



Carolinas Medical Center Emergency Medicine Residency Program

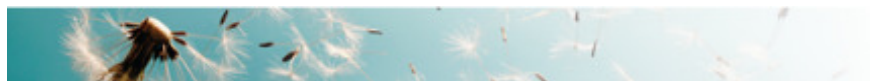


Carolinas Medical Center

Emergency Medicine Residency Program

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Carolinas Medical Center



Emergency Department

There are four treatment areas (55 beds total) within our emergency department:

- * **Major Treatment** – High-acuity medical and trauma patients, 18 beds, open 24/7.
- * **Diagnostics** – Medium acuity medical, OB/GYN, EENT patients, 15 beds, open 24/7.
- * **Ambulatory Emergency Center** – Lower-acuity medical and OB/GYN, lacerations, abscesses, sprains, strains, simple fractures, 10 beds, open 9 a.m. to 1 a.m.
- * **Children’s Emergency Department** - Patients under 18 that do not meet requirements for a trauma code activation, 12 beds, open 24/7.



Children’s ED



Trauma Room



Physician Coverage

Major Treatment: single attending 24/7; double attending coverage from 11 a.m. to 11 p.m.
PGY3 from 7 a.m. to 7 a.m.; PGY2 from 9 a.m. to 5 a.m.; PGY1 from 1 p.m. to 11 p.m.

tiered learning and teaching

Diagnostics: single attending 24/7, PGY 2/3 from 9 a.m. to 5 a.m., MLP from 7 a.m. to 3 a.m., PGY1 from 1a-7a

AEC: single attending during all hours of operation
PGY1 11 a.m. to 9 p.m., 3 p.m. to 1 a.m., 9 p.m. to 1 a.m., PGY3 teaching shift 5 p.m. to 1 a.m. weekdays

Children's ED: single attending coverage 24 hours per day
PGY1: 9 a.m. 7 p.m., 7 p.m. to 5 a.m., PGY2/3 or Peds PGY2/3: 7 a.m. to 7 a.m., MLP 11 a.m. to 9 p.m.

Observation unit: evaluation of suspected ACS, TIA, overnight stays, staffed by MLP 9 a.m. to 5 p.m.

Ancillary Equipment:

Radiology: 24/7 in-house interventional radiology, C-arm fluoroscopy in ED, bedside US (5 machines)
Point of Care Testing: electrolytes, troponin, hemoglobin, cardiac BNP, d-dimer, INR, lactate
Electronic Medical Record, Cerner FirstNet (patient tracking), PowerChart (EMR), computerized physician order entry, 100% electronic documentation via PowerNotes and Dragon voice recognition software.

Ancillary Support: Interpreters, Techs, Respiratory Therapists, MSW, Patient Rep, Child Life, Unit Secretaries

MD VS	Ref	Stat	Ac/RT	Tech	FN	F	M	L	OS	N	Name	Age	Alter Reason for Visit	EP	FEL	2nd EPh	FN	MD	C	P	NED	Events	Lab	Rad	Dis	Bed #	Comment	Consult	PCP (STAR)	PCP (Triage)							
	ED40									0:49	JONATHAN	2 yrs	1: Facial droop																				NORTH CHAR	NORTH CHAR			
	ED41																																				
	ED42																																				
	ED43									1:53	NICH	15 yrs	1: Nose bleed																						CHARLOTTE, P		
	ED44																																				
	ED45																																				
	ED46																																				
	ED47																																				
*	ED48									5:12	BLAYD	2 mo	1:D - Diarrhea, 2:Rectal																					TONKOWICZ, I	ROCK HILL, PEI		
*	ED49									3:47	JAYLA ELLA	4 yrs	1:Cough, 2:Cough																						FREEMAN, KEV	FREEMAN, KEV	
*	ED50																																				
*	ED51									2:47	DEAISLAND	9 yrs	1:Shortness of breath, 2																							GRACE , PEDIA	GRACE , PEDIA

Figure 1: Cerner FirstNet Patient Tracking Board

90% Order Form

90% Orders Favorites

90% Newsflash

System	Order	Quantity	Unit	Frequency	Notes
Respiratory	O2 via NC	2 L	4 L		
	Blow By O2	Cont	10 L		
	Face Mask	Cont			
	BiPAP	Cont			
	Vent per Prot	x1	x2	x3	
EKG	CP New				
	AMS				
X-Rays	Chest X-Ray				
	CT Head				
IV Fluids	NS 1 Liter Bolus				
	NS 2 Liter Bolus				
	NS 250ml Bolus				
Frog Meds	Ativan IV	1 mg	2 mg		
	Ativan PO	1 mg	2 mg		
Peds Meds	Morphine IM	4 mg	6 mg		
	Morphine IV	2 mg	4 mg		

