MESSAGE FROM THE CHAIRMAN:
-SCOTT T. REEVES, MD, MBA

Foundation for Success

My routine on Sunday mornings is to read the newspaper before getting dressed for church. Recently, I came across the headline in the sports section of the Post and Courier, “Holtz’s USC legacy, former football coach built the foundation for success.” REALLY… Holtz record was 33 wins and 37 losses at the University of South Carolina from 1999-2004. However, I did decide to read further and eventually agreed with the premise of the article, which was that Lou Holtz at the age of 77 is a top motivational speaker.

Coach Holtz has a powerful message that should resonate with us all. “Today, everybody wants to talk about their rights and their privileges. Twenty-five years ago, people talked about their obligations and their responsibilities.” As I sat on the couch, I began to think how the world has changed over the past 25 years. Most of us went into the medical and nursing professions primarily to help people during acute illnesses or to improve a patient’s wellbeing. In the process, society has rewarded us with respect and financial security.

So what are our obligations and responsibilities? Fortunately, Lou gives us only three rules to follow to answer that question.

1-Do the right thing
2-Do your best and
3-Show people you care.

Wow… Thank you Lou for challenging us all with pretty simple advice! In this edition of Sleepy Times, we will celebrate our work in Tanzania. We are making a difference.
SOUTHERN UNIVERSITIES DEPARTMENTS OF ANESTHESIOLOGY CHAIRS: JUNIOR FACULTY VISITING PROFESSOR SERIES

The Southern Universities Departments of Anesthesiology Chairs (SUDAC) Junior Faculty Visiting Professor series is a program started in 2007, which allows for the exchange of junior faculty between SUDAC institutions as visiting professors. This is an excellent opportunity for our faculty to see a different program and give a couple of lectures. One of these lectures is their grand rounds series. It also allows networking and frequently becomes a site whereby a chairman can ask senior members of the host institution to write a letter of recommendation for you during your promotion process. Many of our faculty members have participated.

All junior faculty should carefully consider what lectures you would be interested in giving and send a list of the titles to Dr. Reeves to submit for consideration to the other SUDAC chairs. Ideally, MUSC will have 2-3 of our faculty selected each year and would host 2-3 at MUSC.

CONGRATULATIONS TO 2014-2015 NEW CHIEF RESIDENTS

Dear Department,

It is with great pleasure that I announce the 2014-15 chief resident election results. Drs. Ashley Lefevre, Bryan Covert, and Walead Hessami will be serving in this important role. Please take a minute to congratulate them on this important position. I look forward to working with them and know they will do an excellent job. I’d also like to take this moment to thank our current chiefs, Drs. Brandon Sutton, Parker Gaddy, and Brystol Henderson, on a spectacular job this year.

Sincerely,
George J Guldan III MD

Ashley Lefevre, MD  Bryan Covert, MD  Walead Hessami, MD
At the age of 8, Ebony Hilton told her mother she wanted to be a doctor when she grew up. From that moment on, her mother called her Dr. Hilton.

At first, it just seemed to be something that caused Ebony and her two sisters to giggle. But her mother’s intentions were far wiser than that. She was validating her middle child with an understanding that if she really wanted something, she needed to believe it was possible. Ebony never ventured far from that desire. After graduating from Spartanburg High in 2000, she took her dreams and desires to the College of Charleston. She also took with her a quote from her mom that she had heard often, “The more you know, the further you’ll go.” Ebony was only going 200 miles, but fueled by her mother’s urging and wisdom, she was about to journey to an unknown world.

I’d say Ebony Hilton made the most of her four years at the college. In 2004, she graduated magna cum laude with bachelor’s degrees in biochemistry, molecular biology and inorganic chemistry.

Her mother encouraged her to learn as much as she could, but c’mon already! Is the doctor in?

Ebony entered MUSC and graduated in 2008. She still wanted to be a doctor, but given her resume and her grades, there were quite a few options. Initially, pursuing obstetrics or pediatric cardiology were possibilities. During her four year residency, Ebony’s eventual destination would crystallize. It was while watching a woman during childbirth suffer a seizure that she saw an anesthesiologist come into the room and restore calmness and order. From that moment, she wanted to be “that” doctor. Later, she decided to specialize in critical care, which means she spends most of her time in the intensive care unit or the emergency room.

Through it all, it’s her mom’s example that provides her impetus to serve and succeed. A mom that raised three girls with no father around. A mom who worked the swing shift at the Michelin plant while still serving as PTA president. Ebony says she was the middle child, caught between a beautiful, smart older sibling who is now an accountant and a younger sister who was funny, a talented singer and now a teacher. Ebony was the shy, skinny, curious child wearing oversize glasses. But every birthday card was addressed to Dr. Hilton.

Out of Africa

Ebony was raised in a rural, humble area of Spartanburg often referred to as “little Africa.” Most people who lived around her were poor and from single parent homes. Anybody coming out of her situation could have easily been labeled high risk. But that would be short-changing the mother who raised these Hilton girls. Ebony Hilton, 31, was hired by MUSC last year as the first African-American female physician anesthesiologist. She was surprised to hear she was the first and doesn’t want to be the last.

