exemplary group.

Above: Tina Willett, CRNA; Ray White, CRNA; and Gary Hoefer, CRNA enjoying their lunch at Storm Eye.
Rutledge Tower Ambulatory Surgery Wins Patient Satisfaction Banner

Patient Satisfaction Banner Winners - FY’13 Q1 (July ‘12 – Sept ’12)

<table>
<thead>
<tr>
<th>Banner Award</th>
<th>Banner Winner</th>
<th>Rank (Ch only)</th>
<th>Results</th>
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<th>Contact to Award Banner</th>
<th>Support Banner Winner</th>
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<tr>
<td>Children’s Hospital, Peds ED, &amp; NNICU (FY’13 Q1 for CH)</td>
<td>Peds ED</td>
<td>97</td>
<td>91.40</td>
<td>100</td>
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<td>Radiology</td>
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<td>Adult Inpatient - HCAHPS</td>
<td>7 West</td>
<td>8 of 10</td>
<td>56</td>
<td>Leah Ramos</td>
<td>Pharmacy Services</td>
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<td>2 Banners awarded</td>
<td>ART 3 West</td>
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<td>Case Management</td>
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<td>Children’s Clinics – Hospital Based (FY’13 Q1 for CH)</td>
<td>Children’s Surgery Clinic</td>
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<td>Registration</td>
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<td>CH After Hours</td>
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<td>4 Banners awarded</td>
<td>OB/GYN Faculty</td>
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<td>Nuclear Medicine, Jenny Pitts</td>
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<td></td>
<td>Ear, Nose, and Throat</td>
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<td>HCC 2 Hem/Jmc</td>
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<td>Inpatient Psychiatry</td>
<td>Senior Care Unit 4 North</td>
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Notes:
- Children’s Inpatient, Peds ED & NNICU data is via Press Ganey, based on ‘received data’ and Percentile Rank. N > 30
- Adult Inpatient – HCAHPS Top Box. Two units with most companies ≥ 75% percentile. Results run 30 days after quarter closes. N ≥ 20
- All other areas – Data via Avista, based on ‘date of service’ and Mean Score. Results run 60 days after quarter closes. N ≥ 20
- Not every category awards a support banner, those that do not give a support banner are indicated with ‘NA’.
- Outpatient Clinic awards are handled by COM/VUMA
- Please see banner guidelines for description of roles and responsibilities regarding management of banner distribution/award ceremonies.
- FY’13 Q1 Adult Inpatient and Avista results run on 10/31/13 by Ashley Bode. Children’s Hospital Winners provided by Lauren Allen on 10/9/12
On January 16, 2013, the faculty and residents had their annual bowling competition following our pediatric journal club. This year it was held at the new The Alley on Columbus Street in downtown Charleston. Following a lively discussion of articles on pediatric regional anesthesia presented by Brystol Henderson and Kyle Bauer, the residents and faculty started our annual competition.

For those new to the department, the rules are simple.

- No warm ups
- Highest first game among the residents and faculty wins it for the group.

Residents got off to a fast start with Katie Bridges and Parker Gaddy leading the way with 147 and 150 scores respectively. The faculty were slower to get started and therefore finished later, but Carlee Clark had a 153 and Cal Alpert was declared the winner with a 171. It was great to have the faculty back on top and with bragging rights for another year.
RESIDENT BOWLING COMPETITION

Faculty Wins!!!

CHRISTMAS RESEARCH, ACRM
BY: MATT McEVOY, MD

The week after Christmas proved to be a very fruitful time for educational research in our department. Due to the residents' willingness to participate and the help from two awesome nurses (Amanda Burkitt and Monica Davis), our simulation research team was able to complete the final stage of Dr. McEvoy's FAER Research in Education Grant. The study tested whether an iOS-based decision support tool (DST) leads to improved adherence to management guidelines in a number of perioperative emergencies. This tool has been shown to be beneficial in the simulation center for scenarios such as Hyperkalemic Arrest, MH, Anaphylaxis, etc. This study investigated the use of the DST in the management of STEMI (in Preop/Holding) and LAST (in PACU). Data collection is complete and we are moving toward the data analysis phase. Thanks to all who participated and to everyone who made this possible! We hope in the future to move toward investigating the effects of these tools on performance of the entire perioperative team.
The department’s OR start time initiative has been very successful over the past several years, but recently our efforts have slightly decreased. The graph below highlights our percentage of on-time starts for all first cases. The delays are not isolated to only anesthesia but are a result of all cases. Each day please work hard to overcome minor issues that would result in the patient arriving to the room after 7:00 am. If a patient is delayed, please provide documentation so that better solution decisions can be made.

