PARTY NEVER ENDS

For the first decade or two of the department we had a week between the exiting class graduation exercise and the arrival of the entering class. In the past two decades, the separation of events is a few crow cocks.

This year we said goodbye the evening of June 24 and said hello at noon on the 25th. The Janz’s homestead was (as usual) a place of wonderment and we left there with all the windows intact. The atmospheric climate was conducive to a cool drink and the family climate was conducive to exchanges of clasped hands and joyful observation of budding children.

Baseball was very, very good to us. The interns, repeating the constitution of last year’s entering group, came delayed, chewing tobacco, wearing uniforms! The shirts contained names so the rookies could be recognized. Their arms were raw. Their bats were soft. Their defense on occasion was suspect. However, there was one catch that prevented a home run over the left field wall. It took a minute for us to recognize the ball was caught and the fielder was not impaled on a bush. At the end of the bell, the faculty and residents were victorious over the interns on the scorecard but as always the game itself was a victory bringing strangers together.
PARTY TO END

I haven’t submitted the official resignation letter and I understand I have to December/January interface to make retirement official. However, I am looking at July 1, 2012 as the date for my last university pay check. There is much to say as to what I will do beyond, but I’ll delay that revelation.

What I do wish to accomplish between now and then is high. What I will accomplish is anyone’s guess. However, I do wish to announce my intent to tour programs where we have graduates. Hence, I hereby offer myself for another magical tour. I do not anticipate that 40,000 people will line up to see me (like Paul McCartney in Cincy last month).

ARCHIVED PUZZLES TOUR

Jeff Love asked me to revisit Georgetown as I am 3 years from a last visiting speaker there. I agreed if he would permit me to deliver a talk I’ve had swimming in my mind. He agreed. I’ve crafted the slides on a legal pad and Shirley Foreman is converting my old fashion thoughts to a PowerPoint.

I’ve asserted that it is an asset to clinicians if you can author works that talk of the patient variations in terms of ED presentation. Case Reports or Clinicopathologic conference or retrospective case reviews are the least coveted academic pursuits by promotion committees, but I still believe publication of clinical variants helps. To that end I claim the following:


I would be glad to come your way to discuss cases that gave me insight and I did (either by myself or with you) publish in our literature.

Contact me if you are interested.

PARTY EXPANDS TO PRIME TIME

Several years ago I wrote a play. It was o.k. for a self-taught person. I shared it with a top-notch Artistic Director and I retain his awfully nice rejection letter.

When an opportunity arose in June to attend a Playwright Workshop at the University of Iowa, I eagerly embraced Iowa City and its inhabitants for a week. There I learned what I had done well and what I had done poorly. Following the lessons learned, Alaine White has pounded out the revised play, “Getting Up There.” It is now ready for prime time.

Since being back from the midwest bastion of literature & poetry I completed “Cutting Up: A Minister And A Rabbi Go Into the Barber.” Cassie Browning helped with the graphic title page. JB is currently reviewing the final draft. Then this one act, seven scene play set in a German Catholic village is ready for prime time.

My next play, I titled, “Rub-A-Dub-Dub, Three Men In A Dorm” takes place at a liberal arts college. Three young freshman who have been randomized by a computer land in the same dorm room. They are sons of a frequently malpracticing general surgeon (“butcher”), bakery shop owners, and a line manufacturing laborer who assembles candlesticks. I am soliciting stories from your past. I am only half way done with the dialog. Let me know if you have experienced events in your freshman dorm that you would like to make it to the stage. Help me get to prime time.
2011 Orientation Picnic & Annual Softball
Research Results
- Jim Olson, Ph.D.

MASTERS TO MEDICAL STUDENT
In mid June, Sergei Robinson (NCBP Masters Student) received the good news that he had been accepted in both at Wright State University’s Biomedical Sciences Ph.D. program and medical school at Lake Erie Medical College. As he opted for the latter opportunity, this gave him only a few short weeks to finish his research data analysis and write his thesis. In his typical “nose to the grindstone” fashion Sergei completed these tasks in superb fashion and defended his thesis research in public and private meetings with his thesis committee 2-days before moving to Erie to begin orientation for medical school. His thesis described alterations in the subcellular localization of the water carrier protein, aquaporin-4 at the blood-brain barrier following acute development of cytotoxic edema and chronic treatment with anti-depressant drugs. After starting classes in Erie, the Sergei’s first reports back indicate his anatomy training and research experience at Wright State University has served him well as he is head and shoulders (and probably other anatomical regions) above his medical school classmates.

