



Medical Student Newsletter

November 2012

ANESTHESIOLOGY™ 2012 Annual Meeting

Recap From a Medical Student's Perspective

By: Daniel Hansen, MS3, MSC Chair

As we get further into the fall season, it seems appropriate to reflect on what has occurred throughout the preceding months. Significantly, we recently completed the ANESTHESIOLOGY™ 2012 Annual Meeting in Washington DC. For those who were able to attend, it was a remarkable experience. As one of the largest medical societies in the world, the ASA hosts an impressive conference. Thousands attend and are drawn by a vast array of lectures, demonstrations, workshops, conferences, exhibits, and activities. This year we welcomed over 350 medical students, of which a record participated in research presentations or medically interesting case reports.

The conference opened with an entertaining and informative dialogue by James Carville and Mary Matalin. The married couple discussed the political future of the country, made election predictions, and entertained the audience with their wit and striking relationship. And of course, they spoke directly to health policy issues pertinent to the current and future practice of anesthesiology.

Following the opening session, the medical student House of Delegates convened. The meeting began with the election of the new Medical Student Component (MSC) Governing Council. The newly elected GC is:

Chair:	Daniel Hansen
Chair Elect:	Chad Greene
Secretary:	Rachel Wood
Senior Advisor:	Dennis Thapa
Member-at-Large:	D. Craig Barnette, II
Delegate to the AMA:	Brad Cardonell
Alt. Delegate to the AMA:	Jaime Sparling

Immediately following the elections, the MSC hosted a number of student-focused lectures where we were honored to hear from many of the leading figures in the field of anesthesia. Lecture topics included the future of anesthesia, what residency program directors look for in applicants, research opportunities for interested students, and how to prepare for the residency application process.

At the conclusion of the MSC House of Delegates meeting, we transitioned to the annual Residency Program Meet and Greet. For many, this is the highlight of the entire conference as it is an opportunity to speak directly with program directors, faculty, and residents from anesthesia programs across the country. We had a record number of 58 programs in attendance and the huge ballroom was packed with students and programs.

After the Residency Program Meet and Greet, we topped the day off with a social mixer with the Resident Component at a local nightclub. Students and residents enjoyed food, drinks, and a relaxed environment where they continued to network and make friends.

Sunday morning came (too early) for those attending the MSC workshops. The residency programs at Georgetown and George Washington Universities hosted 30 students each for a day of lectures, simulations, and workstations designed to educate and engage interested medical students. Both programs did an outstanding job and the feedback was unanimously positive from both students and hosts alike. Students participated in fully simulated OR settings where a variety of situations were presented and the medical students responded and were debriefed. They also were able to participate in intubation stations, local nerve block stations, and get some hands-on training with a variety of different products. For the majority of those able to participate (space was very limited), these sessions were considered a highlight of the conference. Over the weekend and into the final days of the conference, medical students participated in a variety of lectures, presentations, and other educational opportunities. A number of students presented research or case studies themselves.

In conclusion, the ASA Annual Conference (held every October) is a unique and rewarding experience for any medical student able to attend. The conference offers something for everyone and the offerings geared toward medical students is growing every year as the ASA invests more and more time in cultivating the future of the field.

I would like to personally thank everyone who attended and encourage you to share your positive experiences and promote the conference to your peers in the years to come. I hope to see you all next October in San Francisco!

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The ASA Medical Student Component and The Lifebox Foundation: Joining Forces to Make a Direct Difference

By: Chad Greene, MS2, MSC Chair-Elect

Not Just a Night Out

It is with great excitement that we announce a collaboration of the ASA Medical Student Component with the Lifebox Foundation in ensuring safer surgery throughout the world. Over the past few weeks, the ASA MSC Governing Council has been working closely with Lifebox to devise ideas and promote awareness for this remarkable campaign. We look forward to the year to come and rejoice in the fact that we are making a difference on the world stage. Here are a few words from Sarah Kessler, the project manager at the Lifebox Foundation:

A crisp fall evening in Washington D.C. and a few hundred medical students, recovering from a busy afternoon of considering their futures at the Residency Program Meet and Greet, pile into a local bar for a well-deserved Night Out on the town.