Figure 2: 90% Page created by CMC emergency physician, incorporated by Cerner



Motor vehicle crash - ... List

- Basic Information
- History of Present Illness
- Review of Systems
- Health Status
- Past Medical/Family/Social History
- Physical Examination
- Medical Decision Making
- Reexamination/Reevaluation
- Procedure
- Impression and Plan
- Addendum

Patient: PHOENIX, TRAUMA MRN: 0005828850 FIN: 8100045359
Age: 124 years Sex: Male DOB: 1/1/1688
Associated Diagnoses: None
Author: CRAIG, SANDRA A MD

Basic Information <Hide Structure> <Use Free Text>
Time seen Date & time=== / Date=== / Immediately upon arrival / Other
History source Patient / Caretaker / Significant other / Family / EMS / Police / Friend / Interpreter / Nursing home records / Other
Arrival mode Private vehicle / Walking / Wheelchair / Ambulance / Police / Amb-Air / Amb-ALS / Amb-BLS / Other
History limitation None / Clinical condition / Physical impairment / Cognitive impairment / Language barrier / Intubated / Sedated / Other M
Additional info Patient's physician(s)+ / Chief Complaint from Nursing Triage Note / Other

History of Present Illness <Hide Structure> <Use Free Text>
MVC.
Presents following MVC / Other
Onset Just PTA / === mins ago / === hours ago / === days ago / === weeks ago / Unknown / Other
Collision details Front impact / Rear impact / Driver side impact / Passenger side impact / High speed / Moderate speed / Low speed / ===mph / Unknown / Other
Occupancy Driver / Passenger / Front / Rear / Ambulatory / Ejected / Unknown / Other
Safety mechanism Seat belt / Airbag / Unknown / Other
Location/injury (rpt) Wound #=== / Other
Location: Neg / R / L / B / scalp / forehead / chin / chest / back / abdomen / hand / wrist / arm / leg / ankle / foot / Other
Type of injury: laceration / puncture wound / crush injury / direct blow / burn / bite / GSW / stab / penetrating / blunt / deceleration / unknown / Other
Degree of pain None / Minimal / Moderate / Severe / ===/10 / Other
Degree of bleeding None / Minimal / Moderate / Severe / Other
Risk factors None / Age / Unrestrained / ETOH abuse / Drug abuse / Multiple medications / Recent surgery / Anticoagulated / Other
Dominant hand R / L / Ambidextrous / Unknown / Other
Therapy today None / OTC meds+ / Rx meds+ / Local therapy+ / Drs. office visit / EMS / Degree of relief+ / See nurses notes / Unknown / Other
Associated symptoms None / Shortness of breath / Chest pain / Abdominal pain / Nausea / Vomiting / Back pain / LOC+ / Altered LOC / Dizziness / Syncope / Other

Note Details: ED Physician Documentation, CRAIG, SANDRA A MD, 10/25/2012 12:08:00 EDT, Motor vehicle crash - major

Sign/Submit Save Save & Close Cancel

P197 SCRAIG01 25 October 2012 12:11 EDT
12:11 PM
10/25/2012

Figure 3 Cerner PowerNote Template



Figure 4: JB and his dragon

Carolinas HealthCare System



Seventh largest not-for-profit healthcare system in the country (based on number of hospitals in the system).

Owns, leases and manages more than 40 hospitals in North and South Carolina, nursing homes, physician practices, home health agencies, radiation therapy facilities, physical therapy facilities, managed care companies and other healthcare related operations, comprising more than 7,460 licensed beds and approximately 60,000 employees.

CMC



Flagship hospital of the system with an annual budget of over \$2.4 billion.

874-bed (including 234 LCH), community-based teaching hospital, Level 1 trauma center.

8 ICU's: coronary, medical, surgical, trauma, neurosurgical, cardiovascular, pediatrics and newborn.

The [Children's Emergency Department](#) was a cornerstone to the launching of the 234-bed Levine Children's Hospital which was completed in October 2007. It is the first ED in the region open 24 hours a day and dedicated to the care of children in a family-centered environment. [LevineChildrensHospital.org](#)

Patient Volume

~115,000 annually or ~315/day (85,000 Adult and 30,000 Pediatric)

Patient Acuity

27% are admitted, ~1/4 of these go to an ICU

70% from Major Treatment 22% from Diagnostics 8% from Children's ED

Payer Mix

Commercial 2% Medicaid 23% Other 2%
Managed Care 24% Medicare 17% Self Pay 32%

Patient Mix

Medical 28% Surgical/Trauma 24% Pediatrics 23% Ob/Gyn 22% Psych/Tox 3%

Annual Trauma Registry

4,400 trauma code activations (89% blunt, 9% penetrating, 2% burns/hangings/drownings).
Sixth highest trauma volume amongst level one trauma centers in the US.