In a few weeks, she will head to Tanzania to teach some African students some of what she knows regarding pain management and keeping patients safe and comfortable during surgery. That will be quite a road trip from “little Africa” in rural Spartanburg. She’s certain to explain some of what she’s seen and a bit more of what she gained from her considerable education.

Let’s see, if you’re keeping score: that’s 26 years of school, eight graduations and seven degrees. But the greatest advice she’s likely to give those students and others she encounters as she begins this career? That’s easy: “The more you know, the further you’ll go.”
A SAD DAY IN THE DEPARTMENT, FEBRUARY 19, 2014
RESIDENT AND FACULTY BOWLING NIGHT
BY: SCOTT REEVES, MD

On a warm night the department had a very productive pediatric journal club at the Alley in downtown Charleston. I want to thank the faculty for the good turn out. As has become our tradition in February, we then proceeded to have our faculty vs resident annual bowling competition. It was very competitive. For only the second time in history, the residents prevailed under the arm of new comer, Tony Lawson. Tony is one of our interns who bowled a very respectable 216 to beat the faculty high scorer and runner up, me, at 152.

Tony reportedly played in college. The resident interview committee has now met and revised our questions for applicants to identify potential future competition. It seems that my common question, "Can you touch the ceiling?" is not a good enough discriminator. In addition, the faculty incentive plan may need modification.

Faculty, do not lose heart. I am sure that Dr. Lawson will be randomly assigned call for next year's event. Got to love Spinfusion. David Chandler will make sure that future Mark Henrys who bowled 40 are on call. Ouch!!!

All kidding aside, congratulations to the residents who have bragging rights for the next 12 months.
We have finally finished updating the antibiotic guidelines. The attached copies have the changes highlighted and below is a summary of the changes.

1. The biggest change is that we increased the Cefazolin dosing. Anyone less than or equal to 120kg gets 2 grams and anyone over 120kg gets 3 grams.
2. We added a column for coverage for pts who are MRSA positive.
3. Please also pay attention to the redosing times because they have also changed. Cefazolin will now be redosed at 4 hrs instead of 3.
4. Clindamycin dosing has increased from 600mg to 900mg.
5. For Cesarean Sections we have added Metronidazole 500mg based on our population and infections at MUSC.
6. Gentamicin dosing has increased to 5mg/kg.
7. No specific SCIP changes, but the SCIP abstracted procedures continued to be marked by an asterisk.

Please review these and let me know if you have any questions. These have been sent out to the all three holding areas, surgeons and residents. I hope that we can start using these by March 3rd.

Perioperative Guidelines: Inpatient
Perioperative Guidelines: Outpatient

Epic Follow-Up

By: Susan Harvey, MD

Colleagues:

The recent Epic Kick-off presentation, “A Day in the Life,” provided a brief introductory overview of the documentation workflow throughout perioperative services. The presentation was recorded on Tegrity for those who desire to review the presentation. Please open the following hyperlink to access the program: https://tegr.it/y/1dcr6.

The attached documents for your review include an accompanying short power point presentation, as well as questions from the audience with corresponding answers. Should you have any additional questions, please let me know.

If you are ready to start exploring the world of Epic and would like to activate your Epic view-only, please enroll at https://www.musc.edu/medcenter/epic/webaccount/form. Epic recommends that you get ahead of the game and begin your training by completing a few introductory CATTS modules by self-enrolling on-line at http://mcintranet.musc.edu/epic/documents/ELEarningEnrollmentInstructions4.26.doc. I strongly encourage each of you to enroll in Epic view only and CATTS modules so you have some familiarity with the program before formal training begins.

Thanks in advance for reviewing this information!
Please see the attached links below for more information:

O/R Question & Answer Demo
OpTime/Anesthesia Demo
Abdu Algendy, MD; January 18, 2014

Thank you. Just boarded Emirates flight to Dubai enjoying bulkhead seats!

Will Hand, MD; January 20, 2014

Dr. Reeves,

We made it… almost all the way into our room at the Serengeti house…

No surprise, there are no available rooms for the foreseeable future (no one leaving for 1+ week). I will go talk with Josephine tomorrow morning, but we are at a hotel in the meantime. Also, the one resident I met (peds Cornell) told her the $45 was way too much and she let him just pay $25… which is much more reasonable. I’ll broach that AFTER trying to get a room for Abdu at least (both preferably).

Emirates was a nice airline and they pay for the hotel for the long layover—I do actually prefer the Delta flight if leaving on Friday as we left CHS at 5PM. Food was good, service excellent.

Our plan is to meet Josephine tomorrow, get room figured out, fix phones (both SIM cards have been deactivated due to lack of use—I should be able to have them flashed…) and then get introduced to the anesthesia people and figure out the schedule for Wednesday.

Will Hand, MD; January 22, 2014

Dr. Reeves,

We have finally overcome the many obstacles that exist between Charleston and Mwanza. We have made it into the Serengeti House and are enjoying the other “mzungus” (foreigners) here from Cornell, Northwestern, the Ukraine and Germany.

