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#### MESSAGE FROM THE CHAIR

It is my pleasure to present the 2018 Annual Report for the Department of Emergency Medicine. Our department continues to serve the University through primary and tertiary emergency care, medical education at many levels, and robust academic work. Our department strongly supports all four years of the medical school as well as EM residency training, prehospital provider programs, and eight different fellowship training programs. Our contribution to the knowledge base of emergency medicine includes more than 30 publications and presentations. Our combined emergency departments treat over 105k patients and are the primary gateway for inpatient care at University Hospital and specialty care for our region. In short, the Annual Report outlines the efforts of over 100 employees working to support our mission and our values.

# **OUR MISSION**

The Department of Emergency Medicine at SUNY Upstate Medical University exists to promote the specialty of Emergency Medicine and related specialties through excellence in patient care, education, and research.

# **OUR VALUES**

- 1. Quality emergency care is a fundamental, individual right and is available to all who seek it; and we practice this in our own ED.
- 2. There is a body of knowledge unique to Emergency Medicine that requires continuing refinement and development. We strive to acquire skills and resources for research to advance it. We strive to be its exemplary role models and teachers.
- 3. Board-certified, credentialed emergency physicians best practice quality Emergency Medicine, and we train our students and residents to do the same.
- 4. The best interest of the patient is served when emergency physicians practice in a fair, equitable, and tolerant environment supportive of diversity.
- 5. We value each practitioner's professional and personal growth, and acknowledge the need to balance both.
- 6. The emergency physician has the responsibility to play the lead role in the definition and evaluation of quality emergency care.
- 7. Patients deserve compassion and preservation of dignity in the care they receive.
- 8. A respect for diversity is one of our core values. We are committed to recruiting and supporting a rich community of outstanding faculty, staff and residents/fellows.

## **APPOINTMENTS**

- Michael Hodgman, MD Poison Center Medical Director
- Jeremy Joslin, MD Associate Chief Medical Officer at Downtown
- Kelsey Stack, DO Adult EM Medical Director at Downtown
- Ross Sullivan, MD Opioid Emergency Bridge Clinic Medical Director

### **HIRES**

- Full Time Physician/Faculty Members:
  - Paul Klawitter, MD
  - · Rishana Cohen, MD
- Part Time Physicians/Faculty Members:
  - Joseph Capogreco, MD
  - Andrea Ferrari, MD
  - Dana Finch, DO, MPH
  - Rhonda Philopena, MD
  - Marissa Smith, MD (After Hours)
  - · Michael Witt, MD, MPH
- Advanced Practice Providers:
  - Craig Fisher, PA
- Staff:
  - Anna Prince, MPH (Clinical Research Associate II)
  - Jessica Smith, EMT-P (Simulation Technician and AHA Instructor)

# AWARDS/RECOGNITIONS/ACCREDITATION

- Christopher Fullagar, MD was honored with the Unit Citation Award by the Howlett
  Hill Fire Department for his heroic work responding to a motorcycle crash in the Town of
  Camillus.
- Lindsay MacConaghy, MD received the Gold Standard Award at the Celebration of Faculty for her teaching efforts in Practice of Medicine 1 and 2 and the Emergency Medicine Clerkship.
- Risa Farber-Heath, DO received the President's Award for Excellence in Teaching in the College of Medicine, Clinical Department.
- Rodney Freeman, BS received the President's Award for Excellence in Professional Service.
- Mary Lewis received the Chancellor's Award for Excellence in Classified Service.

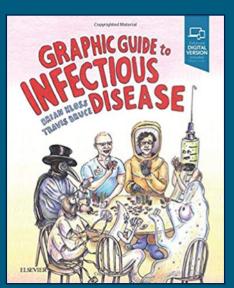






- Richard Cantor (40 yrs), Cindy Spuches (30 yrs), Rose More (25 yrs) and Tom Lavoie (20 yrs) all achieved milestone years at Upstate.
- Tyler Greenfield, DO, Deborah Mann, MD, Lisa Westcott, NP, Patrick Adcock, MD and William Linsky, FNO, MS, DNP received awards for being in the 95<sup>th</sup> percentile for excellent patient interactions and communication at the 3<sup>rd</sup> Annual Patient Experience and Award Dinner.
- **Upstate University Hospital Hyperbaric Medicine** received accreditation with distinction from the UHMA Accreditation Council.
- **Wound Care Center** received a Certificate of Recognition for achieving an overall patient excellence score of 95.1 for 2018.
- Kara Welch, BA graduated Leadership Greater Syracuse Class of 2018.
- · Ross Sullivan, MD
  - Named one of "40 Under 40" by the CNY Business Journal
  - Recognized by the Society for Academic Emergency Medicine as a "hero of emergency medicine" for his creation of the Upstate Emergency Medicine Bridge Clinic which is an innovative approach in the fight against opioid use disorder.
  - Participated in a panel discussion with US Congressional Staff in Washington, DC regarding emergency addiction care
  - Asked to write a section on Emergency Addiction Care as part of the White House
     Drug User Health Document





- textbook the *Graphic Guide to Infectious Disease with Elsevier*. The textbook has been well received with outstanding reviews on Amazon and will be translated into Spanish in September 2019. Because of their success, Elsevier is entertaining the idea of Kloss & Bruce taking on the world of USMLE Board Review and/or a authoring a third medical textbook on neurology. Dr. Kloss is working with McGraw Hill on a second edition of *Toxicology in a Box*, with hopes of adding a section of toxicology cases with self-assessment questions. In November 2018, to celebrate the new textbook the Upstate Medical Library hosted an art show displaying full color posters from Dr. Kloss' book. Several of our staff and faculty stopped by for pizza and to share in the celebration.
- **Brett Cherrington, MD** won the 2018 American College of Medical Toxicology (ACMT) Stimulus Lab Exam which was set up in honor of ACMT's 25<sup>th</sup> Anniversary.



Upstate New York Poison Control Center won the 2018 President's Community Service
 Team of the Year Award.

## **RETIREMENTS**

Mary Lewis (30 years of service)

# DEPARTMENT INITIATIVES AND OUTREACH/ COMMUNITY ACTIVITIES

**Community Campus ED:** Initiated monthly Resuscitation Drills with High-Fidelity Simulation, which has tangibly improved inter-professional collaborative practice among physicians, advanced practice providers, nurses, pharmacists, respiratory therapists, and heath care technicians.

**Syracuse VA Medical Center (VAMC):** Our department provides physicians to staff the VA ED. This medical center serves approximately 15,000 Veterans a year with a 30% admission rate and 300 inpatient psych admissions each year. The department helps train rotating Emergency Medicine Residents, Internal Medicine Residents, and medical students. Joint initiatives with the VA provide simulation activities involving the discharge of individuals seen with suicidal ideation and geriatric trauma. Dr. Nicholas continues to work with the VA to expand the point of care ultrasound at the Syracuse VAMC.

**Community Campus ED Renovations Funded:** Will result in an expanded triage room that will comply with American Disability Act (ADA) standards, a new registration area, and two new behavioral health rooms that will comply with Office of Mental Health (OMH) standards.

**Emergency Medical Technician (EMT) Course at Syracuse City School:** Working with the Syracuse City School District's Public Safety Leadership Academy at Fowler High School Upstate Emergency Medicine (UEM) developed a first of its kind partnership in the country to deliver EMT certification course to inner city high school seniors. In September 2018, Upstate faculty started teaching this first cohort of six students. These students should graduate in June 2019 with their NYS EMT certification. Positive impacts are seen throughout the community with one of our junior students saving the life of a man December 11th who suffered a gunshot wound by calling 911 and applying a tourniquet until first responders arrived.

#### **Patient Quality and Safety:**

- Development of Emergency Medicine report card
  - · Monitor relevant quality and safety measures
  - Meet monthly to determine the need for process change
  - · Monitor Length Of Stay, ED diversion, Left Without Being Seen
  - Provide feedback to physicians and staff
  - Review patient cases
- Developed working groups with Radiology to improve patient outcomes
- Maintain department Patient Experience team to improve service and satisfaction to patients and families
- Assisted in development of monthly trauma resuscitation drills
- Preparing for Geriatric Emergency Medicine (GEM) care accreditation visit

**Sports Medicine Fellowship:** We are in the process of beginning this new fellowship with our first fellows projected to start July 2020. The current sports medicine faculty from the Dept of EM includes Paul Klawitter MD, PhD and Marissa Smith MD. We currently provide training room and sideline coverage for Fabius Pompey High School and Syracuse FC of the NPSL, a national semi-professional soccer league. We are finalizing a similar relationship with a local college and we are in the process of developing an outpatient sports medicine clinic. Other new projects include several clinical research studies that we are beginning in collaboration with the Ultrasound faculty, Drs. Gaskin and Nicholas. We hope to define the role of shoulder ultrasound in the emergency department as well as develop clinical decision rules to decrease over utilization of shoulder X-rays.

**Coffee Conversations with EMS Providers:** Upstate Emergency Medicine & Emergency Department from University Hospital and Community Campus leadership have been hosting informal coffee talks with local EMS providers to improve the patient experience and hear concerns from our community Emergency Medical Service providers first hand. Coffee Conversations is held on the 4<sup>th</sup> Wednesday of even months at Phoebes Restaurant starting at 0915.



**EM Resident Volunteer Activity:** Dr. Louise Prince and several EM Residents served breakfast at the Syracuse Samaritan Center in October.

**Opioid Emergency Bridge Clinic:** in late 2018 this clinic was awarded hospital space in UHCC and Dr. Ross Sullivan was given a medical directorship to run the Bridge Clinic in addition to being part of the Upstate Hospital Addiction Committee.

### **EM Department Community Service:**

• Collection of Backpack/Back to School supplies for school children



- Emmaus collection of toiletries for the homeless
- Christmas Toy Drive for Team Upstate
- AHA Heart Walk & ACS Strides Walk Anne Peer & Cindy Spuches were our Team Co-Captains
- Celebrated Go Red for Women's Day

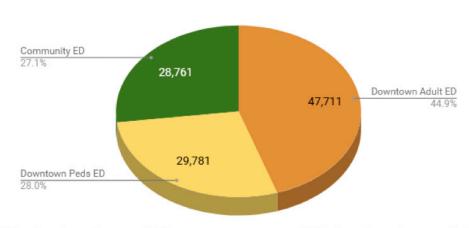


# **CLINICAL EMERGENCY DEPARTMENT (ED)**

We are an urban, level 1 trauma and tertiary care center staffed by resident physicians, advanced practice providers, and board-eligible/board-certified emergency attending physicians. Our Downtown Campus ED is comprised of both adult and pediatric emergency units while our Community Campus ED is unique that it has a separate Geriatric Emergency Medicine Care unit. The department is a major referral center with a catchment area of 19 counties for many medical and surgical services such as trauma and pediatrics.

