FROM THE EDITOR’S DESK
Greetings all! I hope this latest edition of the ED Update finds you and yours well. Believe it or not, it has been almost an entire year since our last edition. So, time to catch y’all up on: Dr. Ballester officially taking on the role of PD, graduating the class of 2016, and our newest bunch hitting the ED and wards: The Class of 2019.

Read on…
Brian L. Springer

OUTSTANDING EMERGENCY MEDICINE RESIDENT OF THE YEAR AWARD PRESENTED TO RORY STUART, MD

On April 19, 2016, at the Emergency Medicine Leadership Forum, the Ohio Chapter of the American College of Emergency Physicians (Ohio ACEP), presented the 2016 Outstanding Emergency Medicine Resident of the Year Award to 2016 graduate, Rory Stuart, MD.

The Outstanding Emergency Medicine Resident of the Year Award was established to recognize a resident of outstanding merit who exhibits exemplary clinical promise, leadership, and commitment to their patients and emergency medicine.

His fellow residents have described him as "brilliant" and “the smartest person I know.”

We would like to congratulate Rory on this accomplishment!
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 teaching our residents about extrication and for allowing our residents to come to their training center each year.
Several of our residents attended Ohio ACEP’s 2016 Ohio EM Residents’ Assembly. **Brent Balhoff** presented a poster. **Dominic Kim, Josh Burkhardt, Meagan Verbillion** and **Brent Balhoff** participated in the EMRA Quiz Show. We are proud to announce that they placed 2nd. Congratulations! You did a great job!

WSU EM Team, left to right: Dominic Kim, Josh Burkhardt, Meagan Verbillion and Brent Balhoff

Brent Balhoff presented a poster.

2nd place!

Congratulations!
GRADUATION

Congratulations to the Class of 2016!

Emergency Medicine

Sara Birdsong, M.D.: Keesler Medical Center, Keesler Air Force Base, Biloxi, MS
Jamie Bleyer, M.D.: WakeMed Health and Hospitals, Raleigh, NC
Nicholas Brautigam, M.D.: Good Samaritan Hospital, Dayton, OH
Devin Burrup, D.O.: US Air Force Regional Medical Center, JBER, Anchorage, AK
Jonathan Henderson, M.D.: Pediatric Emergency Medicine Fellowship, Medical University of South Carolina, Charleston, SC
Michael Koroscil, M.D.: Keesler Medical Center, Keesler Air Force Base, Biloxi, MS
Scarlett Michael, D.O.: Miami Valley Hospital, Dayton, OH
Kartik Rao, D.O.: Good Samaritan Hospital, Dayton OH
Rory Stuart, M.D.: UC Davis Medical Center, Sacramento, CA
Leo Tanaka, M.D.: Hurlburt Field, FL
Nii Sai Torto, M.D.: St. Anthony’s Hospital, St. Petersburg, FL
John Trentini, M.D., Ph.D.: 58th Rescue Squadron, Nellis Air Force Base, Las Vegas, NV
Brian Tucker, D.O.: Miami Valley Hospital, Dayton, OH
Natalie Williams, D.O.: Miami Valley Hospital, Dayton, OH

Sports Medicine Fellowship

Heather Rainey, M.D.: MetroHealth Medical Center/Case Western Reserve University School of Medicine, Cleveland, OH
Pradeep Raju, M.D.: Orthoillinois, Rockford, IL
ORIENTATION PICNIC

This year’s orientation picnic was held at John Bryan State Park. It was a time to meet our new class of residents and spend time with one another all while enjoying a delicious meal and playing volleyball, football and even giant Jenga!
We welcome Class of 2019!

Jamie Bonner
Ross University

Jordan Jacobsen Jacobsen
Wright State University

Eli Borup
Touro University Nevada

Alex Kissinger
St. George’s University

Phil Griffith
VCU

Jonathan Kreher
St. George’s University

Eric Hand
Ohio State University

Katelyn Lippert
University of Kentucky

Ashley-Rose Humphries
University of Central Florida

Rick Marriott
Wright State University

Nick Myers
University of Texas at Houston

Son Pham
USUHS

Matthew Rodgers
Medical College of Wisconsin

Owen Scott, USUHS

Jamie Siesel, Ohio University

Dave Williams, West Virginia SOM
2016 ALUMNI/RESIDENT/FACULTY DINNER

This year's Annual Alumni/Resident/Faculty Dinner will be held at Slice of Vegas located at The Shoppes in Mandalay Bay. This annual dinner held during ACEP week will take place on Monday, October 17th. Please RSVP to Nicki Crellin by emailing her at nicki.crellin@wright.edu or by calling her at (937) 245-7628. We hope you can join us!
CONGRATULATIONS!!!