It’s interesting to return to Bugando— there are so many familiar faces most of whom at least pretend to remember me. Dr. Matasha has apparently advertised the international support that occurs at Bugando and the result is that he now has 40 anesthesia students per year!! The class is broken into three groups on 4-month offsets in their education who are on a clinical day-clinical day-study day rotation. It is simultaneously pleasing and disappointing to see that not much has changed here. The nature of patients and students is content, optimistic, and respectful but sadly the clinical progress has been subtle. The students are all new faces, but act exactly the same— totally silent when I ask questions. I asked the class today to raise their hand if they’ve heard of Neostigmine before… one hand went up. I waited a few seconds and then asked them to raise their hands if they HAVEN’T heard of neostigmine… no hands… so who knows when they don’t answer when I ask for questions… Highlight of my day was finishing lecture to a round of applause— our residents need to take note! MUSC-donated equipment, however, is filling vital roles in the operating theater: now each recovering patient has a pulse ox that is actually connected (AWESOME), our “disposable” BP cuffs show the wear of extended service, and our central line kits from prior trips have all been used on “critical” patients— what that means I’m not sure.

Abdu and I started lecturing and running morning report with Dr. Matasha. It is obvious how much impact our expertise can have with these practitioners as they routinely have anesthetic plans that need major revision. Only time will tell how much we can overcome with sporadic presence, but as we were cited in the Anesthesiology article, our willingness to assist in education and care delivery fills a vital need for this population. (For article please see pages 15-17).

I look forward to writing again with an update and returning to share the experiences with our colleagues. Thank you for your continued support.
TANZANIA UPDATES THROUGHOUT TRAVELS CONTINUED...
FROM: DR. WILL HAND AND DR. ABDU ALGENDY

Will Hand, MD; January 22, 2014

Dr. Reeves,

Hotels have also increased prices…

I negotiated to $30 per night for us. Since they still technically controlled us even getting a room I didn’t push my luck to $25. The new contact Josephine isn’t very useful— the Cornell people are also very frustrated.

Met with Matasha and will be all set to get going 7AM tomorrow.

Onward.

Abdu Algendy, MD; January 23, 2014

Dear Dr. Reeves,

I hope you are well. We finally arrived to Mwanza! On our way to Tanzania, we spent a day in Dubai. I was able to see my parents and also give Will a quick glimpse of Dubai. My Dad gave us a tour while driving through old Dubai. He took us back in time and showed us the old, small and Bastakiya houses and old markets. We also went on a boat ride in Dubai’s historic creek. He then took us to the new Dubai where beautifully designed skyscrapers are everywhere. We had dinner observing the dancing fountains and Burj Khalifa.

We arrived at Dar Es Salam on Monday afternoon. We stayed a few hours at the airport and took a flight to Mwanza. We arrived there on Monday night. As you know we spent the 1st night at a hotel because someone was staying in our room at the Serengeti house. The next morning we were able to negotiate a better rate for the rooms at the Serengeti house due to the “inconvenience.” We went up and down the stairs and to multiple offices to finally get our Bugando Medical Center IDs (but with no debt or payroll options). We then enjoyed a spectacular sunset on the dancing rocks.

On Wednesday we met with Dr. Matasha and the Anesthesia students and participated in the morning report. We started lecturing the students and set up a curriculum which we plan to give during our stay. Everything is going well. People are polite, welcoming and appreciative of our efforts. We are planning to go on Safari this weekend with folks from Northwestern and Cornell.

I will be sending separate emails with pics due to internet speed.

Thank you.

Abdu

Drs. Will Hand and Abdu Algendy
TANZANIA UPDATES THROUGHOUT TRAVELS CONTINUED...
FROM: DR. WILL HAND AND DR. ABDU ALGENDY

Will Hand MD, January 26, 2014

Dr. Reeves,

One week in the book and I have mixed emotions that my stay is half over. I look forward to returning to “real life” but will miss Mwanza and know I’m leaving way before the job here is done. I trust Abdu will continue to teach and hope to have a good idea of where Ebony and Brystol should start when they arrive. I’ve found that the new expanded class size (technically 3 classes with rolling admissions) is difficult to evaluate: there will be three times more graduates, but we fear the quality of each may suffer by more than the reciprocal percentage. As you know there are only 5 operating theaters (rooms) and generally 25-35 cases per day… with 40 students there simply aren’t enough to go around. This results in most cases having 4-5 students trying to “learn” the art of anesthesia. It is obvious to Abdu and I that this is not an ideal arrangement for learning — it’s also actually very difficult to teach when we have to crawl through the students to identify a learning point.