It couldn't seem further from the daily lives of patients and anesthesia providers at the Hospital Nacional General in Santa Ana, El Salvador, several thousand miles away – and yet...

If you attended the Night Out in D.C. then you actually made a direct difference to the quality and safety of anesthesia care there. Thanks to the ASA Resident Component president-elect Dr. Nicole Weiss, who organized the sale of \$5 discount drink wristbands in aid of the Lifebox Foundation, you raised \$682 – enough to send nearly three Lifebox pulse oximeter packages to hospitals in need across El Salvador.

And so Lifebox did exactly that. Your three oximeters were shipped out alongside 84 other units in late October, to ensure that every government O.R. in the country had access to this essential monitoring equipment.

The units cleared customs a week later, and were put to work immediately. They are now providing safe monitoring to hundreds of surgical patients across the country, and a new peace of mind to anesthesia providers who were previously forced to anaesthetize patients with nothing more than a manual blood pressure cuff and a finger on the pulse.

What an amazing difference to make by showing up at a casual happy hour! Imagine what you could do with a dedicated plan.

The Surgical Safety Crisis

Today there are more than 70,000 O.R.s across Africa, Asia and Latin America where surgery takes place without a pulse oximeter.

Even a simple surgery can be a risky undertaking without monitoring, while complex emergency procedures - caesarean sections for mothers in obstructed labor, and essential surgery for road traffic accident victims – are fraught with danger.

Anesthesia mortality in low-resource settings is incredibly high: a 2005 study in Togo showed that as many as 1 in 133 people undergoing surgery were at risk from the anesthesia alone.¹

Lifebox is the first global charity to focus on this crisis of unsafe surgery in low-resource countries. We work in collaboration with national societies and local groups to distribute pulse oximeters where they are most needed, alongside an education program in pulse oximetry and the World Health Organization's Surgical Safety Checklist to support sustainable change.

Each Lifebox oximeter package is specially designed for the low-resource setting, using rechargeable batteries, generic-compatible probes, and a structure robust enough to withstand a fall off an O.R. table onto a concrete floor. Each one comes with a multi-language education DVD for self-learning and classroom teaching, and costs just \$250 including delivery to any country worldwide.

Join the Campaign: Make it 0

In 2011, the ASA announced its support of the Lifebox mission, and members have contributed more than \$150,000 towards closing the global pulse oximetry gap in the last year.

Thanks to this incredible support, Lifebox has been able to send close to 4,000 pulse oximeters to hospitals across more than 70 countries since we began our work a year and a half ago – but there's still a long way to go in increasing our engagement with far-off O.R.s, patients and colleagues who are no longer as distant as they once seemed.

At Lifebox we notice that it is younger colleagues – students and residents – who often understand this best, and who have the drive to really grapple with this challenge. We also hear regularly how impressed professors and admissions panels are by students who are capable of the kind of initiative and organizational skills involved in running a campaign.

That's why we're thrilled that the ASA Medical Student Component is putting its weight behind **Make It 0**, and we are asking for your help to bring the cause of colleagues in low-resource settings to the attention of your own institutions.

You can be the catalyst that gets your department engaged and making a difference to thousands of lives beyond your hospital walls!

¹ Ouro-Bang'na Maman AF, Tomta K, Ahouangbevi S, Chobli M., Deaths associated with anesthesia in Togo, West Africa. Trop Doct. 2005;35(4):220-222

Looking for ideas? Check out the runaway success in Boston, where residents at Brigham and Women's, Beth Israel Deaconess Medical Center and other hospitals challenged each other to raise funds. Led by residents who had an interest in low-resource anesthesia, the "Boston Lifebox Challenge" has raised well over \$10,000.

"I am grateful for the support from our department leadership because they gave us the time and financial support to make this project a success," wrote BIDMC Resident Brian O'Gara, reflecting on the on-going campaign.

