

Wright State Emergency Medicine Residency Department of Emergency Medicine

Volume 38, Issue 2 Fall 2015

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FROM THE EDITOR'S DESK

Greetings All! I hope this fall edition of the *ED Update* finds you and yours well. As we go to press, the recently graduated class of 2015 is already hard at work as attending physicians in their civilian or military jobs. The interns of the future class of 2018 are long done with orientation and busy in the emergency departments, wards, and ICUs of our affiliated institutions.

Dr. Fieg has ended his brief reign as program director. With his departure, we once again have Dr. Brown holding the dual role as PD and Chair. One of Dr. Fieg's biggest changes, the relocation of resident conference from Friday afternoon to Tuesday morning, continues.



Class of 2018

Truth be told, we're starting to get used to it, although we have changed the start time from 7 a.m. to 8 a.m., providing a much appreciated extra hour of sleep.

Enjoy the change of seasons and the upcoming holidays. Be sure and get your shopping done early!

Read on... Brian L. Springer

CONGRATULATIONS!!!

Congratulations to two of our faculty members! **Stacey Poznanski**, DO, has been named as the 2014-15 winner of the BSOM Excellence in Medical Education Award, which recognizes those who have a significant impact on the educational experience of our students through their teaching, leadership, and engagement with the curriculum. **Raymond Ten Eyck**, MD, has been named as the 2015 winner of the BSOM Innovation in Medical Education Award, which recognizes outstanding achievements in medical education by faculty members, particularly in the development of new, innovative educational initiatives or programs.

Cassie's Bulletin - Cassie Browning



Here is a look at what we have been doing since spring.

R2 EXTRICATION COURSE

We have had an extrication course for our second year residents for many years now. It's a great day of learning, and the residents always have fun. A huge thank you goes out to the Kettering Fire Department for allowing our residents to come to their training center each year to learn about extrication.











GRADUATION

Congratulations to the Class of 2015!



Emergency Medicine

Taylor Baldwin, M.D.: Baptist Health Richmond, Richmond, KY Alexander Bedard, M.D.: Wright-Patterson Medical Center, Wright-Patterson AFB, Dayton, OH Derek Broering, M.D.: Miami Valley Hospital, Dayton, OH Steven Colonna, M.D.: Hurlburt Field, Fort Walton Beach, FL Andrea Kaelin, M.D.: Wright-Patterson Medical Center, Wright-Patterson AFB, Dayton, OH Anthon Lemon, M.D. Mike O'Callaghan Federal Medical Center, Nellis AFB, Las Vegas, NV Christi Makas, D.O.: Wright-Patterson Medical Center, Wright-Patterson AFB, Dayton, OH Jeremy Moore, M.D.: Miami Valley Hospital, Dayton, OH Valerie Moren, M.D.: Emergency Medicine Specialists: Kettering Medical Center and affiliated hospitals, Kettering, OH Michael Pearson, M.D.: Willis Knighton Pierrmont Medical Center, Shreveport, LA Sundeep Punia, M.D.: Southern Arizona Veteran's Health Care Services, Tucson, AZ Jessica Rando, M.D.: Emergency Medicine Specialists: Kettering Medical Center and affiliated hospitals, Kettering, OH Christopher Smelley, D.O.: Keesler Medical Center, Keesler AFB, MS Brooke Smith, M.D.: Good Samaritan Hospital, Dayton, OH

Sports Medicine Fellowship

Benjamin Burkam, M.D.: Summa Sports Medicine and Orthopedics, Akron, OH Brian Purchase, D.O.: Covenant HealthCare, Saginaw, MI



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ORIENTATION PICNIC AND ANNUAL SOFTBALL GAME



















OHIO ACEP

Some of our residents attended Ohio ACEP. **Brian Tucker**, **Eugene Kang**, **Ben Holland** and **Devin Burrup** presented posters. Some of our residents also participated in the EMRA Quiz show. The team tied for second place.



A DAY IN THE LIFE

Dr. John Trentini, 3rd year resident, was given an unique opportunity to show people what it is like to be a resident. Trentini was one of three physicians Medicine + the Military showcased for people to immerse themselves in a day in the life of military physicians who practice medicine in unexpected ways. On their website they feature photos and videos from throughout the day.





"Emergency medicine, in my opinion, is the best medical specialty because it's the most interesting. It's the most fun."







http://medicineandthemilitary.com/day-in-the-life#john-trentini

ER CODE PINK

MAKING STRIDES AGAINST BREAST CANCER WALK

Our department recently participated in the Making Strides Against Breast Cancer walk. We raised over \$1,500 for the American Cancer Society. Thanks to everyone who walked and/or donated to our team, ER Code Pink.



