We’ve currently decided to deliver two lectures per day ranging from 1.5-2 hours separated by lunch. The one of us not lecturing goes into the OT to try to teach. Intraoperative teaching is unique because a) there are no ECG stickers left (so no ecg), b) they don’t have sampling lines so they just turn the vaporizer to about 2MAC of whatever gas they’re using with high flow 100%O2, c) they have limited ability or financial authority to get labs and d) the surgeons are only marginally better than the anesthetists so even simple cases can go awry. That said, we’ve already learned to identify the most important teachable patterns (perioperative management of pyloric stenosis babies as sick as you can imagine), identification of cases that can be done with regional (spinal), and blood availability for cases likely to require transfusion. One thing Abdu and I continue to struggle with is Succinylcholine use in every patient (even 2mo babies) with no [K+], not ECG, and no calcium to bolus. I’ve run 60 attendings through a hyperkalemia simulation and yet am at a loss for a constructive way to change practice patterns and/or teach management of symptomatic hyperkalemia (I’ve told them to give insulin (no D50 avail) and albuterol) but I hesitate that I’m going to cause hypoglycemic events that are not warranted…

The difficulties of the experience are also part of what makes it interesting/fulfilling — there are so many things to improve. Abdu and I have conversation nightly about what to do first and then have reconnaissance sessions to see what options even exist before we can teach. I remain enthused by the fact that all periop patients are on pulse ox (and the ICU!) which has to have saved many, many lives since my last visit and the American donation of hardware.

To everyone back home, enjoy the monitor-rich-hyper-educated world we live in. It is true that the technical quality of our care surpasses that delivered here, but I find myself challenged to endorse that the human empathy is as consistent and profound as that here. I’m as guilty as anyone to turn a patient into a diagnosis, but I’m reminded of why we became doctors 45 multiple-choice tests ago — to help people when they are in physical need.

Kwa dhati (sincerely)i,
William R. Hand, MD

Will Hand, MD January 31, 2014

Dr. Reeves,

I am beginning the long journey home from Tanzania today. I’m eager to see my family and coworkers but realize, again, how much benefit our presence can be at Bugando. Abdu has 2 more weeks and is doing a great job teaching and involving himself with the students. A few of the best students have asked for private tutoring to maximize the benefit of our presence. In the airport in Mwanza I ran into Rob Peck, the intensivist from Cornell who has lived in Mwanza for 7 years now and is the cornerstone of their many departments efforts at Bugando — he sat down and said he recognized me . . . after a brief re-introduction he said that he had heard about a patient Abdu saved in the PACU.
The woman had undergone a simple esophagoscopy for dysphagia (presumed esophageal CA here) under general anesthesia with ETT. The procedure was brief and the only comment from the anesthetist was that her sats fell a little during the procedure but they simply pulled the ETT and took her to PACU. Providentially, Abdu was walking by—the PACU didn’t have electricity that day so the pulse-oximeters we were so pleased to see in place last week sat idle. He watched the woman’s labored and sporadic breathing and immediately requested attention for her. She had a SaO2 of 55%. Abdu immediately got O2, ambu and made plans to reintubate—he hoped to return to the OR, but another patient had already replaced her (Dr. Harvey would love the 7-minute turn over times here!). Due to the lack of resources in PACU he simply took that patient into the OR as well. She was reintubated and ultimately taken to PACU. Upon further review, the GI doc indicated the ETT was in the esophagus but that didn’t concern him. Abdu and I assume the patient was apneic for a long time and may well have aspirated from the insulation of the stomach.

The very next day an uncomplicated tonsillectomy had an esophageal intubation. The patient had gradual but significant desaturation (into 30s?). Eventual hypotension and questionable cardiac arrest followed. The team administered adult dose Epi and eventually reintubated the patient (only because the tube was dislodged, I fear). The debriefing the next day was not punitive, but also lacked the urgency and seriousness it should have. I value more and more the type of situational training I was provided and we continue to deliver to residents and attendings alike. I’m certainly biased, but Anesthesia Crisis Resource Management may help prevent as many problems as it actually helps practitioners treat.

Bugando has many needs, but perhaps ETCO2 is next on the list . . .

I look forward to discussing the experience with you and others when I return. It appears you’ll appreciate the warm weather I am bringing with me… the 80’s are tough to leave too!
Post intubation the patient had copious secretions coming through the ETT, which had to be suctioned (this raised my suspicion more that patient aspirated from missed esoph intubation during esophagoscopy). Since there was some sort of "electricity breakdown" in the PACU the only suction machine there was not working. I couldn't transfer patient to the ICU to be suctioned there. The only thing I had in front of me was to take the patient back to the OR while another case was running to use their suction. Which might be fine if we had portable O2 cylinders but they did not. So I had to bag the patient in PACU using wall O2 until Sats are acceptable. Then run run run to the OR to suction the patient and then run run run back to the PACU to bag the patient using wall O2 until sats are up again before transferring to the ICU. Maybe our next donations should be capnography and or even better with anesthetic gas measurement equipment too.

I also find it difficult trying to teach students about emergence and reversal of muscle relaxants before extubation and then find that they send patients to PACU to get extubated there without reversing muscle relaxation. Currently they are out of Succinylcholine. They have been using Atracurium to intubate for short procedures (Tonsilectomy, esophagoscopy, etc..). After the procedure these patients are sent to the PACU intubated. Within few minutes they are extubated without neostigmine. So far I have not seen a patient re-intubated because of residual muscle weakness but I am sure I have missed some and the ones who did "fine" did so because there are no pain medicine on board.

