

ED Update

Wright State Emergency Medicine Residency

Volume 30, Issue 1

January 2008



Special Points of Interest:

- ◆ Another Theme Fulfilled" pg. 2
- ◆ "Online Interventions" pg. 3
- ◆ "Perfect Presents" pg. 4
- ◆ "Structure & Models" pg. 6
- ◆ "SOMA" pg. 7
- ◆ "SIM Expansion" pg. 10

Editor:
Jonathan Singer,
M.D.

Design:
Cassie Browning

QUARTERLY ISSUE

Let every heart prepared for the New Year find welcome in the warm thoughts of the last three months which have elapsed. We've spent another segmental calendar cycle together, whole, sharing the happiness and travails of the day-to-day encounters, watching the sun disappear earlier from our skies.

We have already weathered ice and snow that inhibited transportation, closed school systems and rendered child and pet care a necessity in the department. Predictably there will be future inclement days of note in our region, but they will not color our quarterly issue.



COLORING OUR LOCAL PALATE

While the arctic screamed among signs of a late summer melt, we remained dry. It was everyone's expectation that the autumn foliage would drop precipitously without show of rainbow. To our surprise the hues were resonant and the only aberration was a late separation of leaf from limb. NASA satellite data revealed a three week delayed appearance of leaves piled curb side. Typically my last rake occurs the day following Thanksgiving. This year I was raking and mowing into the second week of December.

TURKEY DAYS

Alaine modified the department's traditional Thanksgiving welcoming poem that is sent to all individuals scheduled to interview. The reinforcing message of our desire to meet and greet these individuals in person went out in advance of the Thanksgiving holiday. I had the fortune of completing emergency department encounters at 11:00 pm on Wednesday the 21st and was free to enjoy the 22nd. Unfortunately it was the second day of the week that I had eaten turkey. My late mother-in-law's refrigerator/freezer that had served as a surplus holding device in our basement for fifteen years died on Sunday the 18th. Ruth stuffed all that she could in our kitchen units and was forced to defrost multiple frozen goods. On Tuesday the 20th I ate turkey cutlets, laden with marinara sauce and aged cheese. The meal was wonderful. However I would easily have given up the national title, worthy of believe it or not designation - the only person to have eaten turkey two days before Thanksgiving.



ON THE EVE OF THANKSGIVING

Greg Kennebeck, chief responsible for the CMC ED scheduling, sent on the eve of Thanksgiving a note which was intercepted. It read “It is my most sincere hope that you all enjoy the next few days with family and friends, that you find a few minutes to find something for which to be thankful, and that someone benefits from the thought, word and deed of your warm heart.” Further, in recognition of his cardinal emotional and tactical errors associated with the distribution of the schedule, Greg asked in a compelling note for the recipients to “strew petals of the most vibrant, soft and fragrant flowers to cushion the earth upon which his tender, bare, hairy feet were about to tread.” Nice touch. Good imagery. As the “sprig of winter green in his face shield” message was not met with an open heart, Kennebeck announced at the November faculty meeting his forensic detailing of life cycles was up for grabs.

ANOTHER THEME FULFILLED

Adam Bromberg, Jeff Greenwood, and JR Pickett organized and carried out a weekend seminar for pre-hospital providers. The cadaver, anatomy and procedural lab provided an extraordinary educational opportunity for participants who brushed up on anatomy, physiology, as well as basic and advanced procedures. The instructors at multiple teaching stations included **Glenn Hamilton, Jim Brown, John Wightman, Brian Springer, Mark Gebhart, Adam Bromberg, Emily Maupin, Jeff Harris, Greg Kennebeck, Jackie Barnes, Jason Pickett, Jeff Greenwood, Rod Morrison, Joey Mauro, Laura Nolting, Ryan Mihata, Melissa Williams, Michael Arocho, Pat Chhuon, Robert Sarlay, Scott Vandehoef, Stephanie Carrion, Steve Galvin, Dave Williams PA, and Paul Bott PA**.



OTHER FORENSIC EVALUATIONS

In the model and format for the ultimate oral examination, we ask our residents six times to collect evidence, persevere through the anxiety and deliver responses across an examining table. Our autumn oral examination was launched from early morning hours to late afternoon with the help of multiple examiners. Thanks go to clinical faculty physicians **Pook, Kwiatek, Hartman, and Williams** for their help.