In addition to first time starts, the OR has developed a process to track room turnover times. Susan Harvey, MD, will be re-educating everyone regarding the appropriate turnover time based on the case classification. A successful way to improve turnover is to have a conversation with your nursing and surgical team prior to leaving with the proceeding patients addressing when one can return with the next case. Our initial goal is to have a turnover time below 30 minutes for ART and UH, and below 20 minutes for RT.
The Lariat
By: Eric Nelson, DO

We have started doing an exciting new procedure at MUSC. Frank Cuoco, MD is now performing the Lariat procedure on patients in the heart and vascular center. The Lariat is a percutaneous left atrial appendage (LAA) closure device. The device is for patients who have rate controlled atrial fibrillation and wish to not be on anticoagulation. Ligation of the left atrial appendage has been shown to be an acceptable way to reduce the risk of stroke in patients with atrial fibrillation without anticoagulation.

Traditionally, the appendage would have to be removed via a median sternotomy and surgically ligated. This new procedure allows the appendage to be sutured closed percutaneously.

An introducer is inserted into the femoral vein for venous access. A wire is then advanced into the right atrium and across the intraatrial septum, much like during ablations. The wire is then advanced into the left atrial appendage.

A second introducer is placed in the pericardial space. A finder needle is used via a subxyphoid approach, and a wire is advanced into the pericardial space. The needle is exchanged over the wire for an introducer. Another wire is then advanced into the pericardial space towards the left atrial appendage. Both wires have magnets on the end so when they are in close proximity to each other they stick together through the tissue of the LAA.

Once this connection is made, the Lariat device, which is a little lasso, is advanced over the pericardial wire. It then goes around the LAA up to the orifice of the appendage. When it is confirmed that the lasso is near the orifice, it is closed. At this point TEE is utilized to make sure there is no further blood flow into the appendage. When this is verified a suture is deployed thus ligating the LAA.

This procedure is especially exciting because we are intimately involved, not only as anesthesiologists, but also as echocardiographers. TEE is utilized to first ascertain that there is no thrombus in the appendage. We also help guide the cardiologist as they advance the femoral wire through the right atrium and then across the intraatrial septum and into the LAA. When the pericardial space is accessed, TEE is used to make sure the RV is not pierced. TEE is also used to guide the two wires in close enough proximity to one another so a magnetic attraction can occur. Finally, the TEE provides confirmation that the appendage is ligated by assessing that there is no longer flow from the atrium into the appendage.

If you’d like to learn more about this, or participate in the anesthesia or echo for the Lariat, feel free to mosey on over to ART and speak to one of us.
**College of Medicine Competencies for Undergraduate Medical Education and Institutional Learning Objectives (ILO’s)**

Currently the College of Medicine is undergoing its reaccreditation review from the LCME. A significant part of that process is to assure that our medical students are achieving their expected core competencies. In order to better educate our medical students, it is important to clearly understand what the core competencies are:

**Medical Knowledge (MK)**

*Students must demonstrate knowledge about established and evolving basic, clinical, and cognate (i.e., epidemiological and social-behavioral) sciences and the application of this knowledge to the practice of medicine.*

| MK 1 | Describe the normal structure and function (morphology and physiology) of the human body and of each of its major organ systems across the life span. |
| MK 2 | Describe how molecular, biochemical, cellular and genetic mechanisms affect human development and maintain the body's homeostasis across the life span. |
| MK 3 | Explain various causes of major diseases and conditions (genetic, developmental, metabolic/ nutritional, toxic, microbiologic, immunologic, inflammatory, neoplastic, degenerative, traumatic and behavioral) and the ways in which they operate on the body (pathogenesis) in individuals and in populations. |
| MK 4 | Describe how altered structure and function (pathology and pathophysiology) of the body and its major organ systems are exhibited through various diseases and conditions, and as a result of aging. |
| MK 5 | Describe the scientific principles underlying diagnostic methods, including laboratory and radiologic testing, and treatment approaches (pharmacologic and non-pharmacologic) that may be applied to major diseases and conditions. |
| MK 6 | Demonstrate knowledge of physical and functional principles of normal and altered human behavior throughout the life cycle, including scientific basis for diagnostic and treatment approaches applied to these conditions. |
| MK 7 | Explain how social determinants, health behaviors and preventive measures affect disease, illness, and health in individuals and across populations regionally, nationally, and globally. |
| MK 8 | Demonstrate knowledge of the scientific method in establishing causation of health and disease, the utility of diagnostic modalities, and the efficacy of therapies (traditional and non-traditional), through critical evaluation of current basic and clinical scientific knowledge. |

**Patient Care (PC)**

*Students must be prepared to provide patient care that is compassionate, appropriate, safe and effective.*

| PC 1 | Obtain essential, accurate, and age-appropriate information about their patients. |
| PC 2 | Formulate an accurate and comprehensive differential diagnosis that synthesizes relevant patient data. |
| PC 3 | Develop an appropriate evaluation and management plan utilizing patient information and preferences, evidence-based medicine and clinical judgment. |
College of Medicine Competencies for Undergraduate Medical Education and Institutional Learning Objectives (ILO’s) cont...

PC 4  Provide care that is responsive to the personhood of the patient inclusive of culture, ethnicity, spirituality, gender, age, disabilities, and other aspects of personal and/or health beliefs, practices and decisions.