Although, before coming here I never was expecting that the situation was so dire. What makes me excited every day is that I feel the students are very appreciative of what we are doing to help enhance their education. I was approached by one of the students asking me to give him and his group more lectures to cover as many topics as we can before I leave. Unlike the other students who stay at BMC for 1 year, this group is only at Bugando for 6 months and they wanted to take advantage of our presence. I admire their eagerness to learn and how they're not discouraged by the lack of resources and poor teaching circumstances.

Will and I have expressed to Dr. Matasha, the lack of clinical experience students get given their large number. He mentioned there has been an increased need for anesthetists around Tanzania but also the BMC is building 4 new ORs (which he thinks will make the difference).

Outside of the hospital, I enjoy the wonderful weather and beautiful nature of Mwanza, which I will definitely miss when I leave.

Sincerely
Abdu

Abdu Algendy, MD; February 11, 2014

Dear Dr. Reeves,

I hope you are well. I have two more days left at Bugando and I am leaving early Friday morning to start my trip back home. I have a lot of stories to tell when I come back. It is hard to quantify the enhancement in student education after spending only four weeks with them. I have received comments from several students that they have never understood such and such topic in anesthesia like this before, or if I can stay with them until the end of their training to learn more. I did notice this week that some students showed improvement in their case presentations in terms of better assessment of patients’ ASA status and better understanding of anesthesia and surgery concerns. Clinical education was more challenging but valuable. There was always continuous flow of questions from students and anesthetists about cases they are doing in the OR. Opportunities to improve education and patients’ life at Bugando are tremendous and it feels very rewarding that you can be part of this every day.
I also want to mention that I have learned so much. This experience has taught me about patience, contentment and gratitude. Often times we take our education and excellent resources back home for granted. In addition, learning to practice anesthesia in a very limited resource environment out of my comfort zone and depending on clinical findings more than labs and monitors has helped me to work under different and challenging circumstances.

I informed Dr. Matasha that Ebony and Brystol are coming in March and his reply was "Oh! More doctors, good, good more teaching is good!" For the students, I have a copy of their curriculum and I marked the chapters I gave to each group. I am sure that Ebony and Brystol might need to repeat some, but also they can continue from where I stopped.

I miss my wife and daughter, and I also miss my friends and colleagues at work. I look forward to returning back to Charleston and sharing my experience with everyone (and lots of pics too). This has been a life-changing experience where I have learned from the students as much as they learned from me. Thank you and to the department for this opportunity, and I hope I can return back again in the future and see how things have progressed.

Looking forward to see you next week.

Abdu

Abdu Algendy, MD; February 14, 2014

Dear Dr. Reeves,

I am currently in Dar airport waiting for my flight to Dubai, transit time there is 3 hours before I take the long flight to Dallas. The last week of my trip was a slow one in the OR. Yesterday had the potential to be an exciting and scary one too when I learned from morning report that they posted an open ASD repair for a 12 year old male. They never discussed posting this case before and also the student presented the case as if it was an ordinary general case. I asked more questions about the patient, Echo report but all I got was ASD for repair. I was skeptical and also interested at the same time to know how will they perform an open heart surgery with scarce resources, absence of a cardiac anesthesiologist or even someone who is adequately trained to do cardiac cases. After giving a morning lecture I went to the OR to check where they were in the case but found that it was cancelled. "surprisingly" they found that the Echo showed the patient to be in heart failure, have Mitral regurgitation (unknown severity), Tricuspid regurgitation and who knows what else. I didn't get satisfactory answers regarding the size of ASD, Right side pressures or direction of shunt. Also someone recommended the patient to be transferred to a different hospital as the case was out of their expertise!!! I wondered where were all this before posting the case??!! I wanted to learn how the anesthetist prepared for the surgery, monitors, drugs, availability of labs, blood products, CPB etc... I found that she already setup an aline and CVP pressure bags and transducers, Etomidate, Fentanyl and Midazolam were drawn, there were dopamine and epinephrine drips on pumps and their only CPB machine was ready to go. I inquired about labs and if they will run any ABGs (since I didn't see them run labs during cases before) and I was told that there is an ABG machine working in the hospital somewhere on the 5th floor. The anesthetist then started to ask me about drug doses, setting infusion pumps and drawing labs which only confirmed my fears, and I was thankful that the case was cancelled. I didn't want to see another death on my last day at Bugando.

In the afternoon I gave a second lecture. After finishing the lecture, I was touched when the group leader handed me a gift that they all shared in and prepared for me. They were all thankful and grateful for what they learned. They all then started taking pictures of me with their cell phones as if I was a celebrity which felt so weird.

I look forward to discussing my stories and what I have learned with you soon. Thank you again for this great opportunity, your support and prayers.

Abdu
TANZANIA EXPERIENCE
BY: DR. ABDU ALGENDY

Our flight to Mwanza began on Friday evening and ended Monday night. After spending more than 65 hours of traveling, we finally arrived in Mwanza only to find that there was no room for us at the Serengeti House and we had to go look for a hotel room to spend the night in. The next day we fixed the housing situation, received our Bugando Medical Center IDs and I was introduced to Dr. Matasha, the only Anesthesiologist in the hospital. This took most of the day so we planned to start fresh the next day by attending the morning report when students present every single case of the day to Dr. Matasha.