INTEGRATED IMPACT

The users of our website either practiced reflective listening or sought interfacility transfer that bypassed our residency for interviewing. We'll not know, but adjusting for occasional ERAS computer glitches, the number of individuals who applied to our program were equal to or greater than previous years. We will have the privilege of interviewing over eighty civilian candidates before things end in January. They will have come from near and afar.

Their sociodemographic data is as follows:
Female 34%, Asian 5%, African American 2%, Middle Eastern 2%, Hispanic 4%, and Indian 4%.

ONLINE INTERVENTIONS

Thanks go to Cassie Browning for revamping and updating our website. She included photos and graphics intended to capture the eye. She incorporated a sequence of brief, non-negotiated interviews of **JR Pickett** who served as a social worker, peer health advocate, naturalist and advocate for those of comparable demographics seeking information about our residency. We edited out a few patterns of misbehavior, but found his horizontal, bi-directional nystagmus, truncal ataxia and dysarthria strangely appealing. Go to <http://www.med.wright.edu/em/res/multimedia.html> and judge the impact of his training modulars.

CONTACT FROM AFAR

Steve Griffith sent us some photos from his first week on a medical mission with Medical Teams International.



Patrick Eitter sent us some pictures of Max's first snow.



BYLINES AND AWARDS

The Ohio chapter of ACEP celebrated its 35th anniversary late summer. One notable moment included the presentation of the Bill Hall Award for Service to **Joan Kolodzik**.

Roger Pacholka was Wright State's nominee for the Humanism in Medicine Award for 2007 to the Association of American Medical Colleges.

Mark Gebhart received the Early Career Achievement Award from WSU for his work in emergency preparedness.

Pamela Ferris-Olson authored an article about WSU's anatomy department that was published in the fall's issue of *Vital Signs*.

Robert Sarlay celebrated the day of infamy from the lecture podium. His arthropod bites and stings lecture placed him in strong contention for Best Didactics of the Quarter. He sought votes with the distribution of candy, not unlike many previous winners. However, his sweets contained insect larva. I hold in my possession a tequila flavored Hotlix hardened lollipop encoding a worm for having identified the skin eruption associated with pus caterpillar contact. It pays to have actually seen this in the past.

PERFECT PRESENTS

Liz and Mike this summer saw the wisdom of the move from Norfolk back to the midwest. Liz dropped out of the workforce. American Funds welcomed Mike's transition to their Indianapolis office. Ruth and I aided on the moving day. We were more passive on the delivery date of John Michael Walton IV. His folks have nicknamed him Jack. I had my individual nickname (Quattro) engraved in a stone which I placed in a garden next to his cousin Quinn's rock.



Congratulations to
Matt and Lauren
Wolf on their new
bundle of joy. Eleanor
Lorraine was born on
October 10th.



Gary Foskey Jr. and his wife, Alexis, welcomed their baby girl, Abigail Marie, into the world on October 16th.

Congratulations!!!





Springer's Stuff

- Brian Springer, M.D.

Greetings all! I hope this addition of the *EM Update* finds you enjoying the opening days of 2008. Hard to believe we are close to ending the first decade of the twenty-first century. Here is the latest play-by-play:

ED NEWS

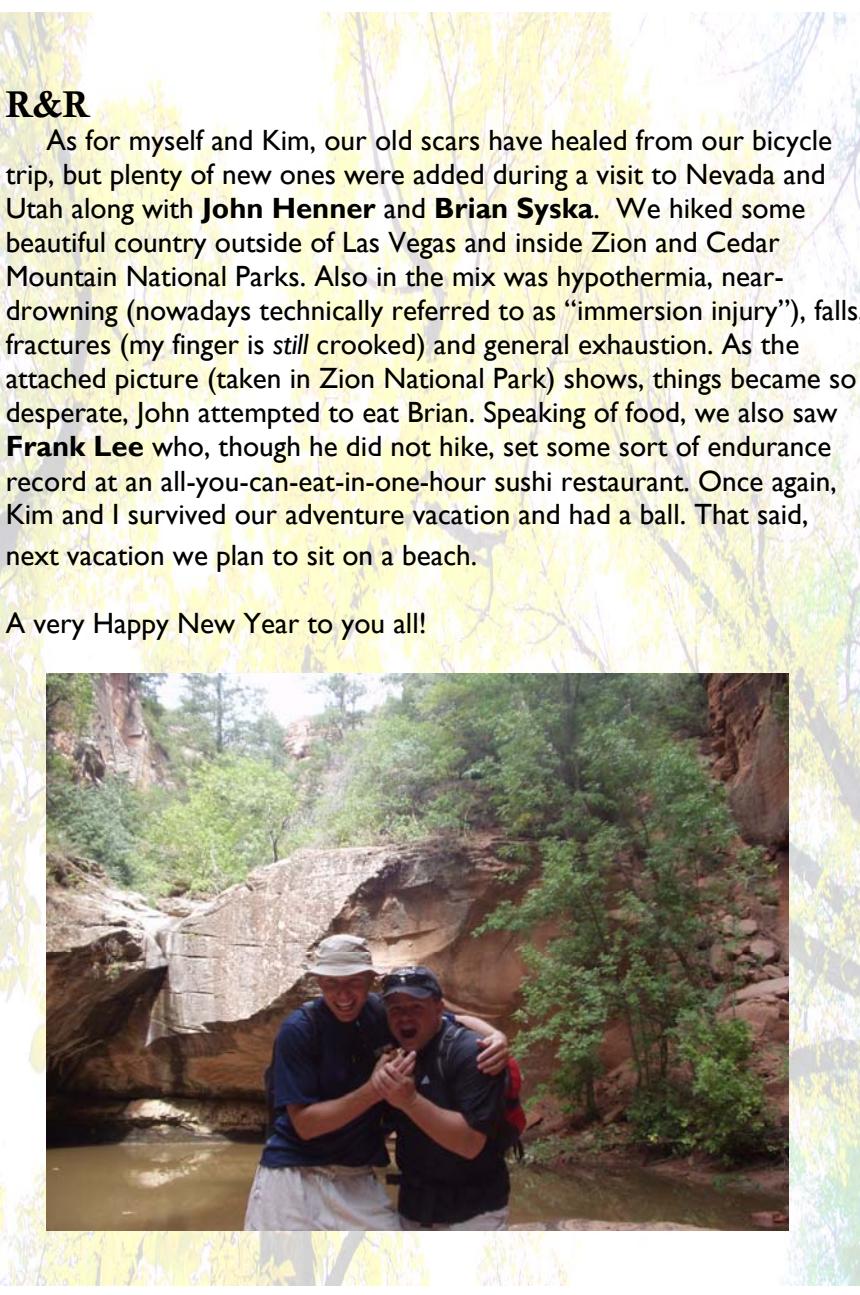
The new pod system in the KMC ED seems to be working well. We are still trying to figure out the best way to utilize our rotating residents and ensure a broad exposure to various complaints and procedures. With time, we should work out the bugs.

SPORTS COVERAGE

Football season has come to a quiet end, following a season filled with more fractures, neck injuries (none catastrophic, thank goodness) and concussions than I have seen in a long time. Sinclair Community College basketball is up and running, with a great record for the women so far. Rotating residents **Debra Edwards** and **Jeff Harris** cast a white cloud upon Sinclair while helping me cover recent games; both men and women won by a sizeable margin. The good doctors are welcome back anytime!

TACTICAL EVENTS

Tactical medicine continues to evolve both in the field and here at the department. Getting through the paperwork is all that stands in the way of our involvement with SWAT in Greene County (courtesy of **John Wightman**) and Warren County (courtesy of **Bill Brady**). The second meeting of the Tactical EMS Resident Interest Group was a success. Residents practiced tactical movement and room entry under the instruction of Oakwood Police Lieutenant (and tactical medic) Chuck Balaj and received a lecture on care-under-fire by the never-dull **JR Pickett**. We also received a visit from Dayton Police SWAT Commander Lieutenant Bob Chabali which goes to show: when we ramp up our training to assist the community, people take notice.



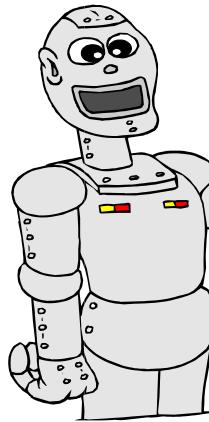
R&R

As for myself and Kim, our old scars have healed from our bicycle trip, but plenty of new ones were added during a visit to Nevada and Utah along with **John Henner** and **Brian Syska**. We hiked some beautiful country outside of Las Vegas and inside Zion and Cedar Mountain National Parks. Also in the mix was hypothermia, near-drowning (nowadays technically referred to as "immersion injury"), falls, fractures (my finger is *still* crooked) and general exhaustion. As the attached picture (taken in Zion National Park) shows, things became so desperate, John attempted to eat Brian. Speaking of food, we also saw **Frank Lee** who, though he did not hike, set some sort of endurance record at an all-you-can-eat-in-one-hour sushi restaurant. Once again, Kim and I survived our adventure vacation and had a ball. That said, next vacation we plan to sit on a beach.