Brian Tucker, another former Masters student from the laboratory who is two years into his medical training at Lake Erie Medical College in the Greenburg, Pennsylvania campus, completed the first draft of his Master’s thesis in anticipation of submission and graduation before the end of the year. Brian Tucker visited Cox Laboratory during the month of September to gather some of his archived data for further analysis and discuss methods of analysis with Dr. Olson. Brian investigated mechanisms involved in brain swelling and recovery during oxidative stress. Now in his clinical training years, Brian finds that the concepts of glutamate excitotoxicity and cytotoxic edema continue to come up in discussions of brain pathology and treatment.

NANOPARTICLES TO MICROWAVES
Our funding for the development of nanoparticles for MRI imaging of specific brain structures has terminated. However, we have begun another bioengineering project centered on evaluating microwave radiation as a probe of brain water content and as a clinical monitor of cerebral swelling. Initial studies with thin slices of brain tissue have demonstrated a significant change in the microwave transmission properties of brain tissues during the development of cytotoxic edema. In the months to come these pilot studies will become a part of a grant submission for continued funding through DARPA. The immediate and long range goal is to develop a device to characterize the presence and extent of traumatic brain injury in the field and to develop a non-invasive method to follow changes in intracerebral pressure in the TBI patient.
Greetings all! I hope this edition of the *ED Update* finds you well. While I was certainly sorry to say goodbye to our last crop of R3s, we have a pretty good new batch to fill in.

**POUNDING THE PAVEMENT**

It has been a busy summer for tactical medicine. Bringing operational experience from the Middle East, intern Alex Keller fit rather seamlessly in with Dayton Police Department SWAT, and went out on his first mission with them in August. Brian Pennington went on his first mission with the FBI, tolerating the 0400 rally time (down in Cincinnati, no less) with aplomb. Michael Mack continues to serve with Warren County Sheriff’s Office, as well as filling in for a mission with Dayton. All law enforcement personnel who have interacted with Mack speak very highly of his motivation, tactical medical skills, and dry sense of humor. I personally have been busy pounding the pavement in support of training and missions, as well as working overtime to develop a working relationship between WSU Division of Tactical Emergency Medicine (DTEM) and the National Center for Medical Readiness.

**INSULTS FOR FUN**

Tactical Medics International and DTEM co-sponsored their second 5-day tactical medicine class at Ohio Peace Officers Training Academy in July. Attending as students were residents Michael Mack, Cory Long, and Mark Shepherd. Serving as a volunteer instructor was Pablo Medina; no surprise that he did a spectacular job. Coming from the “blast from the past” corner, former WSU General Surgery resident J. Allen McElroy went through the class. He is out practicing in Eastern Ohio, has become involved in law enforcement medical support, and wanted to hone his skills. There was much fun for all: sleep deprivation, TASER, tear gas, and pepper spray.

**RESURRECTION**

On a cheerful note, I was recently on-site for day 1 of OPOTA’s Basic SWAT School, and this year no one went into cardiac arrest! I also drove out to Cleveland (with Kim in tow) to attend the 1 year “re-birthday” party of the officer we resuscitated at last year’s SWAT school. He is doing well, and we celebrated with much food and drink. Life is good all around.

Until the next edition…

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**Piling on the miles in my new “hi-viz” riding suit. Doubles as Chiquita banana costume on Halloween.**

**Drs Long and Shepherd work their way through the sensory-deprived airway station at July’s Tactical Medicine class.**

**GO TO PERSON**

Marlea Miano and I presented at Kettering’s annual Critical Thinking in EMS Symposium. I presented an overview of tactical medicine (which caught the interest of KMC’s new trauma staff), while Marlea gave a very well-received update on American Heart Association resuscitation guidelines. Unwittingly, she has now become my “go-to” resident when I need someone to speak to EMS. Say goodbye to your free-time, Marlea.