At the Bugando Medical Center (BMC) I was told there was no ECG, no capnography, no gas analyzers and pulse oximetry was recently made available few years ago. The patients get extubated in PACU but it is often out of electricity so no Pulse oximetry or suction. I was getting prepared to what I will see, but I didn’t expect what I saw until I attended the first morning report and had my first encounter in the OR. Just after a 60 second introduction I was given drugs and asked to induce a patient when there was no endotracheal tube or circuit in the room and monitors were not attached to the patient. Only then, I started to realize what is the situation here and what to expect.

There were a total of 48 anesthetist students. They were divided into 3 groups. The first group was the “seniors” as Dr. Matasha used to call them. They started their training in June. He was always hopeful that seniors would answer questions the junior students would not know, but that was not the case. The middle group was the “Kigoma” group referring to their district’s name as they all came from the Kigoma district in Tanzania. This group started in December and will be there for only 6 months instead of one year. The last group was the January group referring to their start date, which was just a few weeks before Will, and I arrived. Each group had two days assigned as study days except the seniors group had only one. The group who had a study day presented the cases for that day during morning report and then stayed after to listen to lectures. They did not go into the ORs, which was odd to me that they did not follow the patients they saw the night before and formulated the anesthesia plan for but this was how they wanted it.
Morning report was an opportunity for Will and me to teach all students basic but important concepts in Anesthesia. For example, why we pre-oxygenate prior to induction or why we avoid mask induction for kids with full stomachs or infants with pyloric stenosis, managing a difficult airway and the importance of resuscitating pyloric stenosis infants prior to repair. We also recommended adjustment in anesthesia plans as much as time permitted us and it would significantly affect the patient’s care. After the daily OR cases were presented the students then presented the OR report from the night before. They mention the procedure, anesthesia done and outcome whether good or bad. Will and I thought of this as a form of M and M presentation and tried to teach what can be done differently to avoid the bad outcomes.

During my stay I gave a total of 20 lectures. Starting with the very basics from physiology and pharmacology to anesthetic considerations for certain medical and surgical conditions. I gave two lectures every day and sometimes three, as I privately tutored the Kigoma group outside of their study days. In between lectures I used to go into the ORs to do clinical teaching. It was sometimes difficult trying to correct some practices due to the lack of medications or other resources, such as extubating patients without reversing muscle relaxants or even reversing without checking twitches because there are no twitch monitors. Also, managing all difficult airways with inhalation induction or going through whole abdominal exploration case or ORIF of upper extremity fracture without a single dose of pain medicine unless Ketamine was used for induction. Labs were never drawn no matter how big the case or blood loss was.

On the other hand it was rewarding to see things taught in class being applied as much as they could. It was also fulfilling to quickly gain the trust of anesthetist and surgeon and to be consulted on various patients. I also got the chance to see medications in action, which I only read about in textbooks, like Thiopental, Halothane, Atracurium and Pancuronium. Having a few monitors and no labs helped me sharpen my physical exam skills and trust my instincts. You acquire skills to deliver safe anesthesia with the minimum information available.

Living the simple life of Mwanza gave me the chance to reflect on my life back home. The blessings we take for granted in the US are often not present in Mwanza. At the Serengeti house I woke up almost every day to find out that we were out of water and when it is available it is always cold. The electricity went out a couple of times and the Internet was limited. Food was a different story. Lizards were everywhere in the house but somehow they got scared from entering my room. There were med students and residents from Cornell, Northwestern and Australia who stayed with us at the house. The lack of technology and the social isolation it creates gave us the chance to sit down every evening and exchange stories and learn about each other’s backgrounds and life experiences. It was also beneficial to learn about how other departments of the hospital function and what problems they faced.
TANZANIA EXPERIENCE
BY: DR. ABDU ALGENDY

One of the most enjoyable aspects of Tanzania is its charming nature. The city of Mwanza is surrounded with awe-inspiring landscape scenes. The Bismarck Rocks are wonderful to look at with large deposits of granite, and the Victoria Lake in the backdrop enhances such beauty. In our first weekend, Will and I went on a Safari trip. I saw the most beautiful scenes in my life. I saw countless numbers of wildebeests, zebras, lions, leopards, hyenas, wolves, elephants, giraffe and much more. I was always tempted to jump out of the car and join the animals enjoying their natural habitat and running around on the endless green fields of grass, but I kept reminding myself that these are wild animals in their natural habitat and not like horses and dogs back home. I am the one who had to be caged in the safari car for my safety - I guess I used to watch Tarzan a lot when I was a child. Before sunset we arrived at our “jungle friendly” lodge in the middle of the Serengeti Park. We were given a lot of safety instructions, but I remembered only three of them. It was strictly forbidden to get out of our rooms alone after sunset, generators were switched off at 11 pm so it was pitch black and if we needed help then BLOW the whistle! I woke up a couple of times in the middle of the night and heard a lot of grunting, screaming and whooping. I slept again and hoped the next time I woke up it was light. The next day we continued our journey looking for more animals before we started our way out of the park and back to Mwanza.