PC 5  Counsel and educate patients appropriately using accurate, up-to-date information.

PC 6  Partner with patients to prevent health problems and to improve health status.

PC 7  Perform routine procedures safely and correctly with appropriate supervision.

PC 8  Work as members of interprofessional health care teams to provide effective, safe, quality, and patient-focused care.

Interpersonal and Communication Skills (CS)

Students must demonstrate interpersonal and communication skills that facilitate effective interactions with patients, their families and other health professionals.

CS 1  Communicate effectively with the patient, the patient’s family, colleagues and other health care professionals through the use of active listening and appropriate verbal, nonverbal and written skills.

CS 2  Foster therapeutic and ethically sound relationships with patients through respect, empathy and support of emotions.

CS 3  Demonstrate effective collaboration skills as a member of a team, including learning teams and health care teams.

Professionalism (PR)

Students must demonstrate a commitment to professional and personal excellence in all settings, including adherence to ethical principles and sensitivity to a diverse patient population.

PR 1  Demonstrate honesty, integrity, respect, and compassion in all interactions with patients, peers, faculty, staff, and other health care professionals in all settings.

PR 2  Demonstrate ethical, patient-centered decision-making and respect for the confidentiality of patient information in all settings (i.e., clinical, academic, electronic or web-based.)

PR 3  Demonstrate sensitivity and responsiveness to the personhood of the patient inclusive of culture, ethnicity, spirituality, gender, age, disabilities, family-context and other aspects of personal and health beliefs, practices and decisions.

PR 4  Demonstrate accountability for academic, patient care and professional responsibilities, and a commitment to continuous professional development.

PR 5  Acknowledge personal limitations and mistakes openly and honestly, and critically evaluate mistakes to promote professional development.
COLLEGE OF MEDICINE COMPETENCIES FOR UNDERGRADUATE MEDICAL EDUCATION AND INSTITUTIONAL LEARNING OBJECTIVES (ILO’s) cont...

PR 6  Demonstrate a commitment to personal health and well-being, and recognize and address personal attributes, attitudes, and behaviors that may adversely influence one’s effectiveness as a physician.

PR 7  Define professional impairment and describe the role and responsibility of health care professionals in addressing impairment and unprofessional behavior in colleagues and in the profession.

Practice-based and Lifelong Learning (PL)

Students must investigate and assess their academic and clinical performance, develop skills for lifelong learning and personal improvement in order to improve patient care.

PL 1  Demonstrate strategies for analyzing, identifying and improving personal deficiencies in medical knowledge, clinical and collaborative skills, and professionalism.

PL 2  Seek and respond to feedback about professional performance.

PL 3  Retrieve, critically appraise, and integrate current, evidence-based biomedical information into patient care and clinical decision-making.

PL 4  Apply principles of medical informatics, patient safety and quality improvement to enhance patient care.

PL 5  Apply the foundational principles of basic, clinical and translational research to patient care.

PL 6  Describe and apply principles of population health improvement for specific populations with attention to access, cost and patient-centered clinical outcomes.

System-based Learning (SL)

Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care, including barriers and drivers of health and health care access.

SL 1  Describe various approaches to the organization, financing, and delivery of health care locally, nationally and internationally.

SL 2  Advocate for quality patient care and describe strategies for assisting patients in dealing with system complexities.

SL 3  Define the roles of various health professionals in the health care team and describe how successful collaboration can improve individual patient care and system performance.

SL 4  Describe the role and responsibility of physicians in developing and implementing health policy.

SL 5  Describe health disparities and health care disparities and how they affect outcomes of the health care system.

Approved by the UCC on April 27, 2012
GRAND ROUNDS FOR THE MONTH OF FEBRUARY

“Percutaneous Aortic Valves”
February 5, 2013
Daniel Steinberg, MD
Medical University of South Carolina
Assistant Professor for Division of Cardiology

“Should I Be Using Cerebral Oximetry in the Heart Room”
February 19, 2013
Gregory Fischer, MD
Mount Sinai Hospital
Associate Professor Cardiothoracic Surgery

“Heparin Resistance in the Cardiac OR Management Strategies”
February 26, 2013
Alan Finley, MD
Medical University of South Carolina
Assistant Professor for Anesthesia and Perioperative Medicine
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 Janine Sims or Kim Crisp. Thanks so much!!

Kyle Branham, MD: Preparing a patient at night for the next day, and following up in the morning.

Laura Roberts, MD: Cleaning out the refrigerator in 525 CH kitchen.
Wow! Thank you!

Eric Nelson, DO: For contributing to Sleepy Times so often and always providing great input each month!

Janine Sims: For always lending a helping hand any time it is needed!

Charity Ball: February 16, 2013
Location: Memminger Auditorium

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

We Would Love to Hear From You!
If you have ideas or would like to contribute to Sleepy Times, the deadline for the February edition will be February 18, 2013.