**Heart-shaped cake at officer’s “Rebirthday” party. Cake baked at 200 joules with Medtronic AED.**
JEFF & ALEX OUT AND IN
In May, we started a number of new projects which consumed much of the spring and the whole summer. This acceleration in activity was compounded by the loss of Jeff Adams who accepted a position in the simulation lab at Ohio State University. Jeff’s departure was a significant loss, but we have continued to collaborate with him and his positive impact on our operations will be felt for years to come. While working to replace Jeff, we were fortunate to be able to acquire a student worker, Alex, who has done a yeoman’s job filling in during our busiest summer ever.

EM RESIDENTS OUT AND IN
We were able to send the graduating resident class of 2011 off with a final set of simulations chosen by the residents themselves. The activities included the standard procedure-book fillers of pericardiocentesis and transvenous pacing along with a new challenge of creating a credible simulation of a perimortem C-section. I am happy to report that the graduates did a great job and showed they were fully prepared to face the challenges of being independent ED attendings. Immediately after completing this task, we refocused on orientation of our incoming R-1 class during the month of July. The sessions all went well and the class surpassed expectations with the great job they did when they “showed their stuff” during the skills demonstration sessions at the end of the month.

KMC SIMS
While the orientation sessions were ongoing, we also initiated a series of 32 half-day simulation exercises to help Kettering Medical Center ED personnel and other members of the trauma team prepare for operations as a level II trauma center. A multidisciplinary group including nearly 140 professionals completed a series of four unique trauma simulations in groups of 8-12 per session in July and returned for another series in August. The feedback was very positive and we enjoyed the opportunity to work with all the staff including several of our previous graduates. This project provided a new challenge as we attempted to reproduce the planned set up of KMC’s ED trauma rooms to the greatest extent possible since familiarity with all of the components of the new service was a key part of our mission.

OTHER SIMS
In the midst of this activity, we continued our previously scheduled sessions which provided the opportunity to work with our residents as well as with the incoming Grandview emergency medicine residents and the Wright State Surgery residents as part of their orientation. We also initiated a new venture with the nursing institute of Southwest Ohio to create simulation modules in support of nurse education programs at The Atrium Medical Center.
PICKETT'S AFTER ACTION REPORT  
- JR PICKETT, M.D.

OFFICIAL LIFE

Finally, officially, I have started as full time faculty and EMS Director. I am thrilled to join the department and get to work with the residents and med students, as well as our outstanding faculty and staff. JB is probably reevaluating the qualification process for new faculty.

TRYING TO MAKE IT OFFICIAL

Bill Brady ('09) and I helped put together a bill at the state level (HB 288) which is sponsored by Rep Courtney Combs that relates to tactical EMS in the state. If signed into law, the bill would extend qualified immunity from liability for physicians and other TEMS providers who provide medical support for SWAT team operations. It also would permit, at the discretion of the team commander, the TEMS physician/medic to be armed during operations in places where it would otherwise be prohibited, such as in a school during a hostage situation. The bill goes to committee this fall.

TESTING THE WATERS

On the horizon: EMS subspecialty board certification. The ACGME is diligently working on program requirements for fellowship, and the Council of EMS Fellowship Directors is anxiously awaiting these requirements, hopefully before the CEMSFDD meeting in January at NAEMSP (otherwise we’ll have nothing to talk about at the meeting). We are anticipating a “grandfathering” process for physicians who have been active EMS medical directors but have not attended a fellowship, but haven’t nailed down what that process will look like. It is anticipated that there will be a “window” during which you can apply to grandfather in for board certification. After the window closes, the only way to get board certified is to attend an EMS fellowship. Current EMS fellowships are currently 1-2 years in length, with the 2 year fellowships typically including a master’s degree program. The EARLIEST the board exam could be offered is spring of 2012, but I don’t think anyone really expects that to happen. Likely target for first exam will be spring of 2013.

LIFE’S OFFICIAL

Life at home is wonderful, and as ridiculous as it can be when one lives with a 2 year old girl and two passive aggressive dogs. Becky endures the trials and tribulations of being a mother with an otherworldly calm and the patience of a saint.
**If I only had a brain…**

**IF I COULD SAVE TIME IN A BOTTLE...**

Time. A limited and precious resource. How do we spend it wisely? Who defines what is ‘wise’? Is it efficiency, pleasure, or productivity? Is success in this endeavor defined by the person using this elusive commodity or by those who benefit most from the results of it, such as our employers, our patients, our families? “There is only one of me, and I get 24 hours in a day. No more. No less. What am I going to do about it?”