EMS



CMC EM faculty member Dr. Doug Swanson serves as the **Medical Director** for EMS in Mecklenburg County:

- Ground services provided by Mecklenburg EMS Agency (MEDIC) ~ 115,000 responses with 86,535 transports (largest volume EMS system in North Carolina) during fiscal year 2012.
- Aeromedical services provided by MedCenter Air.

The **Center for Prehospital Medicine** is a division of the Department of Emergency Medicine, and serves as a regional center for prehospital medical oversight, paramedic/prehospital education, disaster and preparedness planning, mass gathering medical support, and other EMS-related activities.

CMC provides on-line medical control for Medic and MedCenter Air ground and flight services.

- **PGY1:** orientation, meet the providers, ride with Medic.
- **PGY2:** dedicated EMS month includes on-line and direct medical control, shifts with MEDIC and MedCenter Air (voluntary), coverage at Bank of America Stadium (Carolina Panthers), Lowe's Motor Speedway (NASCAR), interaction with Charlotte Fire Department, EMS Dispatch, Operations Supervisors, EMS Fellow, and Medical Director, teaching opportunity for education courses at EMT and paramedic levels, including experience working with in a high-fidelity medical simulation and human gross anatomy labs.
- **PGY3:** elective rotation can include experience with Carolinas MED-1 (as available), ride-along with MCA, on scene medical control, life-flight as the second crew member.

MedCenter Air Ground & Air Transport

- 4 rotor wing aircraft, EC135 helicopters (March 2010) provide latest in medical and aviation technology (collision avoidance, satellite tracking, environmental control, NVG's).
- 3 fixed wing aircraft (equipped with all current and proposed State / Federal safety recommendations)
- Multiple critical care ground trucks positioned throughout the region.

Carolinas Med-1 - <http://www.carolinasmed-1.org/>

- Two 53-foot tractor trailers, one for patient care and one for support and storage.
- Nearly 1,000 square feet of indoor treatment space, deployable tent system adds 250 additional beds.
- Six critical care beds, seven general treatment beds, one dental/ENT chair.
- Full pharmacy, point of care labs, radiology, ultrasound, environment HEPA filtered to 0.3 microns.
- Mobile Level 1 trauma center capabilities, telemedicine uplinks.



Education

PGY 1-2-3 program with 14 residents per year.

PGY 1

1 Presentation

Curriculum

1 month ED orientation
 3 months ED
 1 month Internal Medicine
 1 month MICU
 1 month Peds
 1 month Trauma
 1 month OB/GYN
 1 month Cardiology
 1 month US/Anesthesia
 1 month Surgery (EGS)

Responsibilities

20-21 10-hour shifts
 Q 5th day long call (7 a.m. to 11 p.m. or 7 p.m. to 11 a.m.)
 5 nights (9 p.m. to 9 a.m./month)
 6 nights per month
 9-10 nights/month (7 p.m. to 9 a.m.)
 5-7 night shifts per month
 No call
 No call
 One week of night float/cross-cover

PGY 2

1 Presentation

Curriculum

5 months in ED
 1 month Peds EM
 1 month in Ortho
 1 month CCU
 1 month MICU
 1 month TICU
 1 month Toxicology
 1 month EMS

Responsibilities

19-20 10H shifts
 16 8H shifts
 ED consults
 No night calls. Leave everyday by 8-9pm.
 Every 3-4th night call
 Every 3- 4th night call
 Tox – 15 home call nights, tox presentation
 WS*, no call

PGY 3

1 Presentation

Curriculum

8 months ED
 1 month PICU
 3 months electives

Responsibilities

8,9,10-hour shifts (peds shifts are 8 hours)
 Weekdays: alternating Long call (6 a.m. to 7 p.m.);
 Short call (6 a.m. to 1 p.m.)
 - 10x night shifts the entire month (7 p.m. to 9 a.m.)
 - 2 full weekends off
 International, US, Critical Care, Med Student Teaching, Research,
 Radiology, Forensics, Administration, Infectious Disease,
 Simulation Medicine, Cardiology, Community EM (*WS, no call)

WS* = weekend shifts in the ED (one Saturday and Sunday)

ACLS, PALS and ATLS are offered during the Intern Orientation week as well as other times throughout the year.