2015 ALUMNI/RESIDENT/FACULTY DINNER

This year's Annual Alumni/Resident/Faculty Dinner was held at Legal Sea Foods in Boston at Copley Place. The annual dinner is held during ACEP week. It is a great time for everyone to catch up. Thanks to everyone who attended this year's dinner. If you couldn't make it to this year's dinner, we hope you can join us next year!









If it isn't fresh, it isn't Legal! *





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Thanks to third year resident and chief, **Natalie Williams** for sending in these great photos!





Senior Residents Day sponsored by CEP America on August 14th, attended by John Trentini, Jamie Bleyer, Devin Burrup, Leo Tanaka, Natalie Williams and their families.



Our residents enjoyed their Resident Wellness Day at Poelking Lanes.



Our intern class spent some time with our chief residents during the Meet the Chiefs get together at SkyZone.





Above: Our residents working at the 2015 Air Force Marathon. Below: Our residents working a shift.



CONGRATULATIONS!!!





Congrats to **Trent** and Courtney **Hansen**! Cora Mae Hansen was born on August 4th at 9:11 pm. She weighed 6 lbs. 11 oz. and was 20 inches long.



Congrats to alum **Bridget Nestor-Arjun** and her husband Scott on the arrival of their daughter Anara Asrani Arjun on June 12th at 8:29pm. She weighed 6 lbs. 9 oz. and was 19 1/4 inches long.



Congrats to alum **Susan Geiger** and her husband Erik on the arrival of their son, David Dowd Geiger on July 18th. He weighed 8 lbs. 3 oz and was 20 1/4 inches long.



DTEM

The Division of Tactical Emergency Medicine has maintained a brisk operational pace in the region. Both local and federal agencies have had multiple missions, supported by our attending and resident physicians. Drs. **Bias**, **Day**, **Schott**, and **Trentini** have bent over backwards and withstood some horrendously early morning starts in their efforts to support our men and women in blue (or in this case in black, OD green, and multi-cam.)

TRAINING

When we were not busy helping on operations, DTEM attending and resident physicians have been teaching up a storm. Ohio Tactical Officers Association (for whom I serve as Tactical Medical Director) had their annual training conference and vendor show at the Kalahari Resort in Sandusky, and DTEM organized the tactical medical training track. I was very ably assisted by Drs. Pickett, Schott, Smith and Trentini. We brought in teaching faculty from Cleveland MetroHealth, Case Western, and Akron, and had students come from across the state of Ohio. It was a great success, and planning has already begun for next year. Dr. Schott also survived 5 days of tactical medical training with Tri-Med Tactical in July. He was joined by two of our PAs from the Kettering Trauma Program. We hope to get them operational with DTEM to enhance our capabilities and manpower.

The Ohio Peace Officer Training Commission has revamped the curriculum for basic peace officer training in Ohio, to include a full day of the self-aid/buddy-aid course that Dr. **Pickett** and I created and have taught for the state for several years. Renamed Critical Injury First Aid or CIFA ('See-fah'), it will introduce police cadets to life-saving tactical medical skills such as bleeding control and airway management. The implementation has required a tremendous workload, during which time Dr. Pickett conveniently deployed to the Middle East. Thanks again to Drs. **Bias**, **Schott** and **Trentini** for their assistance along with the ever reliable Woody Goffinett and Nadi Graham (cops and tactical medics *extraordinaire!*)

Springer's Stuff

- Brian Springer, M.D.





Dr. Pickett and Dr. Trentini dispensing wisdom at the OTOA conference.



While on the road to assist federal agents, Dr. Day discovers a Tesla charging station, hidden behind a rural Kentucky strip mall. Very strange...

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TRIG

Dr. Trentini hosted a meeting of the **TEMS** Resident Interest Group at his home/farm. We practiced approach, treatment and rescue of a downed officer in an "unfriendly environment," with paintball guns to enhance the realism. My instructions: the guns are to be used to keep people's heads down; this should NOT be shootout. Despite the nods of the attendees, my requests were quickly discarded and paintballs started flying. Still, good medicine was administered in bad places, poor tactics were rewarded with paintballs in the face, and everyone struggled while treating casualties in the bed of Trentini's pick-up truck.



Dr. Rao and Dr. Schott get dirty at TRIG training.

