

**T**hank you for the honor of leading this wonderful professional society in the coming year. As your president this year, I wanted you to know me and to feel you can contact me about any issues. I would like to tell you my story and thoughts about this society. I hope you will, as I do, feel that anything is possible if you work hard enough for it and that our society has an inspiring mission and vision.

My road has been a journey. It's a long, long way from where and how I grew up. "Where" was in a public housing project just north of Boston in Salem, Massachusetts. "How" was being born with a club foot and as an infant contracting polio from the Salk vaccine (1). So I spent a lot of my youth in hospitals and around doctors, especially those charming orthopedic surgeons. As my foot was corrected and my polio controlled with braces, it was only natural to develop an interest in medicine and in surgery. I performed my first surgery at age four; I operated on my Chatty Cathy (2). It was successful. I had her apart in five minutes, and, more importantly, back together correctly in three! Today, I am the program director of the general surgery and surgical critical care programs at Johns Hopkins. At Johns Hopkins, we operate seven adult ICUs, plus pediatric and neonatal units. In addition, we've an entire floor dedicated to critical care and surgery, with a combined capacity of nearly 100 beds. It's a long way from that public housing to Johns Hopkins and now to president of our wonderful society.

What got me here is a lesson learned early in life and my message for you today. We cannot accept what it is, just because it is; we can and must go beyond. There is no doubt in my mind that in our nation's hospitals we provide the best critical care medicine in the world. But we can do better. We must set our goals and sights higher. Open our minds wider to new theories and skills.

We must move out of our comfort zone and into a learning zone. Your comfort zone is the sum of all you have learned and experienced previously. There are many positives to being in the comfort zone; it's a "home base" where you feel secure and safe. Because there is little stress, you may be willing to consider new ideas (3). It's a place to return to effortlessly so that you can rest, recover, and recuperate. The comfort zone has many potential negatives; possible stagnation, complacency, and mediocrity. You are unwilling to take a chance and afraid of failing, or standing out in a crowd. To learn, you need to expand your horizons outside of your comfort zone and into the learning zone. You must move just to the edge of your comfort zone and step one step further. This first step can be the hardest, depending on your own attitude about learning, risk, and failure. Today, step into your learning zone.

Our annual congress is a great place to start (4). Our annual congress has more than 100 sessions and 300 expert presenters. I urge you: don't go to the sessions in your comfort zone—what you already know. Go to sessions covering material you are not comfortable with. Take home from this meeting new ideas—new ways of doing things—and go home and lead your team in implementing them. Our standards for best practice today must not be the same as tomorrow.

Our society is putting that into practice right now. At this meeting, we're announcing the formation of a new task force which is committed to developing Web-based simulation training for ICU care, a way to ensure deliberate practice. Expert chess players can play blinded-folded because they have studied the games of masters, crew teams practice hours to be in perfect synchrony (5, 6). No matter at what age a pianist begins to play, he or she must practice 10,000 hours to achieve expertise (7). Practice makes you professional (6). Deliberate practice is hard work; you must invest the time, and you must receive corrective feedback to move to the next level (8). What do you do to practice your skills? Have you devised an exercise to practice

your skills? When have you received meaningful corrective feedback?

Our Web-based learning portal, Learn ICU, has been redesigned and launched at our annual meeting (9). This brings all of the society's educational resources together and encourages you to go beyond your own borders to enhance critical care delivery to our patients.

The lectures, workshops, and our educational products are all fine tools for aiding you in your practice. But they are not enough, not in today's times. We must respond to the call for more training accessible from your computer, at your convenience, and from the comfort of your home and office. As we look ahead, the emphasis will be on deliberate practice by use of simulation training: high volume repetition with feedback and focus. We cannot be satisfied with everyday performance, we must develop expertise.

We already know that this is a program that works (10). We were reminded of it during our visit to the aircraft carrier Midway. I know when I mention "Top Gun," most people immediately think of Tom Cruise and the movie, but if you recall the story from the movie, Top Gun was also about the training of Navy pilots using computer simulation and live mission training to hone their skills. In real life, we know that Top Gun training works (10). We know each of us must enhance our individual skills. We can do this with partial task training, but to achieve the best results for our patients, we need to train for the entire mission. We need to train in teams. It must be our mission.

The Navy used mission-focused whole simulation training in Vietnam but the Air Force did not. It made a big difference. Top Gun trained Navy pilots and had 12 times fewer casualties than the Air Force (10). We can't do this training once. It must be durable; we need to keep practicing. We can't let our skills decay.