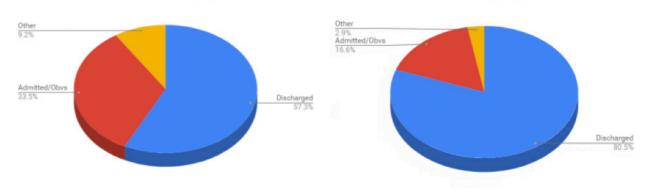
#### In 2018, the department treated 106,253 patients in the EDs:

### **Arrivals by Location**

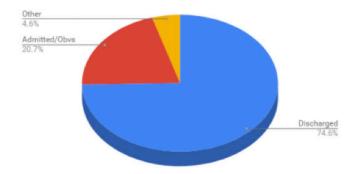


Vists Downtown Campus, Adults

Visits Downtown Campus, Pediatric ED



Visits Community Campus ED



### 2018 YEAR END DATA SUMMARY ED

	Adult ED	Peds ED	CCED	
Total Arrivals	47,711	29,781	28,761	
	(0.86% decrease	(2.4% decrease	(includes 3,770 pediatric pts)	
	compared to 2017)	compared to 2017)	(5% increase	
			compared to 2017)	
Total # Discharged	27,362	23,973	21,470	
% LWBS	2.4%	0.76%	1.3%	
# Admission	11,437	3,586	4,290	
# Observation	4,540	1,364	1,667	
% Of all arrivals that became	33.4%	16.6%	20.7%	
Admit/Obs Status				
Average Overall LOS	5.89 hours	4.10 hours	4.29 hours	
Average Discharge LOS	5.09 hours	3.33 hours	3.81 hours	
Average Admit LOS	7.90 hours	7.70 hours	6.47 hours	
Average Obs LOS	8.39 hours	9.20 hours	6.29 hours	
Ambulance Volume	18,288 (adult & peds)	NA 6,090		
	23.5% total DT ED volume		21% total volume	
Ambulance Volume Change %	5.1% decrease	NA 12.4% increase		
Admit Rate for Ambulance	60.5%	NA 43%		
Arrivals				
% ED Admits Arriving by	51%	NA	45%	
Ambulance				
Total Boarder Hours	37,656 Hours	9,655 Hours 3,828 Hours		
	(23% increase over 2017)	(29% decrease over 2017)	(8.9% decrease over 2017)	
Diversion Hours	521 NA		76 hrs	
	(357% increase over 2017)	(162% increase over 20		
ED Cross Campus Transports	To Community Campus - 651	To Community Campus -	nunity Campus - To UH Adults — 922	
& Admits	Ave of 1.8 per day 10 Patients		To UH Peds — 156	
			Ave of 3 per day	

### **2018 ICU ADMISSIONS**

Adult ED	PED	CC ED
2251	286	561

# 2018 CRITICAL CARE VOLUME (INCLUDES ICU/OR/EXPIRED PTS)

DT ED (AED + PED)	CC ED
4091 (5.2% total visits)	906 (3.1% total visits

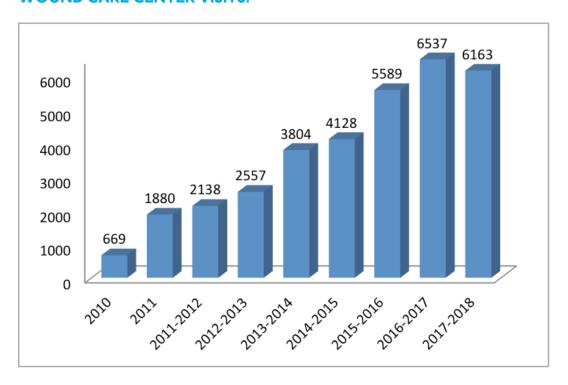
# GERIATRIC EMERGENCY MEDICINE CARE AT COMMUNITY CAMPUS ED

Goal of Geriatric Emergency Medicine (GEM) Care is to decrease the admission rate of seniors. This is accomplished through extensive ED evaluation. Pharmacists evaluate the medication regimen for appropriate dosing and risks of side effects. They also provide consultation to providers on appropriate medication choices. Social Workers evaluate the home and family support, investigate for elder abuse, and counsel the patient and family. Case Management, assisted by Social Work, set up outpatient services (such as visiting nurses or home health aides) as needed, and can help to arrange for follow up. The volume of patients over 65 presenting to the CC ED continues to grow, the percentage of the volume attributed to the over 65 population is increasing, the admit percentage remains at target; the absolute number of admissions is increasing. Much of this is due to a dramatic increase in the patients over 85 who are presenting to the ED.

# **WOUND CARE CENTER (WCC)**

The WCC has seen year over year growth in volume. We are near maximum capacity with our current space. The slight decrease from 2016-2017 to 2017-2018 reflects removal of the bridge clinic stats starting 2017-2018. We are on track for a record year in 2018-2019. The referral stream is strong and current waiting times for consultation have grown to 2-4 weeks. Anticipate starting expansion/renovation during 2019 which will include expanding WCC from 7 to 10 patient rooms. In addition, there is ongoing weekly collaboration with the inpatient wound care team to assure patient continuity and patient follow-up upon discharge.

#### **WOUND CARE CENTER VISITS:**



# **HYPERBARIC MEDICINE (HBO) CENTER**

Our HBO volumes have been near maximum capacity since 2013-2014. There was a decrease in the 2017-2018 treatment volume due to atypically low volumes Jan/Feb 2018. We have returned to normal volumes July-December 2018. In addition, we instituted longer treatment times, maintaining national care standards, which have resulted in a decreased number of elective daily treatments to 6 down from 8. Anticipate starting expansion/renovation during 2019 which will include room for 2 additional monoplace hyperbaric chambers. We continue to provide the only 24/7 HBO coverage and are the only divers Alert Network facility in all of central and western NY.

#### **HYPERBARIC CENTER VISITS:**



**Teaching:** We will host a regional symposium on WC&HBO on February 9, 2019. We will provide an HBO teaching day for the EM residence in March 2019. We host the EM-1 residents for a 2 week rotation in HBO/WC, host 4<sup>th</sup> year medical students, and resident electives. We also have an outpatient specialty clinic rotation for IM-2/IM-3 residents with Internal Medicine. They rotate with the WCC consistently Mon-Fri mornings, complete wound care consultations, and see follow-up patients. HBO faculty presented nationally at the ACCWS Annual Symposium in May 2018.

**Research:** We continue to support 3 prospective clinical trials active in HBO/WC. One of the prospective studies is supported by an industrial grant. There was 1 published manuscript and 4 published abstracts in 2018. There were 5 abstract poster presentations at the UHMS Scientific Meeting in June 2018.

**Service:** HBO faculty serve on hospital committees, lead national committees, and serve on the board of national wound care and hyperbaric medicine organizations. HBO faculty serve as an assistant editor and reviewers for wound care and hyperbaric medicine journals.



### UPSTATE GOLISANO AFTER HOURS CARE

- > 6000 annual visits in 2018
- >95% of patients/families recommend us to others
- · Recruited Marissa Smith, MD trained in both Pediatrics and Sports Medicine

# UPSTATE NY POISON CENTER (UNYPC) AND TOXICOLOGY CONSULT

Provides poison center services for 54 counties within Upstate New York with a population of 7.42 million. Staffed 24/7 by staff, certified in Poison Information.

Boarded clinical and medical toxicologists provide real time oversight and consultation in defined or requested cases. Also provides education and outreach, research and consultative services to healthcare learners. The center is a rotation site for more than 60 learners each academic year and provides support and collaborative service to the public in the form of public education and policy consultations. The center also participates in public health partnerships with local, state and national departments of health and collaborates with law enforcement and other governmental agencies.



#### **SELECTED STATISTICS:**

UNYPC Call Volume 2018:	52,714
UNYPC Call Volume 2017 for Human Exposures:	44,775
44% of calls were regarding children $<$ 5, were able to keep $>$ 90% at home	
Number of Emergency Medicine Resident Rotators:	13
Number of Pediatric and Medicine Rotators:	5
Number of Pediatric EM Fellow and PA Fellow Rotators:	3
Number of MSIV Rotators:	23
Number of PharmD Candidate Rotators:	12
Number of PharmD PGY-1 Resident Rotators:	7

# SUMMARY OF EDUCATIONAL ACTIVITIES WITH TOXICOLOGY FACULTY:

- Quarterly core content lectures to SUNY Buffalo EM residents
- Toxicology Blog: https://upstatenypoisoncenter.wordpress.com/
- Organize and host Annual Toxicology Teaching Day (past 22 years)
- Teach ½ day toxicology teaching days to EM residents with participating toxicologists in Buffalo and Albany

- Participate in EM Department teaching days
- Organize a quarterly series called Combined Toxicology Grand Rounds which is a joint conference with Onondaga County Medical Examiner's Office and Toxicology Lab to integrate and collaborate clinical and forensic toxicology

# **EM DEPARTMENT ACADEMIC ACTIVITIES**

#### **GRADUATE MEDICAL EDUCATION (GME)**

#### Residency - William Paolo, MD, Program Director

#### **Clinical Overview**

The emergency medicine residency was established in 1992 and is now recruiting for its 28 th class of emergency medicine residents. The department consists of 33 residents. (11 x 3 years) who take care of a combined total of > 106,000 ED patient visits/year ( $\sim 76,000$  at Downtown Campus and  $\sim 30,000$  at Community Campus) covering all ages of life from the specialized pediatric emergency department to the geriatric emergency department at Community Campus. The residents come from a diverse medical school background and have gone on to become chairs, program directors, and leaders in the field of emergency medicine.

#### **Educational Programs**

The department of emergency medicine and its residency host and produce a multitude of educational programs for the residents, medical students, fellows, and allied health professionals who it serves. Our 33 residents spend 5 hours per week in a multimodal learning environment in order to become prepared to be excellent emergency physicians. The program has added a dynamic didactic curriculum consisting primarily of active based learning and simulation integrated into each Wednesday conference. In addition we have taken advantage of the abundance of online materials to include 1 hour of required asynchronous learning per week or didactic conference. A new residency website and blog are currently being constructed with a goal of increasing recruitment which will be unveiled by the end of 2019.

Our department hosts a quarterly grand round series inviting national leaders in the field of emergency medicine to speak on diverse topics from healthcare reform to basic clinical skills and interactions. Our speakers have been from a vast array of national bodies including the board of directors of American Board of Emergency Medicine, board of directors of American Academy of Emergency Medicine, and national American College of Emergency Physicians. In addition our residents participate directly in medical student education with multiple residents serving as primary instructors in both the practice of medicine course as well as the foundations of reasoning in medicine course.

#### **Research Activities**

All residents are required to perform scholarly activity, a Quality Initiative (QI) project, and provide 4.5 hours of didactic content during their time at SUNY Upstate (1 hour Teaching to Learn/Learning to Teach lecture, 1 hour journal club, 1.5 hours of core content, 1 hour of Morbidity/Mortality). Residents work with our research group as well as QI officers in order to accomplish these goals. We have presented at national and international meetings and continue to produce new research projects each year. Our format is unique allowing the residents to work directly with our OI officer to identify real-time issues within the emergency department and develop and implement novel solutions.

#### **National Leadership**

Our residents serve on multiple national committees as well as serve in leadership positions in various organizations. Our residents various roles have included president of NYACEP residents association, counselor to national ACEP, members of the governmental affairs committee as well as the educational committee for NYACEP, and EMRA representative to national meetings. In addition some of our residents have completed the ACEP teaching fellowship and presented their curricular development projects at national meetings.