A very Happy New Year to you all!

Sim-Man – Ray Ten Eyck, M.D.

STRUCTURE & MODELS



On Oct 30th, the university sponsored a meeting with the top three architectural firms competing for the design of the new simulation laboratory which will occupy the back half of the first floor of the Cox building. A selection was made and we are looking forward to some amazing changes in the building over the next year. Recently we have added some additional vascular models and an LP model to our inventory of simulation materials. We are awaiting word on our OB model and an additional SimMan. At the same time, our "baby watch" is still in progress for the delivery of two infant simulation models. These additional models will allow us to greatly expand the spectrum of cases that we can simulate in order to practice and learn in a controlled and safe environment.

Photos from R2s October Ultrasound YDC:



STUDENT ACTIVITIES

As we complete the first four months of the simulation-based medical student curriculum we have had a chance to apply some fine tuning based on feedback received from faculty and teaching residents. The feedback from the students has been encouraging and what once seemed like an impossible task is working smoothly thanks to the support of staff, the teaching residents and faculty.

YDC's

The most recent resident YDC simulation curriculum has focused on a combination of the simulation and the new ultrasound curriculum. October's YDC featured ultrasound guided line placement for the R-1 class. In November, the R-2 class had a hands-on introduction to the use of ultrasound for location of fractures, foreign bodies, abscesses, and the sites for lumbar puncture, brachial plexus blocks and central line placement. **Dr. Dagrosa's** ultrasound expertise provided a great training experience with assistance from **Dr. Wightman**, and **Dr. Taylor**.

We all look toward the new years simulated resolutions.

Know-Nothing

- John Wightman, M.D.
Education Director

SOMA

Greg Kennebeck, J R Pickett, and I recently returned from the Special Operations Medical Association (SOMA) meeting in Tampa FL. **Terry Lonergan** was a graduate in attendance. **Glenn Burns** had a poster about lateral canthotomies for orbital compartment syndromes, but we never saw him in the flesh. Former resident, **Dan LaMothe**, and future resident, **Aaron Rubin**, were also present. **Mark Antonacci, Brian Delmonaco**, and **Max Lee** must have been busy supporting their units. Although there is usually a fair amount of beer consumed at SOMA, its purpose is to improve medical support and health care for the warfighter, but also for innocent bystanders and even the enemy.

I go to SOMA every year to recharge my batteries mentally, physically, and spiritually. Being able to sit by myself in a park allows me to think about my various roles as a father, husband, friend, clinician, educator, mentor, etc.—at a time when it's too comfortable to do so outdoors in the middle of an Ohio winter. The regular daytime hours usually allow me to rededicate to exercise, which is often difficult in the weeks between Thanksgiving and the New Year. The spiritual renewal always flows from my interactions with a thousand people dedicated to making the lives of others better.

PHILOSOPHY



The characters for this month are zé rèn zhí, which mean a sense of duty or responsibility. We have a legal duty to evaluate all those who seek our care. We have a responsibility to do our best for every patient. The component that more frequently requires renewal or rededication is that sense of privilege to serve people during their time of need. To quote **Ed Fieg**, “Everybody who presents to the ED is in some kind of crisis.” Even a snotty nose can be a crisis for a working, single mother, who can't afford time off from work to go to a clinic, and might not have the education to know how to manage her symptoms without expert guidance.

Civilian emergency physicians may not have a specific population they support, as do those in the military; but patients are certainly not the enemy, who are there just to make our lives miserable. They are innocent bystanders in our war against

illness and injury.

This season of giving might be the time to consider what a privilege it is to possess the skills we have, or are learning, and a job in which we can use those skills to better the lives of others. The efficacy of any humane action, including the provision of emergency services, is measured by both the degree and inclusiveness of one's beneficence.

In feeling, it is how deeply.
In giving, it is how much.
In speaking, it is how credibly.
In governing, it is how effectively.
In serving, it is how capably.
In acting, it is how timely.