Coming close to the end of my stay it was tough leaving the students when you know there was much more to teach, and also you start noticing improvement in their knowledge. At the same time it was also important to acknowledge that spending a couple of weeks with the students will not achieve the results we are hoping for. To really have an impact, there has to be a continuous presence of quality education, which can graduate well-taught and competent Anesthetists who can eventually teach future students “Safe Anesthesia” and achieve the goal of the Madaktari program. I encourage everyone to get involved in such projects if the opportunity arises. This trip has taught me on both the clinical and behavioral levels, and I would like to thank Dr. Reeves and the Department for giving me this amazing opportunity.

The Dancing Rocks
But What if There Are No Teachers ...?

Marcel E. Durieux, M.D., Ph.D.

It is a sobering realization that our ability to dedicate an issue of Anesthesiology to education, and to agonize about topics such as required simulation experience and optimal faculty–residency ratios, is a luxury not shared by much of the world. In many resource-poor environments, the number of clinical specialists is so low that even if qualified students, adequate facilities, and appropriate materials are present, education still may not occur, simply because there are no teachers.

The United States has approximately 25 physicians per 10,000 population. More than 30 countries make do with less than 1/10 of this number; the vast majority of these are in Africa (Fig. 1). The resulting problems with healthcare access are easily understood, but such a dearth of doctors also makes it essentially impossible to increase the number of physicians. Those in clinical practice are overworked, and the few that might be involved in teaching have to devote most of their time to administration. These countries are in a bind: there are insufficient staff physicians to educate many residents, and because not many residents are trained, there is no increase in the number of staff physicians. A critical mass of teachers is required before this problem can be solved, and therefore this vicious circle can be broken only with substantial outside teaching support.

Here are three examples from our specialty, covering a range of situations as found in east African countries with less than 1 physician per 10,000 population.

1. Malawi has no local anesthesiologists. A very small residency program is run by foreign faculty and combines education at the central hospital, where residents are supervised largely by clinical officers (COs), with a year in South Africa. The first trainee out of this program is about to graduate. Essentially all cases in the country's 25 hospitals are done by approximately 100 independently practicing COs: volunteers from Health Volunteers Overseas assist sporadically with CO training.† For comparison: Pennsylvania has about the same area and population as Malawi (approximately 15 million people); it has 1,900 anesthesiologists‡ and 3,000 nurse anesthetists.§

2. Tanzania has less than 10 anesthesiologists. Most work in private clinics in Dar es Salaam. One is employed at the university hospital in Bugando, where he is mostly engaged in administration, and does some didactic teaching for COs. Foreigners assist with CO training in Bugando and other places in the country.∥

3. Rwanda has about a dozen anesthesiologists, all employed at the two university hospitals, a military hospital, and one private clinic; work in approximately 40 other hospitals is done by COs. The Canadian Anesthesiologists’ Society and the American Society of Anesthesiologists have provided teaching and logistical support to a Rwandan residency program started in 2006.¶ This program has graduated several specialists, who have...
Anesthesia Article: “But What If There Are No Teachers...?”

By: Marcel E. Durieux, MD, PhD

Fig. 1. Physicians working around the world. The relative size of each territory on the map corresponds to the proportion of all physicians in the world who work there. In 2004 there were 7.7 million physicians working around the world. If physicians were distributed according to population, there would be 12.4 physicians to every 10,000 people. The most concentrated 50% of physicians live in territories with less than a fifth of the world population. The worst off fifth are served by only 2% of the world’s physicians. Note the disproportionately low number of physicians in Africa (red). © Copyright Sasi Group (University of Sheffield, Sheffield, United Kingdom) and Mark Newman (University of Michigan, Ann Arbor, Michigan). Reproduced under Creative Commons license.

then spent additional training time in Canada. Currently, a large-scale interdisciplinary program, Human Resources for Health (also see announcement on page 26A in this issue of Anesthesiology), is expanding residency education in many specialties by an influx of foreign teaching faculty (more than 100 FTE, of which 5 anesthesiologists).**

These are complex situations, but they have simple and direct implications for patient care. Although COs often have a wealth of clinical experience and are technically skilled, their limited training in physiology, pharmacology, and the principles behind anesthesia practice is a severe constraint and contributes to the high perioperative mortality in these countries (5–10%, with mortality related to general anesthesia as high as 1 in 150).†† That COs themselves are in short supply and overworked only compounds the problem. Appropriate national policy and financial capability are essential to solve these issues: one needs to educate enough medical students to provide inflow into residencies and specialists, and once they graduate from their training programs, they must be adequately supported. In some countries, residents and COs have to pay tuition, making it difficult for many to pursue specialization. But our concern here is how best to supplement the local faculty with foreign educators, to allow residency programs to build capacity. There is no single right answer, yet many vital issues to consider. Here are some pertinent questions referenced to the situation in Rwanda.