Resident Requirements

- * All residents are required to submit one manuscript of publishable quality before graduation.
- * All residents are required to take the yearly in-service exam in February.
- * All residents are required to take USMLE part III during their intern year.
- * All residents are required to complete an exit interview with the program director before graduation.



Educational Block Conferences

Through the utilization of a block format, 4 hours of educational conferences will provide optimal resident learning experience that will reinforce clinical education, encourage life-long-learning, accentuate residents as educators, and assist residents in becoming masterful emergency medicine physicians. These educational conferences will be patient centered, interactive and innovative while steering away from traditional didactics and toward enlightened academic conversations.

General Topics

Core Content covered in varied and interactive ways
M&M weekly
Toxicology conference monthly
Peds – EM conferences 2/month
Orthopedic conferences given by Ortho Team

Dedicated Symposia

Airway – given twice a year
Wound Care
ECG
How to Find a Job
Risk Management
Written Board Review
Oral Board Review

Simulation Education

(The only facility in the region to be both an American College of Surgeons-accredited Level I Education Institute and a Society for Simulation in Healthcare-accredited simulation center.)

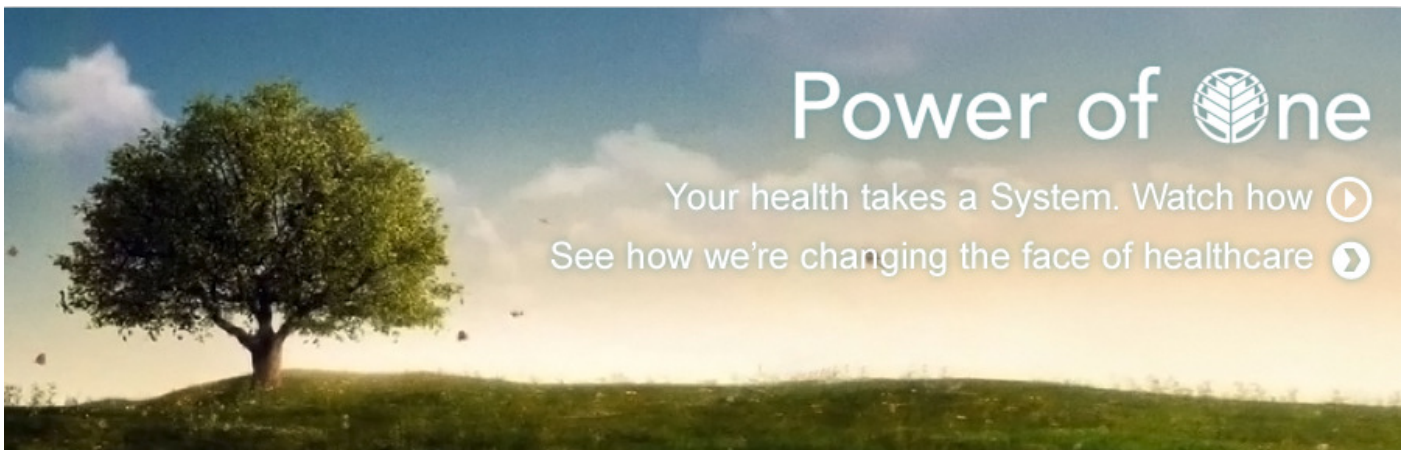


Resident Learning Portal

Carolinas Electronic Compendium provides high-yield full text educational materials organized by rotation month at www.cmcedmasters.com

Journal Club

Monthly at faculty member's home, single topic, 2-3 articles focusing on landmark EM papers.



Fellowship Programs

- Research: Michael Runyon, MD; John Watts, Ph.D.
- Toxicology: Russ Kerns, MD
- EMS: Douglas Swanson, MD
- Ultrasound: Tony Weekes, MD
- Pediatric EM: Stacy Reynolds, MD
- Disaster Preparedness / Operational Medicine: Dave Callaway, MD

Graduate Statistics

The residency program began in 1976. As of June 30, 2014, CMC has graduated 332 emergency physicians. Of these 91 are in academic practice (~27%), and 241 are in private practice (~73%). Over the past 5 years, approximately 26% academic practice; 74% private practice.