In a NY Times Op-ED article entitled “Don’t Quit this Day Job” and published this past June. (Click Here for Link) (1) Dr. Karen Sibert, an anesthesiologist, put forth her opinion of time as it relates to women in medicine. She expresses concerns over a proposed trend for women in medicine to enter “part-time” employment and offers explanations as to why this may be detrimental to patient care, health care, and one’s overall commitment to medicine.

This article really hit home to me, given recent events of my life.

**ALLOW ME TO DIGRESS…**

As of July 1, the Clerkship Director torch was passed onto me as **Dr. Corey Heitz** moved away to other adventures. Prior to his departure, the two of us worked hard to make some changes to the curriculum, including the implementation of Wright State’s new Learning Management Software, “Pilot”. Similar to Blackboard, students obtain much of their clerkship information and curriculum online, which allows for more hands-on time for simulations, ACLS-type trying, procedural skills, etc. So far, so good. There is ever-increasing interest in Emergency Medicine (by both men and women), and the word on the street is that this trend will continue in the near future. I have no doubt these eager young minds will keep me on my toes!

And speaking of keeping me on my toes...my husband and I are expecting our first baby December 1st! We are very excited and everything seems to be going well at this point. The first trimester did start off a bit rough though, with my share of prayers to the porcelain god and also a diagnosis of Melanoma. But thankfully, after several trips to the surgeon and a new roadmap on my back, the coast is clear. I now carry sunscreen with me everywhere that I think actually removes color from my skin, but at least I am healthy!

So as you can imagine, as a young woman practicing full time in academic EM, working with students on a daily basis, in the third trimester of my first pregnancy, and with a recent brush with cancer (albeit brief), I certainly have my own thoughts on the implications of the article written by Dr. Siebert. But what I have found more intriguing than my own gut reaction (which was less than favorable as she attempts to place the blame of the physician shortage and healthcare crisis on the shoulders of women making difficult and personal life choices), are the many perspectives voiced by others that I hadn’t considered. In addition to casual conversation amongst friends and colleagues, many people responded to the NY Times with their agreements or disagreements on the subject (click here), while others wrote more official statements of rebuttal in formats ranging from online blogs to articles published in other journals (2).

These commentaries have come from men, women, medical students, residents, and faculty, both academic and private, each with a different spin on the topic based upon their own life experiences. (Click Here for Link) (Click Here for Link) (3,4).

While I can’t offer any grand solutions to this ongoing debate, I encourage you to look into this article, and more importantly its rebuttals, for more insight into the intricate world of work-life integration and the mother of all resources, time.
Alumni Brian Syska and Heidi Kabler recently joined Patrick Eitter on Eitter’s fishing boat when they dropped by on their way up to AK for a cruise.
NCMR/CALAMITYVILLE

Advances continue as Calamityville operations ramp up. September was Preparedness month and the busiest month out at the NCMR Tactical Laboratory (Calamityville) that we’ve had to date. In no particular order listed below some of the activities ongoing currently as we look forward to a bright future.

- On September 22, 2011 at the Heritage Society’s event for Wright State University, NCMR at Calamityville won the Outstanding Program award as voted by the Wright State students. We were in competition with two other strong centers and were very pleased with this positive recognition and outcome. Along with a plaque to be hung at the NCMR offices, a financial award will support further student involvement in our activities at the graduate and undergraduate levels.

- NCMR staff collaborated with the DEM to offer health care support for the USAF 5K and Marathon. The cooler temperatures kept the need for our services to a reasonable level. Our thanks to the faculty and residents who volunteered to cover this important event. There were over 1000 runners for the 5K (including one dressed a running shoe!), and more the 10,000 for the Marathon. We look forward to returning next year.

- We hosted a variety of events on site especially in September. These included: the Research and Technology Advisory Group for USAF DoD grant which funds our people and programs through the end of this year. This was one of the best group meetings we have held as we reported on specific R&D projects and progress on continued site development. We also hosted the FBI under the guidance of Dr. Springer who utilized both outdoors and indoors for training purposes.