We need to use technology such as simulation using Second Life (11), where practitioners all over the world can interact at the same time. We need to make learning fun. An example of how fun immunology simulation training can be seen by going to the video for Immune

Attack (12)! I'm excited about how these new training programs can help us improve the quality of our care. I know you'll want to keep an eye out on our Web site for further details.

Last year, in its 100 years of corporate existence, Hallmark Cards sold 85,000 Happy 100<sup>th</sup> Birthday cards (13). Now we all know that the fastest growing segment of our population is the over-85 years of age. By 2050, it is projected that some 800,000 Americans will celebrate their 100<sup>th</sup> birthday. The implication for the Today Show is that its entire program will be Willard Scott's bringing greetings to our older Americans.

The implication for critical care is less amusing. You know that we already suffer a shortage of at least 4,000 critical care professionals (14). If we don't radically alter our thinking and our approach, those shortages will more than double in the next decade. Again, I ask you to rethink the boundaries of traditional paths to critical care. Traditionally, for medicine, that path has been by way of internal medicine, pediatrics, anesthesiology, and surgery. But emergency physicians and hospitalists, those most closely interacting with us, most acutely aware of the value of critical care medicine, want to train and join our ranks. Why not?

On January 16, 2011, *The Journal of the American Medical Association (JAMA)* released an online commentary by two of our members, Lew Kaplan and Andrew Shaw, asking why we don't have uniform standards across all specialties for critical care training (15). Why do we have boundaries between the specialties? Why aren't there common competencies and standards for all training paradigms? Aren't all of our patients critically ill? Just as we know there is no one pathway in life, there should be no one limiting path to critical care.

At Emory University, Dr. Tim Buchman already has a pilot project up and running to explore alternate paths. Emory allows hospitalists to train under the supervision of intensivists. It's time for us to reconsider not only "who" can care for the critically ill, but also how we should ensure that all interested parties are able to do so under common training criteria. We must expand the borders of our thinking. We must also encourage the training of nurse practitioners, nurses, physician assistants, pharmacists, respiratory care practitioners, and all others who complete our team of ICU professionals.

Speaking of borders, I would be remiss if I didn't acknowledge the work of so many of you who understand that the need for critical care medicine extends far beyond our U.S. borders. I am so proud of the medical missions and charity care you are providing throughout the world. You'll remember at last year's meeting in Miami, we were only days and miles away from Haiti. So many of you responded to the call and volunteered unselfishly of your time and in the service of the international relief efforts there. Of course, critical care has an admirable track record throughout the world of sharing its knowledge and expertise. For example, last year Dr. Janice Zimmerman led the first Fundamental of Critical Care Support course in Iran. That kind of pioneering courage must be applauded. Thank you, Janice. In response to an invitation from Korea, a Society of Critical Care Medicine (SCCM) team worked with the Korean Critical Care Society to offer its first review course. We were global before global was cool.

From our very beginnings 40 years ago, we opened our ranks to international memberships. Today we are proud that our society includes some 2,000 critical care professionals from more than 100 countries. But it's not enough.

We must support and encourage our international colleagues to participate in our society. This year, for the first time, we have elected our first international member to the SCCM Council. If you haven't participated in one of SCCM's many international activities, I encourage you to do so. Go beyond your boundaries.

You must know, our member numbers are swelling. At a time when many professional associations are seeing a decline in their ranks, David Martin (our Chief Executive Officer), tells me that we have reached a milestone: 15,000 members. In a scant 40 years, we've grown from a gleam in the eye of our 28 pioneers, some of whom were present for our 40<sup>th</sup> Annual Congress celebration, such as Drs. Weil, Shoemaker, and Grenvik, to a vibrant, vital organization. Gentleman, we thank you for your forward-looking, forward-thinking contributions to critical care medicine.

I am so proud of us and of our organization. I am so happy I made such a smart decision 30 years ago to become a physician and a member of the critical care team. You see, in high school, my first job was flipping burgers and bagging fries at McDonald's at age 16. I earned all of a dollar eighty-five an hour. McDonald's quickly recognized my

leadership talents and promoted me to management at a whopping five dollars and twenty-five cents an hour, a tremendous amount for a high school and college student! Even more impressive, at graduation, they asked if I'd like to enroll in their training school, Hamburger University (16). I appreciated the opportunities McDonald's gave me to develop my leadership and management skills and it's a great organization to work for throughout high school and college. But I am glad I succumbed instead to the call of medicine and it is a rewarding way to spend a life. Now I look forward to a year of rewarding work alongside you, my colleagues, as we continue to grow and to improve our profession. Thank you for the opportunity to serve as your president.