There are a number of ways that you can support safe anesthesia in low-resource settings. If your institution has links with a particular hospital you can play a vital research role, assisting with our needs assessment, and arranging a direct donation to support their work.

If you're supporting service trips, you can bring a Lifebox pulse oximeter with you and help deliver the education and training in person (as well as the accompanying DVD, all materials are available free for download on our website at www.lifebox.org/education).

On our website (www.lifebox.org) you'll find a range of outreach materials, from a promotional video to brochures and ads, that you can use to raise awareness at your school or program, as well as examples of other tools – from slide presentations to lapel pins – that we can send you.

And if you're interested in taking a frontline role in global health, watch this space! Lifebox is currently developing a Fellowship Program, with opportunities for research, implementation and follow-up.

For more information please don't hesitate to email us at info@lifebox.org. We are so looking forward to getting to know more of you, and your ideas in the coming few months. Lifebox is committed to making a collaborative and sustainable impact on global health, and we are delighted to be working with the ASA Medical Student Component to make this a reality!

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“Students Speak”

Thoughts From Medical Students on all Things Anesthesia...

By: Justin Ramos, MS4

As a fourth year medical student on the interview trail for anesthesiology residency programs, I get to tell my anesthesiology story quite often. Why did I choose anesthesia? I bet the program directors and faculty hear a lot of stories that are similar to mine because the things that initially attracted me to anesthesiology are common to many people who are interested in anesthesia. I'm not afraid of the cliché because I am confident and passionate about my decision. I tell them, anyway, about how I've learned from my clinical experiences that I enjoy critical care, working with my hands and seeing the immediate results of my work. Physiology and pharmacology are two of my favorite subjects, and I see a future career in anesthesiology as the complex practical application of these principles in daily practice.

I've always been fascinated by human physiology and its manipulation through pharmacology. Anesthesiologists deal intimately with their patients' physiology and pathology every minute in the operating room. I love how Anesthesiology is such an intellectual field, but I won't have to give up working with my hands. Anesthesiologists also get to see the immediate results of their work within seconds and minutes, rather than days, weeks or even longer. If these things sound appealing to you, then I strongly urge you to consider a career in Anesthesiology.

But what truly sold me on anesthesiology? As I worked more with anesthesiologists and started to do rotations, I started to see anesthesiology as a very challenging *art*. Every patient is unique and no two anesthetics can be identical. There are so many different techniques, anesthetic agents, and methods you can use to arrive at the same goal. There's such a complicated interaction between the patient's pathology, physiology, the surgery and your anesthesia. Externally it looks so easy, even boring, to an outsider because a good Anesthesiologist makes it look so effortless. But, once you try it on your own you realize that there are 100 things going on at once and at least 10 of those things could kill the patient if you are not careful. The more I have learned as a student, the more I realize how much I still have to learn to be able to execute anesthesia *artfully* like a skilled anesthesiologist.

Imagine yourself as a new fourth year medical student. Imagine the first time you stop a patient's respirations, paralyze their diaphragm and then attempt to restore the patient's airway with a blade and a tube. It's an awe-inspiring feat. The patient's life is truly in your hands, and that is an amazing feeling. Just imagine the first time you're asked to decide to use a drug, select one appropriately, draw it up in the correct dose and then inject it into the patient's line by yourself. You quickly realize that you can't bluff any of this and it's not a multiple-choice test anymore.

Think about placing your first labor epidural and watching as the pain melt away from a young pregnant woman's face. She was screaming so loud you could hear her down the hallway, but now she is calm and comfortable. She thanks you for taking her pain away, and it's incredibly gratifying.

These are just a few of the types of experiences that have reinforced my decision to go into Anesthesiology. If you are interested in physiology, pharmacology and critical care of patients, then I highly encourage you to explore anesthesiology further. Spend some time with the anesthesiologists in your surgical or obstetric rotations. Reach out to anesthesiologists or other students through your Anesthesiology Interest Group. Do a fourth year elective in anesthesiology and get an idea of some more of the true scope and depth of anesthesiology. Keep an open mind and take a look at everything that anesthesiology has to offer. If you're unsure now, I hope you like what you find. If you've already decided, then I congratulate you and wish you all the best on this exciting journey as we discover the art of anesthesiology.