Congratulations to Allison and Justin Houston on the arrival of their twins!

Adalyn Mae Houston was born on February 20, 2016 at 12:40 pm. She weighed 5 lbs 15 oz and was 19.5 inches long.

Bennett Anders Houston was born on February 20, 2016 at 12:41 pm. He weighed 5 lbs 10 oz and was 19.5 inches long.

Congrats Natalie and Dave Williams. Connor David Williams was born on January 20, 2016 at 3:49 am. He was 7 lbs 8 oz and was 21 inches long.

Congrats Tyler and Roxy! Uxbal Pimentel Kallsen was born on August 3rd, 2016 at 5:05 pm. He was 7 lbs 6.5 oz and 19.5 inches long.
INTERNATIONAL MEETING ON SIMULATION IN HEALTHCARE

Returning right after the first of the year with a new set of knees, I realized that patience comes with age for a reason. However, we hit the ground running (or in my case limping quickly) with a trip to the International Meeting on Simulation in Healthcare in San Diego. We displayed four posters and gave one oral presentation which was the culmination of our research efforts over the previous 18 months. The poster presented research completed with two of our medical students, Kelsey Mayrand and Eric Fischer, and was the overall student award winner at the conference attended by over 3,000 healthcare professionals from 22 countries.

INTERPROFESSIONAL SIMULATION SESSIONS

Upon returning to Dayton, we were back on schedule with our core simulation curriculum for our residents and fourth-year medical students. We initiated the last set of interprofessional simulation sessions with our R-1s and the nursing students from Wright State University’s College of Nursing and Health. Plans were finalized to incorporate the nursing students into simulation sessions with Boonshoft School of Medicine MS-3s starting this summer.

EMIG

With the help of Dr. Witte, Dr. Brown, Dr. Houston, Dr. Bleyer and Dr. Henderson, we provided an introduction to emergency medicine simulations to the BSOM Emergency Medicine Interest Group in January to support recruitment to our specialty. The session provided some fun hands-on education for the students as well as providing them with an opportunity to work closely with our superb residents.

CHANGES

Spring marked some temporary personnel changes as Dave Cherolis deployed with the Army and Phillip Smith came on-board to help sustain our operations. At the same time, we were initiating our annual MS-2 simulations during which they have the opportunity to apply material they are learning to simulated patients. This year we were able to modify the cases from a system-based approach to a chief complaint-based approach to give students a better feel for the emergency department environment. In addition, we introduced a series of clinical decision making questions to enhance the involvement of the students observing each case. The new format required more faculty support, but thanks to Dr. Dupré, Dr. Springer, Dr. Brown, Dr. Sorensen, Dr. Poznanski, Dr. Pickett, Dr. Morgan and Dr. Janz the program was a big success.

COMPLEX SIMULATION SESSIONS & ACLS

To meet the requests of a particularly determined group of third-year residents, we conducted several complex simulation sessions near the end of the year, addressing advanced airway problems, unique ED presentations, and the ultimate emergency medicine nightmare, a perimortem C-section. At the same time, with the continued support of the Dayton VA ACLS program, we greatly expanded the opportunity for our medical students to complete ACLS training at little or no cost. This year over 85 third and fourth-year BSOM students completed the skills demonstration portion of the course in our simulation lab and obtained the required cards for their graduate medical education programs.
A lot has occurred since our last Update issue. So here we go in semi-chronologic order:

**CIFA**
As of January 1, 2016, Critical Injury First Aid (8 hours of self-aid/buddy-aid created predominantly by me and Dr. Pickett) is now part of the Ohio Basic Peace Officer Curriculum. We hope these essential skills will be used to save the lives of officers and civilians throughout our state. I have already helped instruct cadets at the Dayton Police Academy and Greene County Criminal Justice Academy.

**OTOA**
Ohio Tactical Officers Association Annual Meeting in June was a huge success. We had almost 1000 attendees, and filled the TEMS-track with a combination of physicians, medics, and law enforcement officers. Dr. Pickett presented, along with physicians from Case Western and Summa Health. Tactical Medic and Athletic Trainer Woody Goffinett also set up a sports medicine training room to care for sore or injured conference participants. Within minutes of opening shop, a Benchmade Knives sales representative cut himself and came in for a patch-up.