#### **FELLOWSHIP PROGRAMS**

#### **Pediatric Emergency Medicine (PEM) Fellowship**

#### Richard Cantor, MD, Director

With the opening of the new Pediatric Emergency Department in 2016, our patient volume has increased dramatically over the past year. Our PEM Fellowship program was one of the first nationally to accept the emergency medicine pathway applicants, starting in 1980's. Currently there are 5 PEM Fellows which will increase to 6 Fellows in the next academic year. This will augment our clinical coverage with fellows to a seven day a week staffing encompassing the hours of 8am-12mn. Current fellows are: William (Ben) Prince, MD, Vincent Calleo, MD, Sunny Kuldip Kainth, MD, Camille Halfman, MD, and Lance Paton, MD.

#### **Undersea & Hyperbaric (UHM) Medicine Fellowship**

#### Marvin Heyboer, MD, Director

The UHM fellowship continues to maintain ACGME accreditation in good standing. We have maintained a 100% ABMS exam pass rate. We are currently in our 8th year with a fellow and have successfully graduated 7 fellows. Fellows are provided with weekly didactic teaching, self-directed learning of core content with quarterly board like prep exams, and simulation training. Current fellow is Aurel Mihai, MD.

#### **EMS & Disaster Medicine Fellowship**

#### **Derek Cooney, MD, Director**

The EMS Fellowship is one of the very first programs to obtain accreditation from the ACGME. Our program offers a wide range of clinical, research, and administrative opportunities and includes both ground and air medical transport training with a variety of different agencies. Five of our faculty members have completed EMS Fellowship training (at four different programs) and are committed to providing a robust didactic experience. The faculty have varied areas of focus allowing the fellows to explore different facets of out-of-hospital care. The Upstate fellowship also offers significant experiences in air/ground EMS, tactical EMS, fire/rescue operations, wilderness and expedition medicine, event medicine, critical care inter-facility transport and international EMS. Past fellow international experiences have included China, India, Australia, St. Lucia, Brazil, the Sahara desert, and the Amazon jungle. Current fellow is Jordon Holliday, MD.

#### **Medical Toxicology Fellowship**

#### Ross Sullivan, MD, Director

We successfully graduated Brett Cherrington, MD in June 2018. Dr. Cherrington also passed his medical toxicology board examination in December 2018. Medical Toxicology continues to work closely with the Upstate Poison Control Center.

#### **Physician Assistant (PA) Fellowship**

#### Brian Kloss, DO, JD, Director

The PA Fellowship in Emergency Medicine is now in its fifth year and is actively recruiting participants for our sixth class. In December 2018, Claire Wilsey graduated from the fellowship and moved to Roanoke, Virginia to participate in a Wilderness Medicine Fellowship for Physician Assistants. Her goal is to earn a Diploma in Mountain Medicine and continue her career in Emergency Medicine. Claire has greatly enjoyed her time with us and she has expressed gratitude for the opportunities provided to her. Our newest fellow, Haley Miller, has been steadily finding her way and as of January 2019 has been with us for six months. She has expressed interest in gender equality in medicine and is hoping to attend the 2019 FeminEM conference in New York City.

Our program has continued to grow each year and feedback from our graduate fellows has been very positive. We boast a 100% first time pass rate for the NCCPA CAQ Examination and are pleased that so many of our fellows have chosen to stay on board after graduation. New in 2019 we have shifted our start date from July 2019 to December/January 2020 to better coincide with the Upstate and LeMoyne PA Program graduation cycles in hopes of attracting more local talent.

#### **Emergency Ultrasound Fellowship**

#### Kevin Gaskin, MD, Director

Dr. Elizabeth Nicholas, our first fellow graduated in 2018. The fellowship includes 8 clinical shifts a month, 5 scanning shifts a month, weekly QA session, monthly ultrasound lecture to residents and faculty and an original research project. We are planning on having 2 fellows for the 2019-2020 academic year.

#### **Fellowship Seminar Series**

This seminar series focuses on the development of a stronger foundation for conducting independent research and effective interpretation of published research for all of the department's fellowship programs. The series covers topics ranging from understanding the effective design of research projects, research compliance, study implementation, data preparation, data analysis with IBM SPSS, and conducting peer reviews. The seminar series has a total of 30 contact hours, 16 hours Small Group Discussion and 14 hours of Asynchronous Learning Modules.

#### UNDERGRADUATE MEDICAL EDUCATION (UME)

#### Matthew Sarsfield, MD, Medical Director

Our Emergency Medicine physicians are well represented in the preclinical medical school curriculum and include the Dean of Curriculum, Paul Ko, MD; Co-Directors of Foundations of Reasoning in Medicine I and II (FRM), William Paolo, MD and Matthew Thornton, MD; Co-Director of Practice of Medicine I and II (POM), Alison McCrone, MD; Co-Director of MSI Urinary, Respiratory II, Beth Nicholas, MD and Co-Director of MSI and MSII Cardiovascular, Gary Johnson, MD.

#### **Practice of Medicine (MSI and MSII):**

In 2018, approximately 300 POM I and II students have shadowed in the ED with our faculty. Simulation activities with EM faculty continue to be a highlight for our first and second year medical students. EM simulation provides students with exposure to pediatric patients that they cannot get with standardized patients as well as the opportunity to practice decision making skills with faculty support. The EM residents and faculty that facilitate these sessions consistently earn outstanding evaluations from students.

#### **Emergency Medicine Clerkship (MSIII)**

The required Emergency Medicine Clerkship started in 2008 and has always been a student favorite. This year, we have continued to hone and rework our required three-week clerkship. Our recently added sessions on ultrasound use in the ED and opiate addiction have been very successful. This year our "nursing shift" was revamped to a more interactive, inter-professional experience for our students. Every third-year medical student comes to EMSTAT during the academic year to complete orientation and simulation training regardless of the clinical campus they have been assigned. Students have expressed continued appreciation for the two teaching attendings that are available to them throughout the clerkship from the department. Faculty who dedicate time teaching are:

Dr. Matthew Sarsfield Dr. James Mangano

Dr. Lindsay MacConaghy Dr. Elizabeth Nicholas

Dr. Jennifer Campoli Dr. Risa Farber-Heath

Dr. Thomas Lavoie Dr. Leah Bennett

Dr. Eric Hojonowski

#### **Quotes from EM Clerkship Students:**

"It is the best learning experience for a medical student. It is fact paced, we get to walk into a patient room knowing nothing but the CC and devise our interview in a way that is molded by our patient's story and presentation. We need more ED time for sure. I learned more in 3 weeks than most of my other clerkships combined."

"Excellent clerkship experience. I got incredible hands on experience and personal coaching from multiple ED docs. Invaluable experience – I definitely learned a ton!"

"One of the most organized and well-run clerkships of my 3rd year. Revolved around students seeing patients and learning from each case, which is an ideal way to structure a clerkship."





#### Acting Interns or AI's (MSIV - Adult and Pediatric EM Rotations):

In 2018, 33 students completed the Adult AI, 10 of which were visiting from other institutions. The students work shifts in the ED and have a didactic lecture/simulation series one day per week taught by our EM faculty. Our Adult and Pediatric Acting Internships continue to be very popular electives with our Upstate students. We had 24 students complete the Pediatric AI.

#### **Ouote from AI Student**

"Opportunities to follow any patient (i.e. could tailor to person interest/need for experience in a certain area). Opportunities to practice procedural skills and patient interaction. Simulation lab also provided good practice experiences."

#### **Medical Student Research:**

The EM undergraduate education group was active in educational research. We started a note vs. recall student with MSIII students.

#### **Electives (MSIV):**

Our department continues to offer addition electives that have been very popular with our fourth year students. These include Teaching and Simulation, Clinical Toxicology (19), Ultrasound (7), EM Research and Hyperbarics (3).

#### **Emergency Medicine Interest Group (EMIG) MSI – MSIV Students:**

The EMIG has been very busy over the last year. Activities have included lectures from Dr. Gary Johnson and Dr. Jeremy Joslin, as well as an IV insertion clinic. The group offers shadow shifts with our attending in the ED, as well as, ride along shifts with local EMS.

#### **Department of Medicine and EMSTAT Staff – Cardiology Interest Group:**

EMSTAT staff coordinated with the Department of Medicine – Cardiology in a night of hands-on simulation based training. Cardiology fellows and attending's spent the evening with medical students going over Cardiac Echo studies, Recognition and treatment of Acute Coronary Syndrome, and the assessment of a cardiac patient.



#### **Emergency Medicine Student Advisement:**

Our group is very active in student advising. Each year, we have a strong showing of faculty at sessions held by the medical school. Students interested in EM also meet frequently with Dr. Sarsfield. Additionally, we hold an annual question and answer session with the students – Drs. Johnson, Sarsfield and Paolo attend. Last year, we had 17 students from the Class of 2017-18 successfully match into EM.



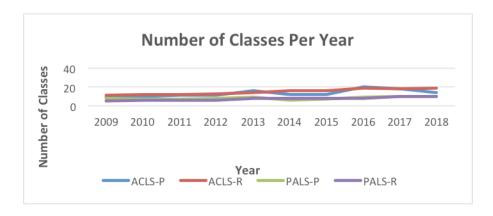




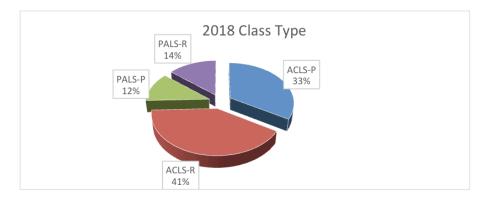
# AMERICAN HEART ASSOCIATION (AHA) LIFE SUPPORT PROGRAMS

The AHA programs at EMSTAT continued to prepare clinical providers to manage cardiac and related emergencies for both adults and pediatrics. 2018 EMSTAT conducted a total of 53 classes in Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS). There was a total of 1459 students participating in the ACLS Provider, ACLS Refresher, PALS Provider and PALS Refresher.

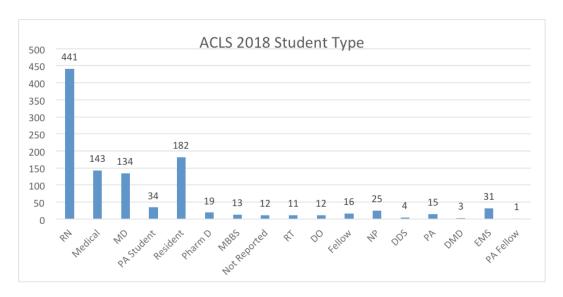
These classes have become more economical and effective. Improved capability resulted in the average class size for an ACLS-P class is 35, in 2015 the average class size was 27. The ACLS-R class in 2018 the average class size is 31, similar to 2015 which was 30 people. The PALS-P average class size is 17; the refresher class is a little larger at 20 people per class. Compared to 2015 it was 20 and 21 respectively.



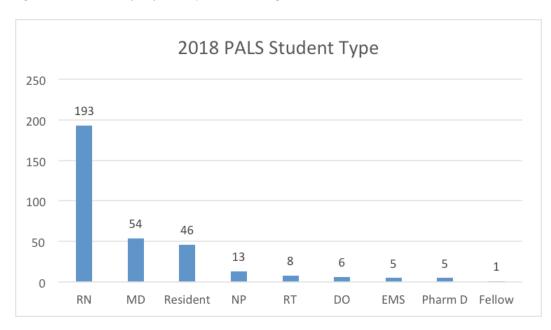
Students are performing better on the exam. The first time pass rate was once 70%, today it is 95% of the students pass on the initial test.



The majority of our students for ACLS are Registered Nurses (RN), followed by Residents. As different types of health care providers are more involved in resuscitation efforts in the hospital we are seeing more Respiratory Therapists and Pharmacists taking these classes.