Lao-tzu

The residency curriculum is just one tool that helps build the necessary skills. Much of the rest of what we do comes from within.

Research Results

- Jim Olson, Ph.D.



TRAUMA AND TAURINE

Medical students have joined our laboratory to participate in clinical and basic science research projects. MS4 students, Jill Aston, Elena Caraman, and Megan Dines, have participated in the development of retrospective and prospective clinical studies of brain edema in trauma. Developed in collaboration with **Dr. Ballester** and Dr. Mary McCarthy (Department of Surgery) this project will explore cause and effect relationships between edema and traumatic brain injury.

Amanda Reese, a first-year medical student in Wright States MD/PhD program is working with **Dr. Olson** to develop a grant proposal to the Emergency Medicine Foundation. This proposed investigation will examine biochemical correlates of altered membrane transport function that arises when cells become swollen by pathological conditions.

NEUROSCIENCE COAST TO COAST

Our department was represented by four posters (out of approximately 15,000) at the recent Society of Neuroscience Meeting in San Diego, California. Soon-to-graduate Masters student, Crystal Stuckey, presented the synopsis of her thesis work on oxidative stress in swollen brain cells. Drs. Olson and Guang-ze Li presented their recent research results on mechanisms of volume regulation of hippocampal astroglial cells and neurons. Dr. Olson also collaborated on the research presented in another poster by Dr. Dominic D'Agostino (University of South Florida) regarding the cellular response to oxidative stress. Surprisingly, the sun was only rarely seen during the week-long meeting due to shifting winds which brought either smoke from the mountains or fog from the ocean; however, the atmosphere in the meeting halls was scientifically invigorating.

PICTURE WORTH A THOUSAND WORDS

Dr. Olson submitted a grant application to the Ohio State Research Challenge program to examine mechanisms of cell swelling-induced death of brain cells. This proposal would provide funds to improve the imaging capabilities for the microscopes in the laboratory. By acquiring equipment which will allow us to perform cellular imaging and 3D reconstructions of individual brain cells, we will improve the competitiveness of grant applications planned for submission to the National Institutes of Health, the Department of Defense, and NASA.

Dr. Olson spent a week in New York City collaborating with investigators on Staten Island at the City University of New York. In these continuing studies, Dr. Olson captured detailed three dimensional images of living hippocampal neurons to permit estimation of neuronal volume during edema. These studies are supported in part by seed grant and travel grant funds from Wright State University. The results will form important pilot data for a planned application to the National Institutes of Health for the early part of 2008. Results obtained during the previous visit to New York (in July, 2007) and analyzed by our collaborators in Prague, Czech Republic demonstrate the resiliency of brain cells to adapt to brain edema by regaining normal size and maintaining physiological function.

Gebhart's Runs

- Mark Gebhart, M.D.



Calamityville Happenings in Mid November

Dr. Gebhart and Jim Gruenberg, AFRL, and the Dayton Development Coalition, participated in a rare opportunity to present the Calamityville project to Mr. Bran Farren, Co-founder and Chief Creative Officer, and his staff at Applied Minds, Inc. in Glendale, California. Applied Minds is a research and innovation studio that designs and develops intellectual property for a very wide range of clients and industries seeking sophisticated solutions to creative problems.

The Calamityville Working Group concluded its last meeting and was presented with the "Calamityville Tactical Laboratory Business Plan". With the publishing of the business plan, a Calamityville Advisory Committee will be established in the new year.

THE HELP CENTER OPERATIONS

The Center continued to prosper during the late summer and fall season. In September **Dr. Jon Krohmer**, Deputy Assistant Secretary and Deputy Chief Medical Officer of Health Affairs, Department of Homeland Security was welcomed for a visit and tour of our facilities/operation. This was in relation to our efforts with the Ohio Department of Health, and the Modular Emergency Medical Systems project.

The HELP Center participated in the United States Air Force 5K and 26.2 mile marathons on September 14 and 15, 2007. The first aid tent was staffed by EM residents and HELP Center staff who provided medical care to runners that experienced minor injuries during

the race. Nearly 2,000 runners blazed past as HELP Center staff cheered on. It was an excellent team building opportunity while supporting our USAF partners and the Fairborn community.

In November, Lt. Commander Sumner Bossler Jr. from the Office of the Assistant Secretary for Preparedness and Response, Department of Human and Health Services visited our MACIE Training Center for our surge capacity solutions for the state. Accompanying him were various representatives from the Ohio Department of Health.