**CENTER FOR PREHOSPITAL AND OPERATIONAL MEDICINE (CPOM)**
With the blessing of the DEM Chair and faculty, the Division of Tactical Emergency Medicine has now been rolled under the umbrella of the Center for Prehospital and Operational Medicine (CPOM). The highly capable Dr. Pickett has been placed in charge, and we expect great things from him. Our program has a long-standing tradition of civilian and military resident participation in EMS, tactical EMS, and disaster/mass gathering medicine. Time to put that face front and center, as these are becoming ever more valuable skills in uncertain times.

**REPUBLICAN NATIONAL CONVENTION**
I attended the 2016 Republican National Convention in Cleveland, in support of FBI Cincinnati Division SWAT and the numerous other law enforcement agencies in attendance. Fortunately, things were nice and quiet and my skills as a tactical medic were not required (although I took care of the usual bumps, bruises and headaches). It was exciting to be on the ground and see the tremendous planning and manpower that ultimately made it a safe venue.

**GRADUATION**
With a heavy heart, I watched as we graduated last year’s TEMS Chief Resident, Dr. John Trentini. He worked hard keeping our residents involved in prehospital activities, and covered many a warrant service himself. He will be sorely missed. On the bright side, Dr. Eric Schott has stepped into his shoes and assumed the role as our Prehospital and Operational Medicine Chief Resident. We already have him hard at work coordinating resident activities with CPOM.
THE BIG 5-0!
By the time this goes to press, I will have reached a landmark birthday: 50, the big five-oh, half-a-century, etc. In case you are wondering: yes, I am beginning to feel the years a little. Kim and I just returned from an early b-day celebration in the Grand Teton and Yellowstone National Parks. It was an amazing trip, and I hope we return soon.

Until the next edition…
Emergency Medicine Research
- Catherine A. Marco, M.D., FACEP

CLINICAL RESEARCH RECENT PUBLICATIONS


Marco CA: Honesty is the Best Policy: How to Handle a Medical Mistake. ACEP Now April 2016: 16.


PICKETT'S AFTER ACTION REPORT  
- JR PICKETT, M.D.

CENTER FOR PREHOSPITAL AND OPERATIONAL MEDICINE  
Opportunities for prehospital and unconventional medicine have long been a strength of this program. Residents who have EMS interest tend to have multiple interests along these lines, and a sharing of resources and educational opportunities will help expand our training offered in this area. We have now consolidated EMS, Tactical Medicine, Disaster Medicine, and Mass Gathering Medicine under one roof: The Center for Prehospital and Operational Medicine. I’d love to say that every member will get a Pickett Bag® (all rights reserved), but I’m cheap, and half the fun of the bag is putting it together yourself.

CAP LAB  
The Cadaver, Anatomy, and Procedure Lab for EMS was once again a huge hit thanks to a fantastic cadre of instructors and a herculean effort by our residents. **Brian Tucker, Natalie Williams, Sara Birdsong, Prabu Selvam, Angela Palitto, Doug Gilmore, Ray TenEyck, David Cherolis, David Shablak, and Cassie Browning** put together the best lab yet. Great big thanks to **Andrew Bohn** who took the helm as faculty advisor while I was off playing in the sandbox. They also managed to convince me that Natalie had precipitously delivered her baby during the lab, which was a cruel but brilliant joke to play on a dude who was 7000 miles away.
The R2 and R1 classes have demonstrated a strong EMS interest, and my hope is that this will translate to a paradigm shift within the residency. Jamie Bleyer and Josh Burkhardt put together a great wilderness medicine event for the residents in June. Residents made improvised litters, addressed bites and stings from our cuddly fanged friends, treated a trauma casualty in the field, and learned how to purify water and make a laryngoscope out of a spoon. This was well received and will become a yearly event. Eric Schott and Doug Bias created our first “EMS extravaganza”, where 14 participating residents rotated through stations performing field care, running in kit, and performing QA incident review. This was all done on a gorgeous day at Doug’s family compound and afforded us the opportunity to drink beer and drink in the beautiful scenery.