Again, RN's are the majority of the providers taking a PALS class.



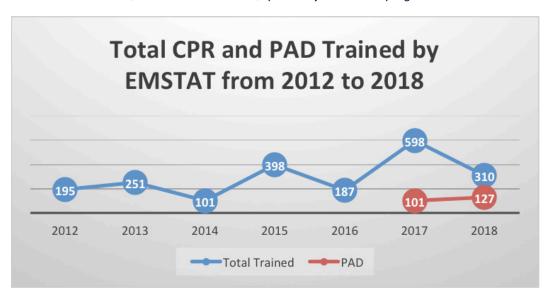
The ACLS and PALS programs benefited from an equipment upgrade in 2018. These programs received a total of 10 medium fidelity manikins. Five MegaCode Kelly's for ACLS and five MegaCode Kids for PALS. These training tools include heart sounds, lung sounds, and radial pulses. These assessment components combined with the increased visual cues of Pulse Oximetry, and End Tidal CO2 give a more comprehensive scenario so that our students can be better prepared at the bedside.

# PUBLIC ACCESS DEFIBRILLATION PROGRAM

The Public Access Defibrillation Program (PAD) has experienced significant growth since 2015. It has also benefited from improved efficiencies through the cooperative and collaborative efforts of many departments and people here at SUNY Upstate.

**Physical growth:** The number of deployed AED's has increased from 82 to 102; a 24% increase. The number of known Building locations expanded from 41 to 52; a 27 % increase. The geographic range of supervision by the PAD Manager is from Ogdensburg to Binghamton and throughout Onondaga County and one location in Oswego County.

**CPR/AED Training growth:** We have seen a steady growth of non-licensed clinical and non-clinical people trained in the Heart Saver program. In 2012 we trained 195 people. This year - 310 people were trained with 127 (41% of the total trained) specifically for the PAD program.



**AED activations:** There were no AED activations in 2018. There were a couple of instances where the device was removed from the box. The device was never applied to the patient.

# **EMSTAT SIMULATION CENTER ACTIVITIES**

We increased our resources in staffing, devices and simulators through a strategic investment by the Department. The most significant change was that we added a new staff member, Jessica Smith. Jessica is a paramedic who joins us as a simulation technician and an ACLS and PALS instructor. She is learning the functions of the simulation center and the AHA Programs as a shared position between the two educational programs. As part of our AHA program staff, Jessica participates as a resource for the instructors and can also teach when necessary. In the simulation center, she is learning to operate the simulators for all learner groups to create the immersive learning environment that develops deep learning with the participants.

The simulation center has increased our support to the hospital by inserting the high fidelity simulators in all of the hospital emergency departments on a monthly basis. The monthly trauma drill and resuscitation drill in the Downtown ED have been ongoing for several years. The addition of monthly resuscitation drills in the Community ED and Pediatric ED have been well received. We look forward to a continued involvement in the coming year.





The simulation center also added a new simulator to our growing capabilities. A Laerdal SimMan Essentials was purchased to supplement the SimMan 3G and to begin the replacement process of the much older SimMan Classic simulators. The SimMan Essentials has more features that the Classics, but less than the 3G, making it a great midrange device for the cost.

New televisions replaced the hallway bulletin boards. The TVs have slideshows that cycle through our Department's capabilities and diversity by showing our active research projects, fellowships and recent publications as well as a daily schedule of events hosted at EMStat.

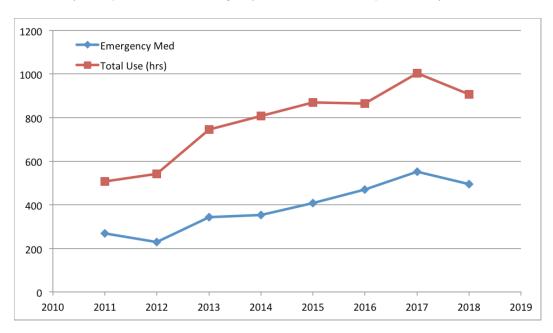
Ultrasound training has increased in the EM residency program and the 3<sup>rd</sup> year medical student EM Clerkship. To support this educational opportunity, a second ultrasound machine was added as well a FAST exam mannequin to help teach proper techniques for ultrasound scanning in the ED. We have a selection of devices that we can use the ultrasound machines on including central lines, lumbar punctures, and IV insertion.

A fiber optic video intubation device was another recent addition to help train residents and faculty using video laryngoscopy during a difficult airway situation. Developing skills with all of the tools and devices available in the hospital is important function of simulation. Fiber optic videography is another skill that requires practice that we can provide to new and established learners.

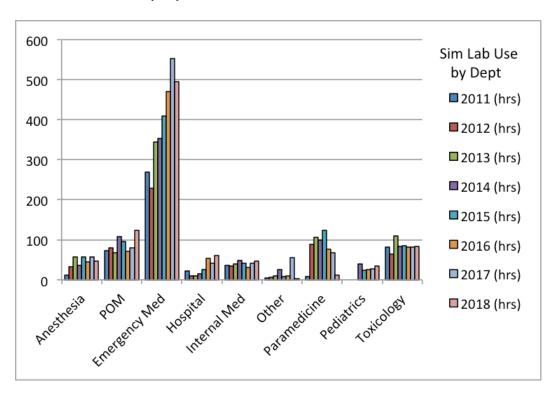
An exciting addition to our capabilities, at least for the technical staff, was the purchase of a 3D printer. The 3D printer has printed several training models, such as the intraosseous insertion trainer, with several more in development. Other trainers we have custom built include a suprapubic catheter trainer, a Burr Hole training board, I/O leg bone trainer and a thoracotomy trainer. We have designs and plans to build several additional trainers in the coming year.

Utilization of the EMStat simulation center has shown a steady increase over several years. The primary users of simulation are the medical education programs such as the College of Medicine and Residency programs. The diversity of learners is also beginning to increase as we collaborate with others throughout the hospital as simulation is used more for training and quality initiatives.

**EMStat Simulation Center Utilization:** (in hours) between 2011 and 2018. The Total Hours are indicated by the square boxes and Emergency Medicine hours are represented by the diamonds.



#### **Simulation Center Use by Department and Year**



The facility is heavily utilized by Emergency Medicine and ancillary programs (i.e. Paramedicine and Toxicology). Other departments have utilized the Sim Center fairly consistently over several years. We are continually looking to increase utilization by other departments and programs and be a resource for training and education.

#### 450 Learner Groups 400 All Depts ■2011 (hrs) 350 300 ■ 2012 (hrs) 250 ■ 2013 (hrs) 200 ■ 2014 (hrs) 150 ■ 2015 (hrs) 100 50 2016 (hrs) 0 ■2017 (hrs) 8GY COM ■2018 (hrs)

#### **EMStat Sim Center Use by Learner Groupings, all Departments**

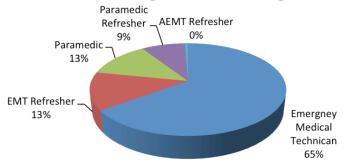
The College of Medicine and Graduate Medical Education (PGY) are the current focus for simulation based education. Future goals are to increase nurse and hospital based simulation education. The EMStat Sim Center is not yet at capacity and can handle additional increases in utilization without sacrificing quality. Increasing *in situ* simulation in the hospital and clinical settings will allow for further educational modes without overburdening the sim center itself. The challenge will be to increase the availability of clinical educators who are trained in designing and using *in situ* simulation for medical training and quality improvement processes.

# EMERGENCY MEDICAL SERVICES (EMS) EDUCATION PROGRAMS

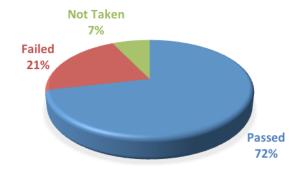
During 2018 our Emergency Medical Services (EMS) Education Programs offered 12 New York State Department of Health Bureau of EMS Certification Programs. Included among these were numerous original certification and recertification courses for Emergency Medical Technician and Paramedic.

Working closely with SUNY Onondaga Community College Upstate EMS Program staff drafted course work, curriculum for an Associates in Applied Science Paramedic and Paramedic certificate program. Approved locally at SUNY OCC this partnership has been submitted to SUNY & State Education Department for approval with an estimated start date in Fall 2020.

#### 2018 EMS Program Student Registration

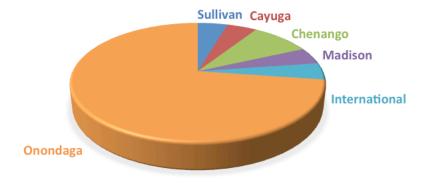


# 2018 NYS Paramedic Original Certification Results





# 2018 Paramedic Students by County



# 2018 AMR FOUNDATION AND GAIL WEINSTEIN MEMORIAL SCHOLARSHIP AWARD RECIPIENTS:

The AMR Foundation in Greenwood Village Colorado developed a scholarship opportunity for EMS education programs across the country. SUNY Upstate was fortunate to have their proposal selected as one of the recipients of the nationwide program enabling Upstate EM and AMR Foundation to award three \$5,000.00 scholarships.

The Gail Weinstein Memorial Scholarship Award is made possible through the generous donation of the Weinstein & Johnston Families, in partnership with the CNY Community Foundation, the Department of Emergency Medicine has created a sustainable scholarship for paramedic students and an ongoing sustainable lecture series in memory of Gail Weinstein, former Paramedic Program Director.

#### Award Recipients were: Amanda Burdick, Andrea Herubin and Stacie Mallioux







#### THE WEINSTEIN EMS LECTURE SERIES:

The Rosamond Gifford Zoo hosted the Weinstein Lecture Series: EMS providers guide to toxicology. This toxicology conference presented in-depth and complex case reviews of the poisoned patient for our prehospital care providers.

#### **Comments from attendees:**

"Excellent lecture series. Speakers were informative and intellectually stimulating. Zoo venue is very nice"

"Loved the focus on ketamine given that it is relatively new for prehospital use"

#### 2018 WE ARE ONE PREHOSPITAL MEDICINE & TRAUMA TEACHING DAY:

Provided attendees updates on the evolving management of acute ischemic stroke, airway management heaven criteria and offered a different perspective on medicolegal death investigation. Those in attendance were offered the opportunity to become stop the bleed instructors.

#### 2018 PARAMEDIC STUDENTS DURING RESCUE OPERATIONS:





#### **EMERGENCY MEDICAL SERVICES (EMS) LIAISON:**

Doug Sandbrook is the EMS Liaison for University Hospital. He serves on standing quality committees for Adult and Pediatric Trauma and Stroke. He represents EMS at University Hospital systems meetings for adult and pediatric trauma. He is a member of CNY's Regional Trauma Advisory committee (RTAC), serving fourteen counties in central New York. This committee of prehospital providers and community hospitals work with area and regional trauma centers to improve the care of victims of trauma. The RTAC is responsible for trauma systems development and quality improvement.

# **INTERNATIONAL PROGRAMS**

**Haiti:** In June of 2018 the department sent Brian Kloss DO, Matt Thornton MD, Dana Finch MD, Joseph Capogreco MD, and Rishana Cohen MD to Verrettes, Haiti to participate in a medical mission trip with the Health Corps Haiti group. Health Corps Haiti was founded in 2010 by Dr. William Forgey and a group of medical students in response to the devastating earthquake and cholera epidemic in Haiti. Over the past 9 years, Health Corps Haiti has conducted over 35 medical trips with over 250 volunteers. The organization heads to Haiti at least four times a year for week long medical trips.