Now, no one makes his or her way to this platform alone. I've benefitted from the help of many and I'd like to recognize them.

I would like to recognize my ICU colleagues at Hopkins: the nurses, mid-level practitioners, pharmacists, and staff in the Surgical Intensive Care Unit and the Weinberg ICU. The many fellows and residents that I have been honored to train, I thank you for serving as an inspiration every day. I owe many thanks to all of my ICU faculty colleagues, and special thanks to my co-directors in the ICU: Todd Dorman, Adam Sapirstein, and Theresa Hartsell. You have been tremendous colleagues and I thank you for your support.

I have been very fortunate to have amazing mentorship and guidance of many in my career: Dr. John Cameron gave me an opportunity to be a Halsted Resident and Drs. Henry Pitt and Keith Lillemoe helped in my academic surgical development. Tim Buchman, MD, PhD, showed me it was possible to be a surgical intensivist, and modeled so very well how to do it. Lisa Rowen, DNSc, RN, FAAN, showed me conflict management and how to think "out of the box." Julie Frieschlag, MD, my current chair, is a terrific role model and Julie came to San Diego to show her support. Now that really is mentorship from a chair! Thank you, Julie. This society is great because of the volunteers and staff. I have had the opportunity to be guided and taught by many. I would offer a special thanks to the council, to the executive committee members I have worked with and who recommended me for this position, and to the amazing SCCM staff. We are indeed fortunate to have them. Finally, I must thank my family and friends: my brother Charlie who is now in Afghanistan; my

brother Robert; my parents who sadly did not live to see this day; my dear friends and colleagues; Kathy Cleary, a pediatrician who spent medical school and residency as my roommate; and finally, Sandy Swoboda, my research program coordinator, manager, nurse extraordinaire, and dear friend. We are all connected and part of an amazing team.

Pamela A. Lipsett, MD, MHPE,  
FCCM

Johns Hopkins University  
Schools of Medicine and  
Nursing  
Baltimore, MD

## REFERENCES

1. Offit PA: The Cutter incident, 50 years later. *N Engl J Med* 2005; 352:1411–1412
2. Kettelkamp S: Chatty Cathy and Her Talking Friends. An Unauthorized Guide for Collectors Schiffer Book for Collectors. Atglen, PA, Schiffer Publishing, 1998
3. Finn GM, McLachlan JC: A qualitative student responses to body painting. *Anat Sci Educ* 2010; 3:33–38
4. Society of Critical Care Medicine 40th Critical Care Congress. *Crit Care Med* 2010; 38:A1–A285
5. Ericsson KA: Deliberate practice and acquisition of expert performance; a general overview. *Acad Emerg Med* 2008; 15:988–994
6. Ericsson KA, Prietula MJ, Cokley ET: The making of an expert. *Harv Bus Rev* 2007; 85:114–121
7. Krampe RT, Ericsson KA: Maintaining excellence; deliberate practice and elite performance in young and older pianists. *J Exp Psychol Gen* 1996; 125:331–359
8. Ericsson KA: Development of Professional Expertise: Toward Measurement of Expert Performance and Design of Optimal Learning Environments. Cambridge, UK, Cambridge University Press, 2009
9. Learn ICU. Available at: <http://www.learnicu.org/Pages/default.aspx>. Accessed March 19, 2001
10. Chatham RE: The 20<sup>th</sup> century revolution in military training. *In: Development of Professional Expertise: Toward Measurement of Expert Performance and Design of Optimal Learning Environments*. Ericsson KA (Ed). Cambridge, UK, Cambridge University Press, 2009, pp 27–60
11. Second Life. Available at: <http://secondlife.com>. Accessed March 19, 2011
12. Federation of American Scientists: Immune Attack. Available at: <http://www.fas.org/immuneattack/players-2/download>. Accessed March 19, 2011
13. 100 years of Hallmark history. Available at: <http://corporate.hallmark.com/History>. Accessed March 19, 2011
14. U.S. Department of Health and Human Services. Health Resources and Services Administration. Critical Care Workforce Report. Requested by Senate Report 108-91. Senate Report 109-103, and House Report 109-143. Available at: <http://bhpr.hrsa.gov/healthworkforce/reports/criticalcare/default.htm>. Accessed March 19, 2011
15. Kaplan LJ, Shaw AD: Standards for education and credentialing in critical care medicine. *JAMA* 2011; 305:296–297
16. Hamburger University: McDonald's Center of Training Excellence. Available at: [http://www.aboutmcdonalds.com/mcd/careers/hamburger\\_university.html](http://www.aboutmcdonalds.com/mcd/careers/hamburger_university.html). Accessed March 19, 2011