1. Who organizes the program? It is critical that any such program be comprehensive and unified, and driven by the local clinicians and administration—they are the only people who understand the local situation. Too many organizations send teachers for short periods of time at irregular intervals, which can never be a structural solution. Preferably, all efforts directed at a residency program should be aligned, and all visiting faculty should teach according to a defined curriculum, with local faculty in charge of the process. The Canadian Anesthesiologists’ Society/American Society of Anesthesiologists program in Rwanda is a good example: the program sends one anesthesiologist—United States or Canadian—each month, and thus provides a full FTE. A detailed curriculum tells each visiting faculty member exactly which subjects to teach.

2. Who are we teaching? Residents or COs? Realistically, COs will be the primary anesthesia providers in most hospitals for many years to come, and it is in the patients’ best interest that COs are optimally taught. Therefore,

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BY: MARCEL E. DURIEUX, MD, PhD

EDITORIAL VIEWS

...participation in CO training is highly valuable. But if the eventual goal is to have, say, at least one anesthesiologist available in each hospital, residencies will have to be started and residents educated at the same time that we help train COs.

3. Should we go there, or should they come here? Instead of setting up residency programs in various countries and sending faculty over to teach, it may seem attractive to bring a few residents at a time from a resource-poor country to the United States and let them take part in our training programs. However, this approach has many problems. Licensing requirements are a major stumbling block, but maybe more important is that such people would be trained in a way of providing anesthesia that is radically different from what they will do back home. In fact, they would learn to use drugs and techniques that mostly do not exist in their country, and not gain familiarity at all with those they will be using there. What is feasible and useful, as shown by the Canadian Anesthesiologists Society/American Society of Anesthesiologists program, is for residents who have completed training to spend several months in a Western country to learn advanced techniques.

4. Can we do distance teaching instead? We can, and we should, but it cannot replace bedside teaching in the operating room. Technically, video conferencing to most locations in the world is feasible these days. Our institution does regular joint case conferences with the residents in the Rwanda program and our own, and both sides find these very educational and enjoyable.

5. How much time should visiting faculty spend? The answer to this question depends on many factors. A longer stay (6 months at least) may be preferable, as it allows the faculty to truly understand the work environment of the trainees. But it is very difficult for a practicing anesthesiologist to take extended time off work, if only because of the financial implications. The Rwanda Human Resources for Health program requires extended stays (preferably a year), but that program comes with substantial salary support. Other programs, such as the Canadian Anesthesiologists Society/American Society of Anesthesiologists program, have demonstrated that short-term faculty, when properly guided, can be effective. Even in that setting, though, long-term contacts are necessary for curriculum building.

6. Should U.S. residents participate? Being able to teach in a country with very different approaches to anesthesia is an extremely valuable contribution to a resident’s education. Senior residents are very effective teachers because they often connect more easily with the local resident group, and may carry a greater store of practical clinical pearls to share than does the more academic faculty member. Many overseas teaching programs allow resident participation, and the American Board of Anesthesiology has formulated a set of rules that allow time spent on such effort to count toward residency requirements. U.S. teaching hospitals are not always willing to pay residents’ salaries during away rotations, but they should be strongly urged to support these efforts—after all, the hospital will be more than willing to share the publicity that comes from this kind of work.

We should support well-designed overseas teaching efforts. Because without our help, it will remain impossible for the few, overworked anesthesiologists in Africa and elsewhere to create the critical mass, to train enough residents, and to break the vicious cycle of insufficient personnel that prevails each patient from having access to an anesthesiologist when needed.

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The author is not supported by, nor maintains any financial interest in, any commercial activity that may be associated with the topic of this article.

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Reference

NEW BABIES IN THE DEPARTMENT

Congrats Parker Gaddy:
Andrew McLean Gaddy,
Born January 16, 2014, 8lbs

Congrats Jarret Todd:
Jackson Wayne Todd,
Born January 25, 2014, 6 lbs, 15 oz, 20 in
GRAND ROUNDS FOR THE MONTH OF MARCH

“Anesthesia Medically Challenging Case Conference”
March 4, 2014
George Guldan, MD and Ryan Gunselman, MD
Medical University of South Carolina
Assistant Professors
Residency Program Director and Associate Residency Program Director

“Foundations in Teaching and Learning”
March 18, 2014
Mary Mauldin
Medical University of South Carolina
Professor

“Pulmonary Hypertension”
March 25, 2014
Michel Sabbagh, MD
Medical University of South Carolina
Assistant Professor
I HUNG THE MOON

Don’t forget to nominate your co-workers for ‘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 Crisp. Thanks so much!!

Heather Highland, CRNA: For Being a Superstar!

Beth Jennings, CRNA; Michelle Ballister, CRNA; Mike Sloan; CRNA: Thanks for being a great help and being a team player during the winter storm.

Jake Freely, MD and Amy Leatherman, CRNA: Great work during snowmageddon!

Resident and Fellow Graduation: June 20, 2014
Location: Mills House Hotel at 6:00pm
Christmas Party: Friday, December 12, 2014 at 7:00pm, at the Carolina Yacht Club

March 2014
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 April edition will be March 24, 2014.