VACATION

Kim and I took the dogs to Hocking Hills for a few relaxing days this summer. We hiked familiar trails at Cedar Falls and Old Man's Cave, relaxed with great food and wine, and spotted deer, turkey and snakes.

Until the next edition...





Brian, Kim, Wally (weiner) and Ripley (bouvier) on the trail.

Emergency Medicine Research

- Catherine A. Marco, M.D., FACEP

CLINICAL RESEARCH UPDATE

Emergency Medicine Faculty, Residents, and Medical Students are keeping busy with Emergency Medicine Research!

Recently Published:

Marco CA, Kowalenko T: Emergency Medicine Residents' Perspectives on Patient Safety and Duty Hours. Am J Emerg Med 2015; 33:459-60.

Geiderman JM, **Marco CA**, Moskop JC, Adams J, Derse AR: Ethics of Ambulance Diversion. Am J Emerg Med 2015; Volume 33, issue 3, 822-27

Accepted for Publication:

Rando J, Broering D, Olson JE, Marco CA, Evans SB: Intranasal Naloxone Administration by Police First-Responders is Associated with Decreased Opioid Overdose Deaths. Am J Emerg Med 2015 (in press)

Marco CA, Davis A, Chang S, **Mann D**, **Olson JE**: Emergency Department Patient Satisfaction: Factors Associated with Satisfaction with Care. Amer J Emerg Med 2015 (in press)

Marco CA, **Michael S**, **Bleyer J**, Post A: Do Not Resuscitate Orders Among Trauma Patients. Amer J Emerg Med 2015 (in press)

Marco CA, Wahl RP, Counselman FL, Heller BN, Kowalenko T, Harvey AL, Joldersma KB, Reisdorff EJ: Physician preparation for the American Board of Emergency Medicine ConCert examination. Acad Emerg Med 2015 (in press)

Ongoing projects:

Pain Scores for Standardized Painful Stimuli Among Emergency Department Patients (Drs. **Marco**, **Mann**, **Pickett**, **Olson**, and medical students Julie Whitis, Alex Cook, James Xidas)

Air Transport for Stroke Patients: a Qualitative Outcome Study (Drs. **Marco**, Hawk, and medical students Matt Huang and Eugene Yoon)

Thyroid Function Tests in the ED (Dr. Michael Koroscil)

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Update from the Center for Immersive Medical Education and Research (CIMER) - Ray Ten Eyck, M.D.

SCHOLARLY ACTIVITIES

2015 has been a good year for our division's scholarly activity. In January we had the opportunity to demonstrate a few of our innovations in simulation-based education at the International Meeting of Simulation in Healthcare. In addition, the fruits of several collaborative efforts with our medical students and the WSU College of Nursing and Health culminated in four abstracts accepted for publication, multiple poster presentations, one published article and two additional articles accepted and pending publication. We continue to look for opportunities to develop research projects from our many educational programs.

NEW OPPORTUNITIES

Although, the core simulation curriculum for our residents and medical students continues to be our primary mission, we have had the opportunity to work with new groups of residents and healthcare professionals seeking additional training opportunities with the increased fidelity that simulation can provide. These new opportunities have challenged us to expand the limits of our facilities and our educational programs.

AIRWAY CURRICULUM

In June I had an opportunity to attend the Difficult Airway Course which provided a strong evidence-based foundation to build a series of simulations which would support the resident airway curriculum initiated by Dr. **Vojta** and Dr. **Keville**. We launched the initial installment with a group of R-3 volunteers who provided feedback which is helping us finalize a longitudinal airway management curriculum for all three years of the residency.

INTERNS AND PA STUDENTS

Our second class of 16 residents started orientation in July and based on their performance in all of the teaching and skills demonstration sessions, they promise to be a very strong group. In the same timeframe, we again provided simulation sessions, focused on emergency procedures and resuscitation skills, to 40 physician assistant students from Kettering College. These sessions were extremely well received thanks to the tremendous support of Dr. **Brown**, Dr. **Janz**, Dr. **Vojta**, Dr. **Pickett**, Dr. **Fieg** and Dr. **Trentini**.

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Research Results

- Jim Olson, Ph.D.

STUDENTS IN THE LAB

Graduate and undergraduate students were working in the lab this summer on various projects. April Daubenspeck (WSU, **Biomedical Sciences PhD** program) completed her qualifying exam and began working on the paperwork needed to get started on her clinical translational project. April will be using advanced techniques in Wright State's Proteomic Analysis Laboratory to discover novel biomarkers for ischemic stroke. From this data she will develop a panel of biomarkers that may be used for prognosis or assessment of stroke onset time. With all the



The lab group for summer 2015 from left to right, Dr. John Trentini, Dr. James Olson, Dr. Brian Tucker, Nancy Andrews, Madelyn Jones, April Daubenspeck, Dr. Guangze Li, and Nicholas Seitz.

alphabet soup of compliance approvals in place (WSU-IRB, WSU-IBC, MVH-HIRC) April is ready to begin collecting blood samples from ischemic stroke patients undergoing surgical thombectomy.