- The fourth AFIT-NCMR CBRNE Conference was held at the Calamityville site September 21st-23rd with over 80 attendees. We were pleased to host Nancy Dragani, Director of Ohio EMA as our keynote speaker. An interesting series of presentations including a panel on how researchers might maximally benefit those in the field in the area of CBRNE and preparedness. It was an enthusiastic crowd who enjoyed the content, venue, food services, and the closing exercise. Despite some limitations brought about by a rainy morning, the exercise included both civilian and military first responders in a CBRNE incident (radiation) tied to a school bus hijacking. We were pleased to have excellent representation by local media and several reports in both television and newspaper articles.
• The next day, September 24th, we hosted the Boy Scout Jam- boree with an interest in generating enthusiasm for the NCMR Preparedness Badge. With nearly 300 Boy Scouts and 100 adults in attendance, we were pleased that even with rainy weather people seemed to enjoy the opportunities the Calmityville site avails. WPAFB Fire, Fairborn fire, and a number of other responders graciously volunteered their time to work with the Scouts.

• We’ve recently hired a number of part time personnel to benefit the project. These include: Rob Meyers, mechanical engineer through the Wright State Research Institute. He is tasked with assisting us in developing our test bed and evaluation program. Henk Ruck and Dan Narigon were added to the team for acquisitions and contracts. Bringing the two of them onboard has been most valuable, as we’ve learned a great deal about military contracting in a very short period of time. We also added Chris Eddy from the MPH Program. He has more than 25 years of food inspection experience and joined us to support Sarah Paton in our efforts with the Food and Agricultural Protection Training Consortium, and USAFSAM Food Safety training programs.

• We continue to work closely with our “Big Four” anticipated customers: the Air Force Research Laboratories, the 711th Human Performance Wing and USAF School of Aerospace Medicine, the Ohio Department’s of Public Safety and Public Health, and the Ohio National Guard. Each one of these is progressing contractually and we have active projects planned on site working with each of these entities. More detailed announcements will be made once the agreements and contracts are completed.

• In addition we’ve opened up a number of new avenues of possible research and training activity. These include working with Ohio Task Force One, the Miami Valley EMS Council, and other first responder/provider groups in the Miami Valley area. We continue to discuss opportunities with the 445th Aeromedical Rescue Squadron, as they’ve identified several opportunities for our site. We already have plans for another Paramedic Medical Refresher with the Parajumpers planned for later this year.

• NCMR and the Division of Tactical Emergency Medicine have been working well together, and agreements have been signed, as well as new courses planned to assist the law enforcement and special operations community.

• Another new area under exploration and hopefully exploitation, is the small size unmanned aerial vehicles (UAV) and ground-based remote piloted vehicles (RPV). We are pleased with the interest from a number of firms in the area, the AFRL, as well as economic developers in the region regarding our potential for being a training and testing site for the “small stuff”. We are pleased to note that the AFRL has added a new Director of MAVs to their team as of Oct 1st. We plan to meet shortly. This is an exciting development and during our recent exercises held with the AFIT- NCMR/WSU CBRNE Conference we had UAV involvement on site.

• At the national level, we continue to pursue membership in the National Domestic Preparedness Consortium. We are very excited about this potential opportunity and will be joined by five of the seven principles in Washington DC on October 3. They are coming to lobby on our behalf with the Ohio Delegation and the various staff members of the Homeland Security Committee. To succeed we must fulfill two steps: First is ‘authorization’ which legislatively identifies NCMR as a member of the NDPC; next there is ‘appropriations’ which offers funding to support our membership. We’re also working well and closely with the developing Food and Agricultural Protection Training Consortium of which we are a charter member. We have identified several “swim lanes” unique to our role in the consortium and found several ways wherein
There is much, much more in play at our site and we are active every day. In addition to the events noted above, we continue to host a variety of groups for the region to demonstrate our capabilities, support the AHA activity of the medical school, and continue our series of NDLS courses. In addition we have active grant and contract work that is actively being pursued to make this one of the most interesting human performance assessment capable sites in the world. If any of you would like to come out for a tour, please join us, you can contact me directly.

Along those lines, Journal Club for November will be hosted at NCMR/Calamityville. In addition to fascinating food for thought, we plan on having not only City Barbeque, but also a visit from Dayton’s currently lone food truck, “Go Cupcakes”. Come on out and enjoy the information, venue, and food.