In late May 2019 Dr. Kloss will return to Haiti with interested residents and faculty. In addition to sharing this experience with the department faculty and residents, Dr. Kloss has been working with the LeMoyne PA Program to bring PA students as part of an elective in Wilderness Medicine. The organizational cost for the trip is \$625 and covers transportation, room and board, translators, security and medical supplies for the people of Haiti. Round trip airfare to Port-au-Prince runs \$750. The department has allocated funds for up to six participants per year.

**India:** For the past several years our department has run a very successful physician exchange program with the Kerala Institute of Medical Science (KIMS) in Trivandrum, India. The program allows for a collaborative exchange of information, technology and culture between our department and the KIMS EM residency in Kerala. Every quarter an Upstate physician travels to India to provide didactic lectures and clinical observation. In their senior year, Indian residents are offered the opportunity to come to Upstate for a month to witness healthcare delivery in the US. The residents participate in Wednesday lectures and rotations in: adult and pediatric EM, toxicology, hyperbarics, and wound care. The residents love their time here in Syracuse and many of the faculty have hosted them for home cooked meals, dining out, movies, pumpkin carving and of course, laser tag.

Dr. Louise Prince (pictured in picture below being presented with a gift as a thank you for lecturing to KIMS residents), Dr. Deepali Sharma, Dr. Andrea Ferrari and Dr. Lingappa Amernath traveled and lectured to residents this past year. Dr. Brian Kloss, Dr.Amernath, and any of the faculty that went previously will be more than happy to share their experiences and answer any questions you may have if you are interested in going in the future.



### ANNUAL DEPARTMENT TEACHING DAYS - 2019 DATES

#### **Upstate Wound Care and Hyperbaric Medicine Symposium**

February 9, 2019, 8:00 AM - 12:30 PM; New Academic Building

#### 19th Annual Contemporary Issues in Emergency Medicine

March 27, 2019, 1:00 - 5:00 PM; Genesee Grande Hotel, Syracuse

#### We Are One: 6th Annual Upstate Pre-Hospital Medicine & Trauma Teaching Day

Combined with St. Josephs Health Care Center and Crouse - May 14, 2019

#### 18th Annual Pediatric Emergency Medicine Assembly

September 18, 2019; 1:00 - 5:00 PM; Genesee Grande Hotel, Syracuse, NY

#### 23rd Annual Toxicology Teaching Day

November 6, 2019; Genesee Grande Hotel, Syracuse, NY

# **OUTREACH/COMMUNITY ACTIVITIES**

#### MEDICAL COVERAGE FOR CARRIER DOME EVENTS

Our physicians provide medical coverage for spectators at all major dome events.

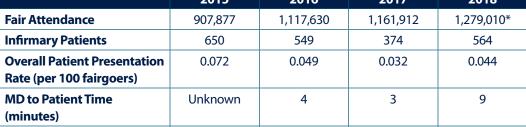
#### MEDICAL COVERAGE IN THE GREAT NY STATE FAIR INFIRMARY

Once again the Department of Emergency Medicine provided medical care at the Great New York State Fair. There were eight (8) attendance records set at the fair in 2018. For the total attendance at the fair in 2018 it was a record of almost 1.3 million people.

Our physicians and staff took care of 564 patients and were able to return 70% of them back to the fairgrounds. They also assisted 651 fairgoers with other creature comforts of over the counter medications, sunscreen etc. That is 1,238 people that were serviced by this department over a 13-day period. Our physicians were at the patient's side within 9 minutes. The patients were able to be treated and released on average of 33 minutes. The attentive efforts of the Doctors, nurses, EMS professionals, and support staff of the infirmary are instrumental in keeping the fair a safe and healthy event.

#### **Key Performance Indicators:**

	2015	2016	2017	2018
Fair Attendance	907,877	1,117,630	1,161,912	1,279,010*
Infirmary Patients	650	549	374	564
Overall Patient Presentation Rate (per 100 fairgoers)	0.072	0.049	0.032	0.044
MD to Patient Time (minutes)	Unknown	4	3	9
Length of Stay (minutes)	Unknown	28	37	33





2018 we introduced the "Interpreter on Wheels" to the Infirmary. This service was donated for a feasibility evaluation this year. It is a tablet that has video and audio capability with access to approximately 100 different languages including ASL (American Sign Language). This was used six times during the fair for a total of 81 minutes. We believe this was a success and will use it in future years.

# CAMPUS MEDICAL EDUCATION FOR DIVERSE STUDENTS (MEDS) PROGRAM

The faculty and staff of the Department of Emergency Medicine continue to support future health care providers in the Syracuse and SUNY community. The Medical Education for Diverse Students (M.E.D.S) and EMSTAT twice partnered to help Juniors and Seniors in the Syracuse school district to develop the necessary skills to enter the healthcare job market. 30 Students came to learn about patient assessment, CPR, EKGs, and various disease patterns.

A second year medical student teaching high school students about the radial pulse during a CPR training session.



#### HENNINGER HIGH SCHOOL HEALTH CAREERS PROGRAM

At the end of 2018 EMSTAT began working with Henninger High School Health Careers program. This program is a combination of academic work, shadowing, and mentoring students who are pursuing a career in health care.

### RESEARCH DIVISION

#### **OVERVIEW:**

The emergency medicine research division supports the investigative efforts of EM faculty of all levels of learning. Working as a resource center, the Division provides guidance and support for the development, design, implementation and/or reporting of research endeavors.

#### **Specific services include:**

- Assistance with IRB applications
- Sourcing grant/foundation funding
- Study design
- Data collection
- Statistical analysis
- Assistance with manuscript writing and submission

# EMERGENCY DEPARTMENT RESEARCH ASSISTANT (EDRA) VOLUNTEER PROGRAM:

The EDRA program continues to support the department in its clinical research endeavors. Research coordinator, Lauren Pacelli, provides real time monitoring of clinical research activities and ongoing training of volunteers utilized to provide assistance with current research in the emergency department. In addition to volunteers, when available in the summer, the program utilizes medical students with federal work study funding, SYNERGY and Presidential Scholar interns. All participants are given didactic training in the requirements of departmental research projects and in the appropriate process of assuring informed consent of all study participants. In 2018 we utilized 44 EDRAs which covered over 3500 hours.

#### **NEW STAFF:**

Anna Prince, MPH, joined the Department in November as our Clinical Research Coordinator. Anna will be assisting with completion of projects in collaboration with investigators within and outside the institution; assuring regulatory compliance; assisting with grant/contract development and sponsor relations; project design and evaluation; data collection and analysis; preparation of reports on study progress; assisting with manuscript development and submission.

#### **NEW PROJECTS:**

#### 1. Emergency Research Network In the Empire State (ERNIES)

ERNIES is a multi-institutional research network organization. Originally this network contained medical institutions throughout the state of New York, but has expanded to include member institutions in Pennsylvania. Participating members cooperate together to expand research in the field of emergency medicine.

A. Lyme Disease in the Emergency Department: A Retrospective Review of Cases Over Two Years

Mathew Thornton, MD-Site PI, Susan Wojcik, PhD-Co-Investigator, Lauren Pacelli-Research Coordinator, Zaid Tayyem-Medical Student

This was a multi-site retrospective chart review conducted in conjunction with ERNIES network partners at Albany Medical Center. This study looked at potential regional differences in how Lyme disease presents in patients and investigating the signs and symptoms that alert emergency providers to suspect Lyme disease. Cases from January 1st, 2016 through December 31st, 2017 that either (a) had a Lyme test performed; or (b) had a diagnosis with Lyme disease were reviewed.

B. Antibiotic Allergies and Emergency Department Treatment for Common Infectious Conditions

Susan Wojcik, PhD-Site PI, Lauren Pacelli-Research Coordinator, Rakshit Tyagi- Medical Student

This was a multi-site retrospective chart review conducted in conjunction with the ERNIES network partners at Albany Medical Center. This study investigated emergency department treatment of Strep Pharyngitis and Sinusitis to assess the utilization of second line antibiotic therapies in patients and whether or not they have antibiotic allergies. This study looked at charts of Upstate Medical University Emergency Department patients seen between January 1st, 2016 to December 31st, 2017 with ICD-10 codes representing pharyngitis (J02/J03) and sinusitis (J01/J32). Charts were reviewed to determine (a) the rate of ED patients presenting with common infectious condition who have a reported drug reaction to an antibiotic (b) the rate at which ED patients presenting with common infectious conditions receive second line antibiotics for their condition, and (c) the prevalence at which ED patients presenting with common infectious condition have received second line antibiotics (presumably) because of their documented drug reaction.

C. Hospital Observation Upon Reversal (HOUR) with Naloxone: A Multicenter Decision Rule Validation

William Eggleston, PharmD-PI, Susan Wojcik, PhD-Co-Investigator, Lauren Pacelli, Anna Prince, MPH-Research Coordinators

This study is a prospective observational study evaluating monitoring times in Emergency Departments for patients at risk for complications from an opioid overdose. This study is a multi-site study though the ERNIES Network in conjunction with partners at the University of Buffalo. Although there is currently no known monitoring period in emergency departments after an antidote is received to reverse the effects of an opioid overdose, the regional Poison Center recommends 4 hours. This study will use an assessment tool for determining if a patient is at risk for complications from an opioid overdose once they are observed for a one-hour period after receiving treatment with an antidote such as Naloxone. Patients who present to the Emergency Department for suspected opioid overdose who are treated with naloxone prior to arrival or who are treated in the emergency department will be included.

#### UltraWee: Ultrasound Bladder Stimulation to Help with Clean Catch Urine in Pre-Continent Children

Vince Calleo, MD-PI, Susan Wojcik, PhD, Kyle Suen, MD-Co-Investigators, Lauren Pacelli, Anna Prince, MPH-Research Coordinators

This is a prospective randomized controlled trial used to compare the success rate of and time to obtaining a urine sample in pre-continent children between clean catch urine

(CCU) method and using ultrasound stimulation clean catch methods. The standard procedures for obtaining urine samples in pre-continent children, CCU, have low success rates that often lead patients to be subjected to the discomfort and trauma of a urinary catheter. This study hopes to look at the effectiveness of ultrasound stimulation of the bladder for obtaining a urine sample without urinary catheterization. The UltraWee study hopes to decrease the number of failed attempts to obtain a urine sample in pre-continent children less than 36 months of age. This study hopes to enroll 354 patients from the Upstate Medical University Downtown Emergency Department.

#### 3. Esophageal Food Bolus Impaction Prospective Observational Study

William Paolo, MD-PI, Susan Wojcik, PhD, Jacob Frier, MD-Co-Investigators, Lauren Pacelli, Anna Prince, MPH-Research Coordinators

This study is a prospective observational study evaluating the best and safest treatment of Esophageal Food Bolus Impaction (EFBI). Previous research has evaluated courses of treatment for EFBI including medications and other non-pharmacological techniques that have varying success rates. Patients presenting at Upstate Medical University Emergency Department will be monitored to observe the course and outcome of their treatment for EFBI. Data collected will be analyzed to evaluate what commonly used treatment modalities are most effective and what, if any, consequences are associated with them.