ABEM Performance Since 1991

Written: 99.5% pass rate vs. 90% nationally
Oral: 99% pass rate versus 95% nationally

Faculty (See separate biographical section)

All are board certified in Emergency Medicine, 6 are dual boarded (Pediatric EM/EM; Sports Med/EM; Tox/EM) and 2 are triple boarded (Pediatrics/Pediatric EM/EM).

38 Emergency Medicine residency-trained including 4 EM/Pediatric EM trained:

- 15 Carolinas Medical Center – Antoniazzi, Batts, Bullard, Cook, Craig, Garvey, Hawkins, Heffner, Mayer, Patel, Runyon, Salzman, Swanson, Tayal, Wares
- 1 East Carolina – Scarboro
- 1 Cook County Hospital - McBryde
- 2 Denver Health Med Center – Pearson, Carlson
- 1 Columbia University – Colucciello
- 1 Henry Ford Hospital – Asimos
- 1 George Washington – Georgetown University - Pelucio
- 3 Indianapolis – MacNeill, Cordle, Malka
- 1 Penn State - Kerns
- 1 North Shore – Beuhler
- 1 Jacobi Medical Center -Weekes
- 1 Maryland - Fox
- 2 Pittsburgh – Gibbs, Reynolds
- 1 Beth Israel – Callaway
- 1 MUSC – Lewis
- 1 Baystate Med Center/Tufts – Patel
- 1 Virginia Commonwealth – Murphy
- 1 Emory – Griggs
- 1 Washington St. Louis - Puchalski
- 1 Cincinnati – Vander Have



"Can I get into academics if I go to a 3-year program?"

- **Jeff VanderMark** – 1992, Associate Professor, EM, UT Southwestern
- **Jeff Kline** – 1993, Vice Chair of Research Department of EM, Professor, Department of Cellular and Integrative Physiology Indiana University School of Medicine, past President, SAEM
- **Mike Harrigan** – 1996, Assistant Professor EM, UNC-Chapel Hill
- **Joel Moll** – 1997, Program Director, VCU
- **Dave Caro** – 1997, Program Director, University of Florida at Jacksonville
- **Joanna Oakes** – 1999, Associate Professor of EM, U Texas Houston
- **Andy Perron** – 1999, Program Director, Maine Medical Center
- **Manish Patel, MD, MSc** – 1999, Assistant Professor of EM, Emory University
- **Rawle 'Tony' Seupaul** – 2000, Chairman and Professor of EM, Univ Arkansas
- **Christopher Moore** – 2001, Associate Professor of EM; Director, Section of Emergency Ultrasound; Director, Emergency Ultrasound Fellowship
- **D. Mark Courtney** – class of 2001, Assistant Professor, Department of EM, Northwestern University, Feinberg School of Medicine
- **Alan Jones** – 2002, Chairman, University of Mississippi, President, SAEM
- **Steven Arze** – 2003, EM Chair, CMO, VP Medical Affairs, Baylor Medical Center at Garland TX
- **Alice Mitchell** - 2004, Associate Professor of Research, Indiana University
- **Bret Nicks** – 2004, Associate Dean, Office of Global Health, Associate Professor, EM, Wake Forest Med
- **Mike Fitch** – 2004, Associate Professor, EM, Wake Forest
- **Matt Neulander** – 2004, Assistant Professor, University of Connecticut
- **Jen Hannum** – 2005, Assistant Professor, EM, Wake Forest
- **Jim Fiechtl** – 2005, Associate Professor of EM, Vanderbilt University
- **Manoj Pariyadath** – 2005, Assistant Professor, EM, Wake Forest
- **Gregory Snead** – 2006, Ultrasound Director University of Arkansas
- **Ross 'Marty' Vander Noot** – 2008, Assistant Professor of EM, Director International EM Fellowship University of Alabama – Birmingham
- **Danielle Turner-Lawrence** – 2008, Associate Professor, Oakland University-William Beaumont School of Medicine
- **Michael Marchick** – 2008, Assistant Professor of EM, Assistant Clerkship Director
- **Harland Hayes** – 2009, Associate Professor, EM, University of Utah
- **Malika Fair** – 2009, Assistant Clinical Professor of EM, George Washington University
- **Anne Daul** – 2009, Assistant Professor of EM, Emory University
- **Bijal Shah** – 2009, Assistant Professor of EM, Emory University
- **Katherine Mayer** – 2009, critical care fellowship position, Cooper Hospital, Camden, NJ
- **Elizabeth Rosenman** – 2010, faculty member, Harborview Medical Center, Seattle WA
- **Michael Puskarich** – 2010, Assistant Professor, Associate Research Director Mississippi University
- **Shiloh Gilbert** – 2010, Associate Professor, EM, University of Utah
- **Dustin Calhoun** – 2011, Assistant Professor of EM, University of Cincinnati
- **Brittany Murray** – 2012, Pediatric Emergency Fellow Children's Hospital Boston, MA
- **Daren Beam** – 2012, Research Fellowship Indiana University Department of EM Indianapolis, IN
- **Angela Fusaro** – 2012, Assistant Professor of EM, Emory University
- **Dazhe James Cao** – 2013, Medical Toxicology Fellowship, Rocky Mountain Poison and Drug Center Denver, CO
- **Erin Noste** – 2013, EMS Fellowship CMC
- **Katharine Modisett** – 2014, Critical Care Fellowship Georgetown, DC
- **Peter McCahill** – 2014, Operational and Disaster Medicine Fellowship CMC