TEACHING MONTH IN SEPTEMBER

For many years my preferred Teaching Month was December, but as that is likely to be more of a wind-down month, it was agreed an earlier involvement would be beneficial to all. I’ve been sharing the month with Kevin Juozapavicius, and our newest faculty J.R. Pickett. After the heavy workload of NCMR/Calamityville, this was a great opportunity to get back to teaching Emergency Medicine to the MSIVs and R1s. The teaching day with the students is certainly more efficient for us, but it’s a lot of information in a short period of time. The simulation experience is key to backing up that information with action and opportunity to perform. JR took over that duty this month and therefore I look forward to reciprocating in December.

TRAVELS WITH ELIZABETH

That title is a variant of a John Steinbeck book, but over the last few months due to Lynda needing time in Michigan to work on closing out her mother’s estate, my “Mr. Mom” time has accelerated. I’m also very thankful of Alaine and Nancy who kindly offered to host Liz for lunch on occasion when the day simply is too crowded. In August and September, Lynda, Liz, and I traveled to Los Angeles to celebrate Liz’s 20th birthday (if you think that’s hard to imagine, you can imagine how I feel). We had a wonderful time with perfect weather in Santa Monica and West Hollywood. Should any of you be headed that way we have recommendations for restaurants, activities, and places to stay. Upon returning to Ohio I wondered where all the Bentley’s and Rolls Royces were in the parking lot and noted the nature of our food as well as it’s portions are quite different then the West Coast (what! No tofu??).

We recently returned to my former training site in Denver to endure some long, but useful and detailed assessments in preparation for Liz’s college. We toured sites and towns along the base of the Rocky Mountains, Colorado Springs, and found a number of interesting places including Manitou Springs and the Pike’s Peak cog railway. The weather cooperated beautifully as we remembered the 300+ days of sunshine in the area, although the mile high plus altitude on occasion slowed us a bit. Great trip with more physical activity and bicycling than I can remember since having been in Beijing, China.

Lastly, we’re preparing for a very exciting opportunity tied into the oldest car touring event in the world. That once-in-a-lifetime event will appear in the next Update. We’ll miss you at ACEP in San Francisco (where we hosted the first Resident-Faculty-Alumni Dinner in 1982), because of this event. Our loss and apologies!

My best wishes to all of you as we come into Fall, a wonderful season in Ohio, and approach the enjoyment and complexities of the holidays. I’m still a little stunned that the Halloween decorations have already appeared.
The Acoustic Window

John Wightman, Ultrasound Director

After my introduction in the last issue of the Update, most of these articles will cover applications of limited bedside ultrasonography in the ED. I’m not sure the image below changed ED management much, but Michael Mack and I were able to identify a stone in the common bile duct then backtrack it to measure proximal dilation at 14.5 mm between the cursors in the image below.

The two shadows streaking from the cursors are examples of edge artifact, and do not represent the stone itself. Unfortunately, I lost my copy of the image with the stone to include that too.

The patient was only mildly symptomatic initially, and an oral dose of Donnatal made her colicky pain go away. She was not jaundiced, but her direct bilirubin was mildly elevated. She didn’t need admission, and we didn’t need to call in an ultrasound tech late at night. ED disposition was much more rapid, and arranging sooner-than-later surgical follow-up was easier.

Know-Nothing

John Wightman, Education Director

Since the last issue of The Update, I was pulled away for some non-medical military duties throughout the month of September, and have been working on catching up ever since then. I haven’t been able to keep as active a hand in the curriculum usual. Nonetheless, this year’s didactics are off to a good start with toxicology topics in emergency medicine (TEMs). It’s always a good review for me, because it takes so much memorization for many problems not seen frequently.

Periodic reviews are necessary for all of us. Those of us in academics are fortunate to have a structured curriculum for residents and medical students on which we can piggyback reviews and updates for our own education. The characters wen ke mean to review a lesson.

I wasn’t able to find much deeper meanings for these pictographs.

As I discussed in the last issue, learning the fundamentals of emergency medicine is akin to asking oneself for excellence—and the fundamentals are what keep us practicing safely for a long time. For instance, I saw a clinically subtle but ultimately significant aspirin overdose just last month. I didn’t remember everything there was to know about it, but I knew enough to get started and to look up the rest.

I believe that periodically reviewing the fundamentals, whether through formal CME programs or regular involvement in teaching, is demanding excellence as well. Keep up the lifelong learning … and reviewing/updating!