MODULAR EMERGENCY MEDICAL SERVICES

The maintenance contract from the Ohio Department of Health was officially awarded in October for the surge capacity initiatives. These initiatives include the West Central Acute Care Center (ACC) and Neighborhood Emergency Help Center (NEHC). We are pleased to continue this important project which directly aids the citizens of the state.

Mr. Michael Porter has joined the HELP Center as the MEMS Manager for the Dynamic Medical Systems project. As MEMS manager he will manage all aspects of the MEMS projects and integrate the MEMS project which currently includes the Acute Care Center (ACC) and Neighborhood Emergency Help Center (NEHC) into Medical Readiness at the HELP Center. Mr. Porter is a nurse with an extensive background in pediatric care. He has over 20 years of pediatric nursing experience working at the Dayton Children's Hospital. Before arriving to the HELP Center, Mr. Porter was instrumental in the start-up of Eastern Indiana Sports and Ortho Tower Specialty Surgery an orthopedic outpatient surgery center. Mr. Porter was the first recipient of the Department of Emergency Medicine Nursing Excellence Award in 1997 bringing him full circle within the department.



The Chair's Perspective

- Glenn Hamilton, M.D.

SIM EXPANSION

We're delighted to welcome **Melissa Schloneger, MD** who will be joining us January 1st in a .5 FTE position and working her clinical time at Good Sam ED. Dr. Schloneger's role will be to work with **Dr. TenEyck** and enhance our capabilities in the area of simulation. Dr.

Schloneger is a 2006 graduate from our program and we're delighted to have her back with us, especially in a teaching capacity.

In addition, we'll be adding David Cherolis as our new simulation technician. Mr. Cherolis comes with a extensive background as US army ranger and has had significant field experience with a medical orientation. We are certainly pleased to have him join us and help operationalize both the medical and the field Simulation Center area.

Lastly, we are planning a substantial expansion of our simulation space. In conversation with the University just this week, we will be adding almost 1,800 ft. of additional space, primarily new classroom space on the 2nd floor of Cox. Over the course of the next 12 months, there will be tremendous progress in this area and we hope to invite the readership to come see our new multi-use Simulation Center within the next year.

WEB UPGRADES

We ask each of you to take a look at the web site <http://www.med.wright.edu/em/res/>. Dr. Singer has favorably commented on the added video vignettes. These are spontaneous in nature and a very thoughtful discussion of the program, its benefits and the attractive elements that brought Dr. Pickett to us.

In addition, there are a number of other new items including a much more detailed guideline to the curriculum. We continue to enhance this important communication tool with our constituency and again invite you to take a good look at what we're doing and welcome any feedback. Cassie Browning, our web page editor has done an excellent job and she is always open to new ideas.



CALAMITYVILLE FUSION



Over the last few months, we have been working on a third frontier initiative called the Ohio Research Scholars Program. You may recall the third frontier is a 1.6 billion dollar investment on the part of the State of Ohio (from its tobacco settlement). The goal is to enhance both higher education in Ohio and the commercialization potential of research endeavors supported at the public and private institutions throughout the state.

As we have been making excellent progress in our planning for the Calamityville Tactical Laboratory, we decided that the addition of a Fusion Center at this site would have a variety of directions. The primary foci of the Calamityville Tactical Laboratory are training and commercial test bed. With the addition of the Fusion Center, we hope to bring in 5-6 out of state scholars who will work with our already strong partnership teams within the university, other universities, the military and with a variety of commercial partners. Directed toward the theme of medical readiness, the Fusion Center actually brings the research arm to the previous orientation of training and commercial test bed. The success in this area can only enhance our viability as a unique world-class center for medical readiness in Dayton. It is 27 million dollar proposal due in February and we'll keep you up to date as to its progress.

PERSONAL NOTE

The next issue of the *Update* will address the spirited activities surrounding the celebration of the holidays and all of the visual/e-mail/mail greetings we have had the pleasure to receive. I hope you all had a wonderful holiday season. We look forward to your happy New Year. Rest assured, we have had a successful, productive and reflective 2007. May you remain healthy, prosperous, and satisfied with your careers.





Boonshoft School of Medicine
Department of Emergency Medicine
3525 Southern Blvd.
Dayton, OH 45429-1221