Research and Scholarly Activity

Physical Plant:

Cannon Research Center

Opened in 1991

60,000-square-ft. facility for small and large animal investigations.

Close proximity to ED facilitates processing of clinical lab samples.

Departmental Personnel:

1 full-time Ph.D. clinical researcher

3 full-time research coordinators

1 full-time research nurse

2 full-time lab technicians

Undergraduate research associate program



Research Summary

The Mission of the division of Emergency Medicine Research at Carolinas Medical Center is “to research ways to diagnose and treat life threatening illnesses.” As a result, the scope of interests ranges from social science to cell physiology. Clinicians in the department tend to research disease entities or organ systems relevant to acute care.

Areas of Interest

Michael Runyon, MD – Diagnosis and management of sepsis as well as utilization of diagnostic imaging and diagnosis and treatment of emergency conditions in resource-limited settings

Lee Garvey, MD – Diagnosis and treatment of acute coronary syndromes

John Watts, PhD – Cardiac function in experimental massive pulmonary embolism

Dave Pearson, MD – Cardiac arrest and post-cardiac arrest syndrome focused on the peri-arrest period

Alan Heffner, MD – Emergency airway management, sepsis, shock, cardiac arrest and therapeutic cooling

Mike Gibbs, MD - Airway management, trauma, medical errors

Vivek Tayal, MD – Ultrasound diagnostic methods

Andrew Asimos, MD – Stroke, seizures, and traumatic brain injury

Stacy Reynolds, MD – Diagnostic imaging of trauma patients

Emily MacNeill, MD – Pediatric Trauma

Tony Weekes, MD – Ultrasound applications

Chad Scarboro, MD – Pediatric head injury and diagnostic imaging

Mark Bullard, MD – Medical simulation

Margaret Lewis, MD – Ultrasound education

Christine Murphy, MD - Alternative uses of methylene blue, current trends in drugs of abuse



Carolina HealthCare System

Schedule of CMC-related Events at the 2014 SAEM Annual Meeting

Wednesday, May 14, 2014

- 8:00 – 10:00 am Oral Abstract: International Emergency Medicine – Houston Ballroom C
27. *HIV Counseling and Testing Practices for Children Presenting to the Emergency Department of Muhimbili National Hospital, Dar Es Salaam, Tanzania.*
Hendry R. Sawe, MD, MBA, Muhimbili National Hospital
(Mike Runyon, MD, Carolinas Medical Center, is Mentor)
🏆 **Gallery of Excellence Nominee**
- 8:00 – 12:00 pm Sim Wars – Lone Star Ballroom C1-C2-C3-C4 (Conference Center, 2nd Floor)
David Kiefer, Mike Lara, Revathi Jyothindran and Karina Reyner of Carolinas Medical Center
- 3:00 – 5:00 pm Plenary Session – Dallas Ballroom B-C (Conference Center, 1st Floor)
- 5:00 – 7:00 pm EMRA Quiz Bowl – Austin Ballroom 2 (Hotel 2nd Floor)
Bryant Allen, Jessica Baxley, David Kiefer, Sarah Rackers and Karina Reyner of Carolinas Medical Center
- 5:30 – 7:00 pm Opening Reception & Gallery of Excellence – Lone Star Ballroom Pre-convene Area
Join us in celebrating SAEM's 25th Annual Meeting at the opening reception, following the plenary session on Wednesday, May 14, 2014 from 5:30 - 7:00 pm, in the Lone Star Ballroom Pre-convene area (Conference Center, 2nd Floor). This is a great opportunity to network with other SAEM members and attendees, while enjoying hors d'oeuvres and a cash bar.