DEPLOYMENT
I returned from my third deployment to the Middle East at the beginning of April. This was qualitatively very different that my previous deployments, as I had a phenomenal degree of freedom of movement, lived in the community, and saw six different countries. Becky, ever the saint, kept everything under control through a slew of challenges, including sewer backups, trips to the ER, HVAC issues, and two obstreperous little girls (girls who are now terrified every time I leave the house in uniform that I’ll be gone for months). She has earned her place in heaven for sure.
FAST AND FURIOUS FUNDING
We have pursued research funding from a variety of sources with the first six months of 2016. The first application went to the Wright State University School of Medicine Translational Grant program. We are collaborating with Drs. Cool & Chen, Ludwig, and Markey from the Departments of Pharmacology and Toxicology, Neurology, and Biochemistry & Molecular Biology. Our goal is to identify peptide biomarkers that can be used to diagnose ischemic stroke. In hopes of developing a point-of-care diagnostic device, we have contacted pharmaceutical and medical device companies to partner with us.

Our second proposal was sent to the American Diabetes Association. I am collaborating with Dr. Claflin (Department of Psychology) to examine whether reactive oxygen plays a role in the neurologic pathology resulting from diabetic ketoacidosis (DKA). We will determine whether subjects treated with antioxidants show less evidence of brain damage.

The third project is an application to NIH for the DEM to join others in the region in a broad research network. This system, called SIREN, has the goal of establishing research centers through which multicenter studies can be performed quickly and easily. Dr. Marco and I are site investigators.

The fourth grant went to DARPA to determine whether microwave interrogation of brain tissue can be used to monitor brain activity. This has implications for developing means for controlling prosthetic devices and for determining brain injury following rapid acceleration/deceleration. This project was developed in collaboration with Dr. Ron Riechers of Spectral Energetics and Dr. Doug Ling of SUNY Downstate.
FUNDING FINISHED AND MORE
Drs. Trentini, Li, and I wrapped up work for a grant funded by the Emergency Medicine Foundation. The goal was to determine whether cerium oxide nanoparticles can protect brain tissue during an ischemic stroke. The results have been strongly positive. Dr. Trentini has left Dayton for parts west; however, we are in the process of writing the results for publication.

Marianne Yacyshyn, (WSU MS-4) and I are continuing to examine prognostic indices in traumatic brain injury. We are determining whether the presence of brain edema predisposes patients to a poor outcome, and establishing the validity of the IDC-9 codes by performing quantitative analysis of CT images.

RESEARCH PRESENTATION
April Daubenspeck (WSU Biomedical Sciences Ph.D. candidate) and Drs. Ludwig, Cool and I submitted an abstract to the 2016 Society for Neuroscience meeting in San Diego this fall, outlining results from Ms. Daubenspeck’s evaluation of stroke biomarkers.

Augusta Eduafo, who received her Master’s degree in Physiology through her work in our laboratory, Nicholas Seitz (Valparaiso undergraduate) and I submitted an abstract which describes the production of reactive oxygen radicals in brain cells. This research may lead to improved therapies aimed at mitigating brain cell injury in patients with DKA.

Dr. Claflin (WSU Psychology) and I submitted a third abstract in the theme of Neuroscience Education. The presentation demonstrates our ability to rapidly form a memory trace that can be reinforced when the memory is later retrieved into our working memory.

Military Maneuvers
Roy Johnson, MD
Associate Program Director, Military

ACADEMIC YEAR
The academic year is off to a strong start on the Air Force side of the house. This year’s entering intern class is chock-full of talented physicians, and I expect great things from them. The R2’s and R3’s have moved up and are embracing their new roles and responsibilities. I have heard from a few of our recently graduated residents. Rory Stuart is in California, getting settled at Travis and UC Davis in his new role as academic faculty. Jon Henderson has already reached back and offered to come out and give some pediatric EM lectures. While hanging out in the local area before departing for his new assignment to Keesler AFB in Biloxi, MS, Mike Koroscil came to help teach some of the new interns.

INTERVIEW SEASON
Interview season is upon us. Dr. Dupre and Kathy Dyke are doing an absolutely superior job of managing the audition rotations for the medical students. It is shaping up to be another competitive year with fantastic candidates. On the Air Force faculty side, Dr. Sorensen continues to expand our EM critical care knowledge and set the standard for faculty in the small groups. Drs. Pennington and Morgan are working hard to ensure that our residents are competent in the future of bedside diagnostic ultrasound. We are excited to have Lt Col (Dr.) Glenn Burns back with us after completing his toxicology fellowship. It should be a great academic year.