Justin Ramos, MS4
University of Nevada School of Medicine
ASA Delegate

By: Patrick Harper, MS3

The question that every medical student dreads: "So, what are you going to specialize in?" I cannot begin to count the number of times that I've been asked that question over the last couple of years. More frustrating is the response I get when I give my answer of anesthesia: "Oh, going for the money?" or "That's a great life, you don't even have to work... you just tell the nurses what to do." or "That must be so boring." Even when talking to classmates I get the 'how boring anesthesia is' speech. It is quite evident from speaking with people, both in and out of healthcare, that the vast majority don't fully understand the scope of anesthesia.

I've been interested in anesthesia ever since Spring 2004 when I received a series of epidural blocks for a herniated disc. I had already been accepted to respiratory therapy school and through that period of study the idea of anesthesia lingered in the back of my mind. After I graduated, I took a semester off before going back to complete my prerequisites for medical school. During the 4 years that passed between finishing my undergrad and starting medical school, I worked primarily in an anesthesia-run cardiovascular ICU.

During my career as a respiratory therapist I was able to witness several aspects of care that anesthesiologists deliver. Every day I worked, I would round with the attending physician, residents, medical students, pharmacists and nurses. I also had several opportunities to get back in the OR, whether it was helping to start nitric oxide, inhaled Flolan, high frequency oscillatory ventilation or to bring an ICU vent back if APRV was needed. During this time I became more and more interested in the field. The wide scope of responsibilities that fell on the shoulders of anesthesiologists became evident. I also realized how much I enjoyed what the anesthesiologists were doing. Most interventions only took seconds to minutes to be effective, not the extended time of weeks or even months that I observed in other areas of medicine. The depth of

knowledge, especially in regards to pharmacology and physiology, became apparent. I was able to observe patients who were extremely sick when they came out of the OR get better and move to the floor. I loved the fact that during an acute decompensation of a patient, the anesthesiologist was often the only calm person in the room.

When I entered medical school I knew that anesthesia was at the top of my list of prospective specialties, but I also knew that there were many fields of medicine to which I had never been exposed. I feel like I have done a good job of keeping an open mind; it took me to the end of my surgery rotation to realize that surgery was not for me. However, I am almost half way through my third year and anesthesia still tops my list. I'm very lucky to have discovered this "hidden" specialty.

Patrick Harper, MS3
University of Kansas School of Medicine

“Ask an Anesthesiologist”

Anonymous Thoughts From Physicians on all Things Anesthesia...

Question of the Issue: “What drew you to anesthesiology?”

“In medical school while rotating with anesthesiologists, I never once met one that hated or disliked his job! They were all very happy and loved coming to work every day. That is more than I can say for other specialties I rotated through. Anesthesiology combines ER, internal medicine, trauma, pediatric medicine, and critical care medicine among other specialties in one. Anesthesiologists are the complete perioperative physician. You get to work with your hands and mind and often see rapid results of your actions. It is a great field. I love it.”

"I couldn't see myself in any other field of medicine."

“Initially it was the procedures, combined with the study of "consciousness". As you know, I initially went into pediatrics, and came to see pediatric anesthesia as an inpatient subspecialty of pediatrics. So I got the best of both worlds.”

"You'd have to be stupid or have a brain tumor not to"

“Anesthesiology was the only rotation in medical school where I didn't want to go home at the end of the day. Even after providing thousands of anesthetics, the ability to guide an individual patient through a surgical procedure safely and comfortably still remains intensely rewarding. I love the challenges that perioperative medicine continues to provide me especially the need to think on my feet and take decisive action in a fast-paced environment.”

"I get to work in the OR without having to deal with the surgery workload like post-op checks, rounding, and clinic."

"I was initially interested in critical care and started out with internal medicine, but quickly realized that approaching critical care from an anesthesia perspective would give me not only the knowledge but also the skills-- airway, access, and others-- that I would need."