Thursday, May 15, 2014

- 8:00 – 10:00 pm **IGNITE! SAEM 2014** – Dallas Ballroom A
The inaugural **IGNITE! SAEM** will be an exciting, informal event at which your colleagues will address a variety of emergency medicine topics. Each speaker will have 5 minutes to present 20 slides, each of which automatically advances after only 15 seconds, whether the presenter is ready or not! Come be a part of this face-paced, action-packed experience.
- 🗣️ *Health Policy: What's in it for Me?*
Nick Sawyer, MD, MBA, Carolinas Medical Center
- 🗣️ *Tourniquets as the New Trend: Data, Technology and Outcomes to Show that Mortality from Extremity Hemorrhage Should be a Thing of the Past.*
Josh Robertson, MD, Carolinas Medical Center
- 8:00 – 10:00 pm Moderated Poster: Critical Care – Pearl 4
234. *Timing of Paralytics Impacts Door-To-Cool Time in Post-Cardiac Arrest Patients.*
Katherine A. Mayer, MD, Carolinas Medical Center
- 8:00 – 12:00 pm Poster Abstracts (Poster Session 2) - Lone Star Ballroom B
281. *Effect of Shift Work Fatigue on Clinical Performance of PGY-3 Emergency Medicine Residents as Measured During High Fidelity Simulation Cases.*
Jo Anna Leuck, MD, Carolinas Medical Center
345. *Severe IV Access Difficulty in Two Urban EDs.*
Michael D. Witting, MD, MS, University of Maryland
(Sandy Beverly, MD, Carolinas Medical Center, is Co-investigator)
370. *Morbidity and Mortality Following Traditional Uvulectomy among Children Presenting to the Muhimbili National Hospital Emergency Department in Dar es Salaam, Tanzania*
Hendry R. Sawe, MD, MBA, Muhimbili National Hospital
(Mike Runyon, MD, Carolinas Medical Center, is Mentor)
🏆 **Gallery of Excellence Nominee**
377. *A Brief Educational Intervention Improves Medication Safety in Grandparents of Young Children: a Pilot Study.*
Maneesha Agarwal, MD, Carolinas Medical Center

10:30 – 12:30 pm

Oral Abstracts: Simulation – Houston Ballroom B

259. *Implementation of a Pediatric Mock Code Blue Program at a Tertiary Care Facility: Does It Improve Code Performance, Confidence or Teamwork?*

Mark J. Bullard, MD, Carolinas Medical Center/Carolinas Simulation Center

☛ **Gallery of Excellence Nominee**

262. *A Comparison of Performance for High-fidelity ACLS-based Simulation Cases for PGY-1 and PGY-3 Level Learners at Two Institutions.*

Jo Anna Leuck, MD, Carolinas Medical Center

265. *Unifying Performance: a Transition in Critical Care from PGY1-2: Increasing Learner Confidence with An Interdisciplinary Intern Simulation Curriculum.*

Mark J. Bullard, MD, Carolinas Medical Center/Carolinas Simulation Center

12:00 – 5:00 pm

Sono Games – Lone Star Ballroom C1-C2-C3-C4 (Conf. Center, 2nd Floor)

Bryant Allen, Daniel Troha and Valarie Schwind of Carolinas Medical Center

1:30 – 3:30 pm

Oral Abstract: Toxicology – Houston Ballroom B

430. *Incidence and Outcomes of Adult Cardiac Arrest Associated with Toxic Exposure Treated with Therapeutic Hypothermia (ToxiCool).*

Katharine L. Modisett, MD, Carolinas Medical Center

4:00 – 5:00 pm

Didactic Presentation – Dallas Ballroom B

DS066 *Training Pathways for Educators: A Panel Discussion*

Jo Anna Leuck, Carolinas Medical Center, Charlotte, NC - Submitter, Presenter

Sean M. Fox, MD, Carolinas Medical Center, Charlotte, NC - Presenter

Samuel Clarke, UC Davis, Sacramento, CA - Presenter

Sorabh Khandelwal, Ohio State University, Columbus, OH - Presenter

4:00 – 6:30 pm

Oral Abstract: General Pediatrics – Houston Ballroom A

462. *Emergency Department Recidivism in Early Childhood is not a Risk Factor for Child Maltreatment.*