Thanks,
Roy
FROM THE OTHER SIDE

- Jon Singer, M.D.

OLD HOUSE BLUES
Five inches of rain fell from the sky in less than an hour on two peri-Cincinnati communities. The volume far exceeded the capacity of the sewer system. People of St. Bernard watched their cars wash down the roadway on a break away Colorado River run. As if that were not sufficiently tragic, admixture of discarded bodily fluids crept up basement walls. Our kids high school took on the average 5 foot of bile, sputum and blood in both their basement and on top of the now ruined, very expensive artificial turf in the stadium. Our house of 41 years, prone to basement violation thru window wells was not immune to disaster. And speaking of windows, the original, near ninety year old objects of someone’s 1929 labors are still functional. I had to replace bb gunned, sun-cracked panes every now and again, repute and repaint periodically, but they had never been replaced.

NEW HOUSE NEWS
Our second home was built in 2004. The seal on one window was broken when we moved in 3 plus years ago. Subsequently, eight seals have failed, fogged out, sweat and repel less ultraviolet rays. We are growing either soybean shoots or mushrooms in between one double frame. Today, Tim, the measuring to one sixteenth of an inch man arrives. Six to eight weeks from now we’ll have replacements with warranties that will be transferable to the next owner. It is not that I am not buying unripened bananas just yet, but projected lifespan goes into the cost benefit calculation for things such as mattress purchase. The dude tried to sell me a 20 year guaranteed one and I told him that was an unlikely need.

NEW AND OLD NEIGHBORS
To our south, a retired academic family physician (at U.C.) and his wife moved from 3000 square feet to 1200 at Otterbein for a semi-sheltered support system. They vacated in May and have only had a few nibbles at what I thought was a fair price point. In between their weekly Sunday revisits to gingerly prune vegetation I have revised hillside architecture and planted new growth and then spring bulbs on what is common property and/or is actually their property but the yet to be determined new neighbor won’t be aware of my restructuring.

To our north, a youngish couple with 4 kids moved in several months back. We have exchanged foods, gathered on the drive for political discussion, watched over properties, watered plants while vacationing as good neighbors are prone to do. Their 4 and 2 year olds have helped me fill the bird feeder, transplant, water, etc. Having heard my Cincy crew call me Papa, these unrelated urchins call me Papa. Guess my family has grown! How is yours?
CHAIR BROWN KNOWS
- James Brown, M.D.

CHANGES
There have been, as usual, some significant changes in the Department since I last wrote a column. One of the biggest was the retirement of our business manager Shirley Foreman last spring. Shirley had been with the department since the Rosary Hall days and almost all of our alumni had some interaction with her over the years. It’s taken a considerable bit of adjustment learning to live with the post-Shirley era. Carolyn McDermott is trying to fill those shoes.

Ed Fieg also left the department in June of 2015 to assume the ED Director job at the St. Louis VA. At last report, he’s busy tilting at the VA windmill, trying to bring things into the late 20th century for EM. I took the Program Director job back for a short period of time. In January, Mike Ballester rejoined the faculty with the plan to take over the PD job from me. He assimilated so well that he took over as PD on April 1st (an auspicious date). Many of you remember Mike’s time with us a few years ago, and he had kept in touch while working clinically at the Valley, so it was a pretty seamless transition. The residents seem pretty happy with their new PD (vs the old, grumpy one).

PERSONAL NOTE
On a personal note, as many of you know my father died after a brief illness in July. I can’t tell you how much the outpouring of sympathy from many of you meant to Judy and me. It was comforting to hear from ‘family’ and it helped a great deal to blunt the pain.

ALUMNI NEWS
In the category of alumni news, there are a couple of things to report. Jim Augustine was appointed to the ACEP Board of Directors last year. Jon Krohmer was just appointed to head NHTSA’s Office of EMS! Locally, Rob Wiegand took over as the ED director at the Dayton VA, trying to do locally what Ed Fieg is doing in St. Louis. Rob comes by our Tuesday conference frequently, and it’s nice to have him back in town. I’m sure I’ve missed or forgotten other significant events – let me know what’s going on with you and I’ll try to include it next time.

ALUMNI DINNER
Finally, I hope to see as many of you as can make it at the alumni dinner at ACEP in Las Vegas. Dinner will be at Slice of Vegas at the Mandalay Bay Hotel on Monday night, the 17th of October. Please try to come out if you can. It’s always great to see our alumni.