Madelyn Jones (WSU undergraduate) is measuring the release of ATP from human astrocytoma cells during osmotic swelling. Using pharmacological inhibitors of specific membrane channels she will characterize the mechanism responsible for this release. Madelyn gained experience using cell culture techniques, sample preparation, and HPLC analysis. Her work will be presented in a poster at the Central Research Forum at Wright State University on October 22.

Nicholas Sites (Valparaiso University, undergraduate) performed live cell imaging studies using a cell culture model of diabetic hyperglycemia. He examined changes in the production of reactive oxygen species during osmotic swelling and observed that hyperglycemia increases production of these potentially damaging molecules. Nick's work will form the basis of preliminary data for a planned application for the American Diabetics Associates in early 2016. In addition to his time spent in the lab, Nick managed to play a little golf and placed fourth with even par in the 2015 Metropolitan Championship Golf Tournament at Beavercreek's Country Club of the North in July.

BIG NEWS ABOUT NANOPARTICLES

Work continued during the summer on John Trentini's project funded by the Emergency Medicine Foundation. We are examining the efficacy of cerium oxide nanoparticles for elevating damage caused by brain ischemia. Our results demonstrate application of the nanoparticles during reperfusion significantly reduces the production reactive oxygen species and leads to less cell death. In addition, our studies indicate there is a dose response for this effect. Dr. Trentini's work was presented in October at the Midwest Regional SAEM meeting in Toledo.

THE BEAT GOES ON

Thanks to the effort of Dr. Brian Tucker, the brain edema and trauma (BEAT) research project that was started with three WSU medical students many years ago has been submitted for publication. Dr. Tucker's manuscript describes the prognostic value of evaluating brain edema on the initial CT scan of patients with traumatic brain injury (TBI). The results demonstrate that brain edema is associated with an over tenfold increase in mortality across all TBI patients and 5-fold increase in mortality for those with mild TBI. This retrospective analysis of over 8,000 patients from Miami Valley Hospital's Trauma registry database is the first to critically examine the influence of brain edema on clinical outcome for mild TBI patients. Co-authors on the manuscript include Dr. Mary McCarthy (WSU Department of Surgery) and three emergency physicians who initially worked on the project as medical students; Dr. Jill Aston, Dr. Meagan Dines, and Dr. Elena Caraman. Dr. Tucker presented this research at the recent Midwest Regional SAEM meeting in Toledo.

a natural canopy of high branches in the right upper

quadrant of our backyard woods. This was a natural location for a small patio. So I dug up a 10 foot by 10 foot area and fortified the walls with 2×4 's. For a year the 10 inch pit collected rain water and served as a mud wrestling area for toads. Then a promise came to pass. In order to secure the purchase of our abode (which did not have the perfect kitchen, tops on someone's priority), I said, "You can do whatever you want in this house". A year passed then something bit me in the arse. Ruth determined the blacktop driveway had to be replaced by pavers. We got bids, picked the company that had created a patio at our old place and over a two week period watched the production of an art project outside the garage door. I requested a drop off of a few ton load of crushed rock/sand mix which rested comfortably at the neighbor's property line and load by load wheelbarrowed it until rocks rested, leveled in the 100 sq. ft. space. For the driveway we paid for 1200 sq. feet of pavers and I performed the same joyous transport of the excess pavers and fashioned the same pattern. I now am the proud owner of a cheap fire pit, covered in a green tarp buried in the RUQ of my backyard, and I am 20 something grand poorer, but Ohh, you should come over and park to catch the sweet smell of backyard flame.

FROM THE OTHER SIDE

- Jon Singer, M.D.

OUR LITTLE CORNER

We completed a number of projects in our little

yard. When we first moved in two years ago I sensed

Continued on next page.

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As had been my history of burying bulbs in the St. Bernard property I have done the same in Maineville. But as described above, 90% of our current yard is woods, impervious in much of the area to any sunlight thus preventing photosynthesis of products from Holland. Now two autumns into rural living, all available space at 1610 Sycamore Ridge Drive, 6 inches underground are occupied. However, I figured out a solution to overpopulation. I buried allium and daffodil bulbs in the "park" across the street from us. This is one of the common areas of the 500 housing development. Per the HOA, "nothing can be removed from the common areas." Simple enough, it doesn't say that you can't put something in. So I did. Come park in our driveway in the spring to catch green shoots erupt.