Emily MacNeill, MD, Carolinas Medical Center

☛ **Gallery of Excellence Nominee**

Published Resident Academic Projects

Matthew Leonard (2007)	Determination of the effect of in vitro time, temperature, and tourniquet use on whole blood venous point-of-care lactate concentrations
Patrick O'Malley (2007)	Emergency clinician-performed compression ultrasonography for deep venous thrombosis of the lower extremity
Kristen Saak (2007)	Performance of the Mortality in Emergency Department Sepsis score for predicting hospital mortality among patients with severe sepsis and septic shock.
Michael Marchick (2008)	One year mortality of patients treated with an emergency department based early goal directed therapy protocol for severe sepsis and septic shock: a before and after study 12-Lead ECG Findings of Pulmonary Hypertension Occur More Frequently in Emergency Department Patients With Pulmonary Embolism Than in Patients Without Pulmonary Embolism Prospective evaluation of right ventricular function and functional status 6 months after acute submassive pulmonary embolism: frequency of persistent or subsequent elevation in estimated pulmonary artery pressure The significance of non-sustained hypotension in emergency department patients with sepsis. Comparison of 8 biomarkers for prediction of right ventricular hypokinesis 6 months after submassive pulmonary embolism.
Danielle Turner-Lawrence (2008)	A feasibility study of the sensitivity of emergency physician Dysphagia screening in acute stroke patients.
John Garrett (2009)	Intravenous fat emulsion: a potential novel antidote. The effect of a quantitative resuscitation strategy on mortality in patients with sepsis: a meta-analysis
Edward Green (2009)	Indirect computed tomography venography: a report of vascular opacification.
Michael Puskarich (2010)	Sepsis-induced tissue hypoperfusion One year mortality of patients treated with an emergency department based early goal directed therapy protocol for severe sepsis and septic shock: a before and after study. Effect of glucose-insulin-potassium infusion on mortality in critical care settings: a systematic review and meta-analysis.
Patrick Burnside (2011)	Indirect computed tomography venography: a report of vascular opacification Systematic review of emergency physician-performed ultrasonography for lower-extremity deep vein thrombosis
Sanjay Iyer (2011)	Utilizing geographic information systems to identify clusters of severe sepsis patients presenting in the out of hospital environment
Melanie R Artho (2011)	The impact of emergency medical services on the care of severe sepsis
Alan Babcock	Comparison of serial qualitative and quantitative assessments of caval index and

(2011)	left ventricular systolic function during early fluid resuscitation of hypotensive emergency department patients
Brent Lorenzen (2011)	The significance of intermediate range blood lactate elevation in emergency department patients with infection: a systematic review
Andrew Albers (2011)	Whole blood lactate kinetics in patients undergoing quantitative resuscitation for septic shock
Paul Musey (2012)	Characteristics of STEMI patients who do not undergo PCI after prehospital cardiac catheterization lab activation
Daren Beam (2012)	Detection of lipopolysaccharide in patients presenting to the emergency department in septic shock
Zachary Kahler (2012)	Effect of weight based volume loading on the inferior vena cava in fasting subjects: A randomized, prospective double blinded trial
Eric Schenfeld arrest (2012)	Prehospital initiation of therapeutic hypothermia in adult patients after cardiac arrest does no improve time to target temperature
Abhiram Reddy (2012)	E-Point Septal Separation Compared to Fractional Shortening Measurements of Systolic Function in ED Patients: Prospective Randomized Study
Chrystan Skefos (2013)	A characterization of code STEMI activations by location type
Sam Montgomery (2013)	Single nucleotide polymorphisms (SNPs) in emergency department patients with repeated admissions for sepsis
Jaclyn Davis (2013)	Prognostic value of peripheral venous oxygen tension to predict an abnormal initial central venous oxygen saturation in emergency department patients undergoing quantitative resuscitation for septic shock
James Cao (2013)	Perceptions of Basic, Advanced, and Pediatric Life Support Training In a United States Medical School
Samuel Chang (2014)	Evaluation of 8.0-cm Needle at the Fourth Anterior Axillary Line for Needle Chest Decompression of Tension Pneumothorax
Mike Keller (2014)	Central Vascular Catheter Placement Evaluation using Saline Flush and Bedside Echocardiography
Devin Bustin (2014)	A Simplified and Structured Teaching Tool for the Evaluation and Management of Pulseless Electrical Activity
Jonathan Bronner (2014)	Asynchronous eLearning Module in Orthopedics is an Effective Method of Knowledge Acquisition for Emergency Medicine Residents
Katharine Modisett (2014)	Incidence and Outcomes of Adult Cardiac Arrest Associated with Toxic Exposure Treated with Therapeutic Hypothermia (ToxiCool)

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