# 4. Opioid Prescribing Review and Needs Assessment for Targeted Quality Improvement Education

Jay Brenner, MD-PI, Susan Wojcik, PHD-Co-Investigator, Anna Prince, MPH-Research Coordinator, Amanda Kaley- Medical Student

This study was a review and analysis of opioid prescribing trends at Upstate Medical University. Due to the continued increase in opioid overdose deaths in the United States, the Centers for Disease Control and Prevention (CDC) has established opioid treatment guidelines and other information for healthcare professionals. In addition, the New York State Department of Health requires Mandatory Prescriber Education for all prescribers licensed in New York to treat humans and who have a DEA registration number to prescribe controlled substances. Considering all of this, the study assessed whether training has decreased opioid prescribing at Upstate and if prescribers are in compliance with CDC guidelines. Information obtained will be used to determine if there is a need and specific areas for additional opioid quality improvement education.

#### 5. The Occurrence of False-Positive Urine THC Immunoassay Following Oral Proton-Pump Inhibitor Administration in Healthy Adult Volunteers

William Eggleston, PharmD-PI, Varun Vohra, MD (fellow), Ross Sullivan, MD, Susan Wojcik, PhD-Co-Investigators

Urine drug-screenings (UDS) are commonly used in the workplace and healthcare settings for the detection of drugs of abuse. There are several medications that have been documented to cause interference with urine drug screens, resulting in false-positive THC results. Pantoprazole, a proton-pump inhibitor (PPI) that is commonly used to treat acid reflux has been reported to cause false positive THC results in screening tests. This study will examine the association between the administration of PPIs and the subsequent false-positive THC urine drug screens in healthy volunteers.

# 6. Do Emergency Department Wait Times Lead to Increased Hospital-Acquired Pressure Ulcers?

Matthew Sarsfield, MD-PI, Theodore Albright, MD, David Andonian, MD, Susan Wojcik, PhD-Co-Investigators

This study is a case-control retrospective chart review of patients admitted to the hospital through the Emergency Department to compare which developed hospital acquired ulcers. In particular this study looked to see if there was a relationship between ED length of stay and the development of an ulcer while in the hospital. Patients who were 18 years and older who presented to Upstate Medical University Emergency Department between 2013 and 2017 were assessed.

# 7. Note Taking vs. Recall for Third Year Medical Students While Taking a Patient History and Given a Patient Presentation in the Emergency Department: Are They Capable of Performing These Tasks Without Taking Notes and Does This Practice Improve Their Performance?

Lindsay MacConaghy, MD-PI, Casey Moore, MD, Matthew Sarsfield, MD, Susan Wojcik, PhD -Co-Investigators.

As part of the third year emergency medicine clerkship, a novel curriculum addition has been implemented to aid students in bridging the gap between how they learned to take a formal history and give an oral case presentation (OCP) with how they will need to as young physicians. Students initially took patient histories and give OCP as they have been, which is usually done using notes. This was followed by taking patient histories and give OCP without notes solely using recall. This study examined if this new curriculum had any impact on their experiences when taking a patient history and orally presenting a patient to a preceptor. In addition, the study looked to determine if there were any positive or negative impacts of this curriculum change.

#### 8. Albuterol Prescribing with Pediatric Patients

Vince Calleo, MD-PI, Peter Aiello, MD, James Yarovoy, MD, Susan Wojcik, PhD-Co-Investigators

This study is a retrospective chart review that will analyze albuterol prescribing patterns of physicians in the pediatric emergency department over the past two years (July 1, 2016 through June 30, 2018). This study will review all albuterol multi-dose inhalers (MDIs) in patients less than 20 years of age. This data will be analyzed and compared to the standard of care recommendations. By identifying any deviations in albuterol prescribing standard of care this study will give us the opportunity to educate prescribers so that as a medical community we can administer better patient care.

### EMS Providers Knowledge and Practices Around Preventing Hypothermia in Burn Patients During Transport to Upstate New York Burn Center

Susan Wojcik, PhD-PI, Bethany Hawke, MD, Douglas Sandbrook, MA-Co-Investigators, Lauren Pacelli-Research Coordinator

This project consists of administering a short survey electronically at the NYS Vital Signs Conference to ascertain NYS EMS provider knowledge and practices around caring for burn patients during their transfer to a burn care center. Specifically the survey looks at knowledge and practices surrounding maintaining appropriate body temperature and preventing hypothermia in these patients. The purpose of this survey is to identify possible barriers that may prove detrimental to the pre-hospital care of burn patients so that we

can make improvements in these areas, with the overall goal of reducing morbidity and mortality in this patient population.

### 10. US vs CT for Identifying Facial Abscesses

Elizabeth Nicholas, MD-PI, David Morris, MD, Kevin Gaskin, MD-Co-Investigators, Anna Prince, MPH-Research Coordinator

This study is intended to determine if ultrasound (US) can be used as a sufficiently sensitive and specific modality in identifying superficial facial abscesses when compared to Computed Tomography (CT). This study will recruit patients who have been determined to have a clinical suspicion of superficial facial abscess. These patients will undergo an initial US examination followed by a diagnostic CT scan (the definitive diagnosis). The goal of this study is to examine if US can successfully identify facial abscesses when compared to the traditional CT scan. Results from this study may indicate US as a point of care alternative to other imaging modalities (CT and X-ray) that can save time and limit patient exposure to radiation.

#### 11. March Into Residency Assessment

Risa Farber-Heath, MD-Pl, Hannah Charland, MD, Brian Kloss, DO, Susan Wojcik, PhD-Co-Investigators

Fourth year medical students at Upstate Medical University partake in a mandatory residency preparedness course in the month of March. This course involves a high-yield lecture series, content-based small group sessions, and procedural skills workshop. The goal of this course is to better prepare the medical students for their upcoming new role. A survey was created to have former medical students (now first year residents) rate the helpfulness of the different aspects of the course. The goal of the survey was to determine how well the students felt the course prepared them for residency and to use the information to improve the course for future students.

#### 12. Rapid Strep Testing in the Emergency Department

Matthew Thornton, MD-PI, Susan Wojcik, PhD-Co-Investigator, Rakshit Tyagi- Medical Student

This study is a retrospective chart review examining the use of rapid streptococcal tests (RST) in the diagnosis of acute pharyngitis. Although RSTs have made this diagnosis simpler and reduced the use of antibiotics, there are concerns that these tests do not achieve adequate sensitivity resulting in false negatives. To evaluate the use of RSTs in the pediatric emergency department the study reviewed charts of patients seen from July 1, 2017 through June 30, 2018 that received a rapid streptococcal Test (RST). Data will be collected on the frequency of usage of RSTs, patient length of stay, false negative rates of RSTs, and other laboratory studies performed. The goal of the study is to better define the use of RSTs in our Emergency Department.

#### 13. Automated External Defibrillator (AED) Phone App Study

Stan Goettel, MS-PI, Susan Wojcik, PhD-Co-Investigator, Lauren Pacelli, Christine Podolak-Research Coordinators

This study is an observational, randomized, single-site study that serves as a preliminary test to assess ease and time of locating AEDs on campus with and without the use of an app. The SUNY Upstate Medical University has automated external defibrillators (AEDs) located in key locations on campus and other locations that allows for the delivery of

defibrillation to a sudden cardiac arrest victim within 3-5 minutes. Currently there is no method for individuals on campus to easily know and access the closest AED in the event of an emergency. In collaboration with two Lemoyne University students and our AED program director an app was developed, Upstate AED Locator, which allows for quick and proper identification of the closest AED on campus as well as other Upstate properties.

#### **ONGOING PROJECTS:**

The following projects implemented in the Upstate Emergency Department, Hyperbaric Medicine and Wound Care Clinic, and Department of Emergency Medicine are ongoing and data is continuing to be collected and inputted by our research coordinators Lauren Pacelli, Christine Podolak, and Anna Prince.

## **Hyperbaric Medicine and Wound Care Clinic**

- Wound Vision, PI: Marvin Heyboer, III, MD, Co-Investigator: Susan Wojcik, PhD
- Effect of HBO on Glucose Levels in Non-Diabetics, PI: Marvin Heyboer, III, MD, Co-Investigator: Susan Wojcik, PhD
- HBO and its Effect on Radiation Induced Long Term Side Effects, PI: Marvin Heyboer, III, MD, Co-Investigator: Seung Shin Hahn, MD, Susan Wojcik, PhD, Medical Student: Ryan Thibodeau

#### **Department of Emergency Medicine:**

- Strategies to Innovate Emergency Care Clinical Trials Network-SIREN, PI: William Paolo, MD
  - Upstate Medical University Department of Emergency Medicine continues to participate in the SIREN Network. SIREN is a NIH-funded network that serves as a nationwide effort to fill a need for a multi-institutional emergency and trauma education and research network organization.
- Emergency Medicine Services Medical Director Workforce Assessment, PI: Christian Knutsen, MD, MPH, Co-Investigator: Susan Wojcik, PhD
- Laceration Repair in the Pediatric Emergency Department, PI: William Prince, MD, Co-Investigator: David Sadowitz, MD, Peter Aiello, PharmD, Susan Wojcik, PhD
- Citalopram and Escitalopram Overdoses, PI: Brett Cherrington, MD, Co-Investigators:
   Ross Sullivan, MD, Michael Hodgman, MD, Susan Wojcik, PhD, Resident: Kayla Dueland, MD
- Toxicity of Sodium Channel Blockers on EKG Manifestation, PI: Brett Cherrington, MD, Co-Investigators: Supa Niruntarai, MD, Susan Wojcik, PhD
- Efficacy of Focused Assessment with Sonography in Trauma, PI: Elizabeth Nicholas, MD, Co-Investigators: Julienne Yamamoto, MD, Susan Wojcik, PhD, Theodore Robak – Medical Student

#### **COMPLETED PROJECTS:**

#### 1. Acute Urticaria

Jay Brenner, MD-Site PI; Jeremy Joslin, MD, Susan Wojcik, PhD-Co-Investigators; Lauren Pacelli, Christine Podolak-Research Coordinators

This was a multi-center randomized, controlled phase III clinical trial sponsored by JDP Therapeutics, Inc. to evaluate the non-inferiority comparing 10mg Cetirizine injection to 50mg Diphenhydramine injection for treatment of acute urticaria.

## 2. Opioid Emergency Department Survey

Jay Brenner, MD-Site PI; Ross Sullivan, MD, Susan Wojcik, PhD-Co-Investigators; Lauren Pacelli-Research Coordinator

A research collaboration with Nathan Kline Institute for Psychiatric Research was established to jointly conduct opioid related research. This project was a survey of ED and Bridge Clinic patients to assess the social and demographic profile of individuals who use heroin and non-medically prescribed opioids; and assess the sociodemographic and opioid use behaviors/experiences associated with perceptions of overdose risk and naloxone awareness/acquisition/use.

### 3. Increasing Medical Student Awareness of Patient Centered Care

Vince Calleo, MD-PI (fellow); David Andonian, MD, Lindsay MacConaghy, MD, Matthew Sarsfield, MD, Louise Prince, MD, Susan Wojcik, PhD-Co-Investigators; Matthew Camara-Resident; Kara-Welch-Clerkship Coordinator

A new patient centered care (PCC) curriculum has been developed as part of the emergency medicine clerkship rotation consisting of patient centered care orientation, standardized patient encounter, patient shadowing shift and debriefing session.