RUNNING OUT OF TIME

As the leaves have fallen, so have the contents of my colon, but the latter has been in an unnatural efflux, the result of magnesium citrate and polyglycol solution. I watched the benzo and opiate infusion for the few seconds before I went to LaLa Land. The new GI guy (my last one died precipitously from a cardiac event) removed a single polyp. Pathology is pending. Before he left the facility he told Ruth and I that one option was for another colonoscopy in 5-7 years OR not have any further. This sentiment is similar to my radiation oncologists opinion when I left his care 5 years ago that I should get a yearly PSA until some point when "You need not bother." The obvious implication from these learned gentlemen is that something awaits. In the interim, come park in the driveway. My best, Jon.

Military Maneuvers

Roy Johnson, MD Associate Program Director, Military

INTERNS

The Air Force interns are off to a solid start and all of our residents are progressing nicely. The R2 class continues to impress as one of the strongest military classes we have had in a long time. And as we move toward graduation the R3's are thinking about what they would like for their assignments.

CANDIDATES

It is that time of year where we score and select next year's residency candidates. It is another strong year with over twice as many candidates as there are Air Force training positions and to get a military training slot the candidate will likely need to be near the top quarter. The board should be completed at the end of November with the results being released in mid-December.

FELLOWS

We are hoping that the Air Force gets funding to train two emergency medicine fellows this year, one in pediatric emergency medicine and one in ultrasound. The Air Force only has one gualified applicant for each position and both are from this program. For peds EM, one of our Chiefs, Jon **Henderson**, has made a strong showing during interviews at multiple peds EM fellowships around the country. Jon would make an outstanding pediatric emergency medicine physician and would make a huge contribution to Air Force EM. Our recent graduate, Andrea Kaelin, who is doing great as a new staff physician at the base, is applying for the ultrasound fellowship at the San Antonio Military Medical Center. If selected, this would be a huge win for our program because the consultant to the Air Force Surgeon General has said that he would have her return to Wright-Patterson after completing her fellowship to bring her newly minted skills back to our residency program. Let's all hope that the Air Force finds the funding to send both of these great candidates to fellowship.

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CHAIR BROWN KNOWS

- James Brown, M.D.



The only consistent thing in the department is change. We are in the middle of interview season and just about each medical student asks some version of "do you anticipate any changes in the program" during the interview. My answer is always "yes, I'm just not sure what they are yet." That being said, there are a few changes that I can talk about.

As Brian mentioned on the cover, I'm back at the Program Director job. **Ed Fieg** decided to take a position back in St. Louis as Director of the St. Louis VA ED. I think it's an important mission, one filled with plenty of 'challenges' and one that Ed is uniquely fitted for. I offered to get him a lance suitable for tilting at the windmills of the VA system as a going away present.

I'm not planning on holding on to both jobs for long, however. **Mike Ballester** has agreed to return to the faculty and the plan is for him to assume the PD role in July. We (residents and faculty) are excited to have Mike back with us. He's been very enthusiastic about returning and taking the reins of the program.

ULTRASOUND

As you know, ultrasound has become increasingly important as a tool in the ED. Despite the fact that as an old guy I think it's witchcraft, the department needs to beef up its skill set in this area. To that end, we will be advertising for a new faculty position of ultrasound director. If you know of someone with a skill set and passion for ultrasound, send them our way.

FACULTY DEVELOPMENT FELLOWSHIP

Glenn started a faculty development fellowship a number of years ago. We revived it this year when **April Anderson** contacted us about it. April has been a fantastic addition to the department this year. The residents have really taken to her. She has a particular interest in teaching about quality, an area the ACGME seems to be focusing on more and more.

I'm sure that there will be many more changes and news to share with you in the next edition.

KEEP IN TOUCH

Thank you for reading the *ED Update*. If you have anything you would like to share with the residency, including birth announcements, and would like it to go in the *ED Update* please email it to me at <u>cassandra.browning@wright.edu</u> and I will put it in an upcoming issue. We would love to hear from you!

Also, please remember to keep us updated on any address, phone number and/or email changes so we can keep in contact.

We are on Facebook! If you would like to become a member of our private Facebook group page email, me at <u>cassandra.browning@wright.edu</u> and I will email you an invite to join in the fun.