# 4. Open-Label Post-Marketing Study of KamRAB Administered as a Single Dose with Active Rabies Vaccine in Children Exposed to Rabies

Embika Eranki, MD-PI (Infectious Disease); Peter Sadowitz, MD-EM Investigator; Lauren Pacelli-EM Research Coordinator

The Upstate Emergency Department is being utilized as a location to execute an investigational vaccine trial to confirm the safety of KamRAB, a human rabies immune globin, in children ages 0 months to <17 years, when administered as part of post exposure prophylaxis.

# 5. Prospective Cohort Study of Clear Edge Assessment System and Saliva Biomarkers in Concussion Injury

Christopher Neville, PhD, PT-PI (CHP); Susan Wojcik, PhD-EM Investigator; Lauren Pacelli-EM Research Coordinator

The Upstate Emergency Department is being utilized as one of the locations to enroll subjects with concussions in this prospective cohort study. The aims of this project are to: measure postural stability, cognitive skills, and presence of unique saliva markers in individuals at baseline (prior to concussion) and then in those who have sustained a recent concussion.

### **GRANTS SUBMITTED:**

- NIH (RO1): Addressing the Challenges of the Opioid Epidemic in Minority Health and Health Disparities Research in the US, 5 year sub-award with Nathan Kline Institute, Jay Brenner, MD- Site PI, Susan Wojcik PhD-Site Co-Investigator, \$598,109
- Upstate Foundation: PEDS Resident Simulation Education, Asalim Thabet, MD, \$6,000 -Awarded

### **ABSTRACT SUBMISSIONS:**

- American College of Medical Toxicology (ACMT) 2019 Annual Scientific Meeting:
  - Rivara M (Resident), Eggleston W, Pluckrose D, Cardiac Toxicity After Trazodone Overdose
    - Accepted: Poster session 2, April 13<sup>th</sup> at 9:45 am. Full conference runs from April 12-14, 2019 in San Francisco, CA
- Council of Residency Directors in Emergency Medicine (CORD) 2019 Academic Assembly:
  - Farber-Heath R, Charland H (Resident), Welch K, Wojcik S, Kloss B, March into Residency Assessment
  - MacConaghy L, Moore C (Resident), Welch K, Wojcik S, Clerkship Notetaking/ Presenting
- Society for Academic Emergency Medicine 2019 Annual Meeting:
  - Ott J (Resident), Utilization and Barriers to Ethics Consults in the Emergency Department
  - Waxman M, Shah S, Abbuhl J, Eichelman A, Perkins E, Wojcik S, Ata A, Chang A, Kennedy J, Association Penicillin Allergy and Selection of Alternative Antibiotics in Patients Diagnosed with Sinusitis
  - Waxman M, Abbuhl J, Shah S, Eichelman A, White J, Ata A, Wojcik S, Kennedy J, Signs and Symptoms Predictive for Lyme Disease in an Emergency Department Setting

# JOURNAL ARTICLES:

Paolo WF, Silaban R, Nguyen L, Wojcik S, Grant W. Physicians' understanding of CT probabilities in ED patients with acute abdominal pain. *Am J Emerg Med.* 2018 Nov; 36(11):1986–92.

https://www.ncbi.nlm.nih.gov/pubmed/29555112

https://doi.org/10.1016/j.ajem.2018.02.039

Paolo WF. Does application of the pulmonary embolism rule-out criteria rule result in an inferior rate of thromboembolic events over 3 months among very low-risk patients with suspected pulmonary embolism? *BEEM Journal* [Internet]. 2018 Nov 1; 3(311).

https://beem.ca/journal/article/181103/

Paolo WF. What is the risk of acute kidney injury, renal replacement therapy, and mortality after computed tomography with intravenous contrast compared with computed tomography without use of contrast? *BEEM Journal* [Internet]. 2018 Feb 1; 3(302).

https://beem.ca/journal/article/180201/

Vargo C, Olliviere-Baptiste B-A, Brenner JM, Cooney DR, Rodriguez E. Fungal Rhino-orbital Cerebritis in a Patient with Steroid-induced Ketoacidosis. *Clinical Practice and Cases in Emergency Medicine* [Internet]. 2018 Sep 18;

https://escholarship.org/uc/item/2b16d8m4

Brenner JM, Baker EF, Iserson KV, Kluesner NH, Marshall KD, Vearrier L. Use of Interpreter Services in the Emergency Department. *Ann Emerg Med.* 2018 Oct; 72(4):432–7

https://www.ncbi.nlm.nih.gov/pubmed/30238909

https://doi.org/10.1016/j.annemergmed.2018.05.009

Eggleston W, Podolak C, Sullivan RW, Pacelli L, Keenan M, Wojcik S. A randomized usability assessment of simulated naloxone administration by community members. *Addiction*. 2018 Dec; 113(12):2300–4.

https://www.ncbi.nlm.nih.gov/pubmed/30107641

https://doi.org/10.1111/add.14416

Heyboer M, Byrne J, Pons P, Wolner E, Seargent S, Wojcik SM. Use of in-chamber transcutaneous oxygen measurement to determine optimal treatment pressure in patients undergoing hyperbaric oxygen therapy. *Undersea Hyperb Med.* 2018 Aug; 45(4):389–94.

https://www.ncbi.nlm.nih.gov/pubmed/30241117

https://europepmc.org/abstract/med/30241117

Stolz LA, Acuna JG, Gaskin K, Murphy AM, Friedman L, Stears-Ellis S, et al. Echogenicity and ultrasound visibility of peripheral nerves of the upper extremity. *Med Ultrason*. 2018 May 2; 20(2):199–204.

https://www.ncbi.nlm.nih.gov/pubmed/29730687

https://dx.doi.org/10.11152/mu-1240

Chancellor JC, Blue RS, Cengel KA, Auñón-Chancellor SM, Rubins KH, Katzgraber HG, et al. Limitations in predicting the space radiation health risk for exploration astronauts. *npj Microgravity*. 2018 Apr 3; 4(1):8.

https://www.nature.com/articles/s41526-018-0043-2

https://doi.org/10.1038/s41526-018-0043-2

Fancher J, Meola G, Paolo W, Seabury R. Retrospective assessment of succinylcholine use in acute stroke care: What are the risks? *Am J Emerg Med*. 2018 Mar 21;

https://www.ncbi.nlm.nih.gov/pubmed/29602667

https://doi.org/10.1016/j.ajem.2018.03.047

Thabet A, Greenfield T, Cantor RM. Corticosteroid use in management of pediatric emergency conditions. *Pediatric Emerg Med Practice*. 2018 Mar; 15(3):1–16.

https://www.ncbi.nlm.nih.gov/pubmed/29490126

https://www.ebmedicine.net/topics.php?paction=showTopic&topic\_id=573

Reap VJ. Spontaneous Vertebral Artery Dissection in a Healthy 26 Year Old Female Patient: A Case Study. *Advanced Emergency Nursing J.* 2018 Mar; 40(1):21–6.

https://www.ncbi.nlm.nih.gov/pubmed/29384772

https://doi.org/10.1097/TME.000000000000174

Pavela J, Suresh R, Blue RS, Mathers CH, Belalcazar LM. Management of Diabetes During Air Travel: A Systematic Literature Review of Current Recommendations and their Supporting Evidence. *Endocr Pract.* 2018 Feb; 24(2):205–19.

https://www.ncbi.nlm.nih.gov/pubmed/29466062

https://doi.org/10.4158/EP171954.RA

Antonsen EL, Mulcahy RA, Rubin D, Blue RS, Canga MA, Shah R. Prototype Development of a Tradespace Analysis Tool for Spaceflight Medical Resources. *Aerospace Med Hum Perform*. 2018 Feb 1; 89(2):108–14.

https://www.ncbi.nlm.nih.gov/pubmed/29463357

https://doi.org/10.3357/AMHP.4808.2018

Johansen BD, Blue RS, Castleberry TL, Antonsen EL, Vanderploeg JM. Point-of-Care Ultrasound for Pulmonary Concerns in Remote Spaceflight Triage Environments. *Aerospace Med Hum Perform*. 2018 Feb 1; 89(2):122–9.

https://www.ncbi.nlm.nih.gov/pubmed/29463355

https://doi.org/10.3357/AMHP.4959.2018

Camara M, Farber-Heath R, Gitler C, Joslin J. Inadvertent subclavian vein cannulation via internal jugular approach: A rare central line anomaly. *Visual Journal of Emergency Medicine*. 2018 Jan; 10:87–8.

https://doi.org/10.1016/j.visj.2017.09.004

# TEXT BOOKS AND CHAPTERS

Kloss B, Bruce T. Graphic Guide to Infectious Disease E-Book. Elsevier Health Sciences; 2018. 382 p.

# **PRESENTATIONS**

#### IN OUR COMMUNITY

"Late Effect Radiation Injury and Hyperbaric Oxygen Therapy." Heyboer M. Presented at Upstate Wound Care & Hyperbaric Medicine Symposium, Syracuse, NY, February 2018.

**"EMS Physician Response Team."** Christian Knutsen. Presented at Syracuse Airport's Table Top Exercise, May 2018.

"BRUE: The New ALTE, or Something More?" Matthew Thornton. Presented at Pediatric Emergency Medicine Assembly, Syracuse, NY, September 2018.

"Emergency Medical Services: A Project for Kazakhstan." Christian Knutsen. Presented at U.S. State Department's International Visitor Leadership Program, Western Area Volunteer Emergency Services in Camillus NY, October 2018.

"Health Care Haiti: Who We Are and What We Do: Tropical and Neglected Diseases of Haiti." Brian Kloss. Presented at 6th Annual Northeast Wilderness Medicine Conference, Syracuse NY April 2018

"Synthetic Drugs of Abuse." Brian Kloss. Presented at Onondaga Medical Society Substance Abuse Seminar Series, Syracuse NY June 2018.

"Toxicology and Synthetic Drugs." Brian Kloss. Presented at Rising to the Challenge: Confronting the Epidemic: A Primary Care Approach, LeMoyne College, Syracuse NY April 2018.

#### AT OTHER INSTITUTIONS

"Pediatric Difficult Airway Techniques." Matthew Thornton. Presented at PEM Base Camp, Cornell Medical School - NYC, November 2018.

"Evidence Based Pediatric Emergency Medicine." Richard Cantor. Presented at St. Joseph's Hospital Annual Family Practice Refresher Course, Syracuse NY, March 2018.

## NATIONAL/REGIONAL/STATE CONFERENCES AND EVENTS

"Medical Toxicology and Emergency Addiction: Medication Assisted Treatment into the Community." Sullivan R. Presented at American College of Medical Toxicology, 2018 Annual Meeting, Washington DC, April 2018.

**"ED Addiction and Connection to Treatment."** Sullivan R. Presented at American Society of Addiction Medicine, 2018 Annual Meeting, San Diego CA, April 2018.

"The Patient Experience Curriculum: Increasing Medical Student Awareness of Patient Centered Care." Calleo V, Camara M, Welch K, Andonian D, MacConaghy L, Prince L, Sarsfield M. Presented at National CORD-EM, San Antonio TX, April 2018.

"HBO Indications." Heyboer M. Presented at ACCWS 8th Annual Symposium, Toledo OH, May 2018.

"Wound Bed Preparation." Heyboer M. Presented at ACCWS Back to Basics, Toledo OH, May 2018.

"Nutrition and Wound Healing." Heyboer M. Presented at ACCWS Back to Basics, Toledo OH, May 2018.

- "Supraventricular Tachycardia During Hyperbaric Oxygen Treatment." Mihai A, Morgan M, Heyboer M. Presented at UHMS Annual Scientific Assembly, Orlando FL, June 2018.
- "Hyperbaric Oxygen Therapy for Type-II DCS in an Experienced Dive Master A Case Study." Boes T, Morgan M, Sharma D, Santiago W, Mariani P, Heyboer M. Presented at UHMS Annual Scientific Assembly, Orlando FL, June 2018.
- "Successful Artificial Sphincter Placement for Urinary Incontinence in the Setting of Radiation Cystitis with Adjunctive Hyperbaric Oxygen Therapy A Case Study." Boes T, Morgan M, Sharma D, Santiago W, Mariani P, Heyboer M. Presented at UHMS Annual Scientific Assembly, Orlando FL, June 2018.
- "Hyperbaric Oxygen Therapy for Type-I DCS Secondary to Hypobaric Challenge A Case Study." Boes T, Morgan M, Sharma D, Santiago W, Mariani P, Heyboer M. Presented at UHMS Annual Scientific Assembly, Orlando FL, June 2018.
- "Effects of Hyperbaric Oxygen Therapy on Non-Diabetic Serum Glucose Levels." Boes T, Wojcik S, Heyboer M. Presented at UHMS Annual Scientific Assembly, Orlando FL, June 2018.
- "Mistakes You Don't Want To Make in Pediatric Patients," and "Literature Review In Pediatric Emergency Medicine." Richard Cantor. Presented at Lehigh Valley Medical Center, Allentown NY, March 2018.
- "Antidotes You Need To Know" and "Literature Review In Pediatric Emergency Medicine." Richard Cantor. Presented at ACEP PEM Assembly, Las Vegas Nevada, March 2018.
- "Why What You Do Matters," "Mistakes to Avoid in PEM," and "Literature Review in PEM." Richard Cantor. Presented at the SEMPA 360 Annual Conference, San Antonio Texas, May 2018.
- "Articles That Changed My Practice," "Drops and Ointment Toxicity," "Beware the Gram Positives," and "What Would Richie Cantor Do." Richard Cantor. Presented at Essentials of Emergency Medicine, Las Vegas Nevada, May, 2018.
- "Literature Review in PEM," "Pediatric Toxicologic Emergencies," and "Evidence Based PEM." Richard Cantor. Presented at the 51<sup>st</sup> Annual Advances and Controversies in Clinical Pediatrics, San Francisco California, June 2018.
- "The Crashing Neonate," "Pediatric Status Asthmaticus," and "Pediatric Resuscitation Pitfalls." Richard Cantor. Presented at the Resuscitation Assembly, Baltimore Maryland, June 2018.
- **"EBM in PEM: Are You Practicing It?"** Richard Cantor. Presented at the 7<sup>th</sup> Annual Clinical Concepts and Conundrums in Pediatric Hospital Medicine, Denver Colorado, September, 2018.
- "EBM in PEM: Are You Practicing It?" "Literature Review in PEM," and "Mistakes You Don't Want to Make in PEM." Richard Cantor. Presented at the ACEP Scientific Assembly, San Diego California, October, 2018.
- **"EBM Management of Pediatric Respiratory Emergencies," "Lies Your Mother Told You,"** and "**Must Know Pediatric Toxins."** Richard Cantor. Presented at the 34<sup>th</sup> Annual Fall Conference on Pediatric Emergencies, Oahu Hawaii, October, 2018.
- "Management of Pediatric Hypertensive Emergencies," "Common Errors in PEM," and "Must Know Pediatric Toxins." Richard Cantor. Presented at the 10<sup>th</sup> Annual Conference on Pediatric Emergencies, New York, New York, December, 2018.

"An Office Based Toxicology Overview," "Cocaine and Heroin as Seen by the ER Provider's Perspective," "The Danger of Legal Highs in Both Adolescents and Adults," and "Primary Care Update on Synthetic Drugs." Brian Kloss. Presented at MER CME Conference, Oahu Hawaii, December 2018.

"Tick Doc? Lyme Disease and All Its Friends: Tick Borne Illnesses Illustrated." Brian Kloss. Presented at PAAV 36<sup>th</sup> Annual CME Conference, Manchester Village VT, January 2018.

"An Office-Based Toxicology Overview," "Cocaine and Heroin as Seen by the ER Provider's Perspective," "The Danger of Legal Highs in Both Adolescents and Adults," and "Primary Care Update on Synthetic Drugs." Brian Kloss. Presented at MER CME Conference, Orlando FL, March 2018.

"Synthetic Drugs of Abuse" American Burn Association Annual Meeting, Chicago, IL, April 10, 2018

## **INTERNATIONAL CONFERENCES AND EVENTS**

"Lies Your Mother Told You," "EBM in PEM," "Toxicologic Emergencies." Richard Cantor. Presented at Holistic Horizons in Pediatric Medicine, Kuwait City, Kuwait. January 2018.

# **EM DEPARTMENT FACULTY**

Gary Johnson, MD, FACEP, Associate Professor and Chair

Elliot Rodriguez, MD, FACEP, Associate Professor and Vice-Chair

Patrick Adcock, MD, Assistant Professor

Lingappa Amernath, MD, Assistant Professor

David Andonian, MD, Assistant Professor

Leah Bennett, MD, MPH, Assistant Professor

Rebecca Blue, MD, Assistant Professor

Jay Brenner, MD, Associate Professor

Jennifer Campoli, DO, Assistant Professor

Richard Cantor, MD, FAAP, FACEP, Professor

Joseph Capogreco, MD, Assistant Professor

A. James Ciaccio, MD, FACEP, Assistant Professor

Rishana Cohen, MD, Assistant Professor

Derek Cooney, MD, FF/NREMT-P, FACEP, Associate Professor

Norma Cooney, MD, FACEP, Assistant Professor

Christine Courtney, MD, Assistant Professor

Susan Demartini, MD, Assistant Professor

Mary Lee DiRubbo, MD, Assistant Professor

William Eggleston, PharmD, Assistant Professor

Risa Farber-Heath, DO, Assistant Professor

Andrea Ferrari, MD, Assistant Professor

Christopher Fullagar, MD, FACEP, Assistant Professor

Kevin Gaskin, MD, Assistant Professor

Tyler Greenfield, DO, Assistant Professor

Erin Hanley, MD, Assistant Professor

Marvin Heyboer, MD, FACEP, FUHM, FACCWS, Associate Professor

Michael Hodgman, MD, Assistant Professor

Eric Hojnowski, MD, Assistant Professor

Michael Holland, MD, FACEO, FACOEM, FACMT, FAACT, Professor

Samantha Jones, MD, Assistant Professor

Jeremy Joslin, MD, FACEP, FAWM, Associate Professor

Priyanka Kaul, MD, Assistant Professor

Paul Klawitter, MD, PhD, Assistant Professor

Anthony Klimek, MD, Assistant Professor

Brian Kloss, DO, JD, Associate Professor

Christian Knutsen, MD, MPH, FACEP, Assistant Professor

Paul Ko, MD, FACEP, Associate Professor

Albert Krisch, MD, Assistant Professor

Thomas Lavoie, MD, Assistant Professor

Lindsay MacConaghy, MD, Assistant Professor

James Mangano, DO, Assistant Professor

Deborah Mann, MD, Assistant Professor

Peter Mariani, MD, FACHM, FAPWH, Emeritus

Jeanna Marraffa, PharmD, DABAT, FAACT, Associate Professor

Alison McCrone, MD, FAAP, Assistant Professor

John McCabe, MD, FACEP, Professor

Monica Morgan, MD, Assistant Professor

Elizabeth Nicholas, MD, Assistant Professor

William Paolo, MD, Associate Professor

Rhonda Philopena, MD, Assistant Professor

Lauren Pipas, MD, Assistant Professor

N. Heramba Prasad, MD, FACEP, Emeritus

Louise Prince, MD, FACEP, Associate Professor

David Reed, MD, FACEP, Emeritus

Peter David Sadowitz, MD, Associate Professor

William Santiago, MD, Assistant Professor

Matthew Sarsfield, MD, FACEP, FAAEM, Assistant Professor

Deepali Sharma, MD, Assistant Professor

Eric Shaw, MD, FACEP, FAAEM, FAWM, Assistant Professor

Kelsey Stack, DO, Assistant Professor

Christine Stork-Medicis, PharmD, DABAT, FAACT, Associate

Professor

Ross Sullivan, MD, Assistant Professor

Christopher Tanski, MD, MSEd, EMT, Assistant Professor

Asalim Thabet, MD, Assistant Professor

Matthew Thornton, MD, Assistant Professor

David Wirtz, MD, MPH, Assistant Professor

Michal Witt, MD, MPH, Assistant Professor

Susan Wojcik, PhD, ATC, Associate Professor

# ADVANCED PRACTICE PROVIDERS

Stephanie Brannan, PA Mark Suchowiecki, PA

Victor Rodriguez, PA Craig Fisher, PA

Cassidy Callahan, PA Lisa Evans Westcott, NP

Kelley Serens, NP William Linsky, FNP, MS, DNP

Jamie Winslow, PA Maia Czarnecki, PA

Jennifer Smith, PA Valerie Reap, RN, MS, FNP-C

Karl Elsner, NP

## EM DEPARTMENT STAFF LISTING

Jennifer Patrick, RHIT, Medical Coder Frances Barry, Administrative Coordinator

Anne Peer, Senior Administrative Assistant to Chair Jodi Butterfield, EMS Programs and EMS Fellowship Coordinator

Elaine Pohl, RHIT, Medical Coder Maureen Corcoran, RHIT, Medical Coder

LaToya Pointer, RHIT, Medical Coder Michelle DeBellis, RHIT, Medical Coder

Anna Prince, MPH, Clinical Research Associate II Rodney Freeman, Manager Simulation Center

David Rothman, Information Technology Associate Stan Goettel, MS, EMT-P, Manager of Life Support & AED/PAD

**Programs** Douglas Sandbrook, MA, NREMT-P, EMS Liaison and EMS Programs Tisha Hanson, Administrative Specialist

Angela Scalise, Accountant III Diane Hartzog, Residency Program Administrator

Cynthia Sidari, Residency and Medical Toxicology Fellowship Janice Harvey, MBA, Administrator/Business Manager

Deborah Hermann, MS, Director of Operations

Kristy Holcomb, RHIT, Medical Coder

Robert (Randy) Klein, BBA, Assistant Business Manager

Naomi Krebs, EMT-P, EMS Programs Clinical Coordinator

Joshua LaDuke, BS, EMTP, Paramedic Program Lead Instructor

RoseMarie More, Conference and Life Support Programs

Coordinator

Lauren Pacelli, BS, EDRA Program Coordinator & Assistant Research

Coordinator

Director

Coordinator

Trina Skeele, RN, BSN, Director of Patient Safety

Cindy Spuches, CPC, Medical Coder

Lisa Vogtle, International EM & Wilderness Medicine Fellowship

Coordinator

Andrea Williams, PEM and HBO Fellowships Coordinator

Kara Welch, Undergraduate Medical Student & PA Fellowship

Coordinator

Mildred Williams, RHIT, Medical Coder



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