

**Carolina's Emergency Medicine
Residency Program**





Carolina's Emergency Medicine Residency Program

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Carolinas Medical Center - Main



Emergency Department

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

- **Major Treatment** – High acuity medical and trauma patients. Level 1 Trauma Center. Stroke and Cardiovascular Centers of Excellence. 18 beds, open 24/7.
- **Diagnostics** – Medium acuity. 15 beds, open 24/7.
- **Ambulatory Emergency Center / Intake** – Lower acuity medical and ob-gyn, lacerations, abscesses, sprains, strains, simple fractures. 10 beds + 6 Intake Rooms, open 9a-1a.
- **Children’s Emergency Department** - Patients under 18. Level 1 Pediatric Trauma Center. Open 24/7.



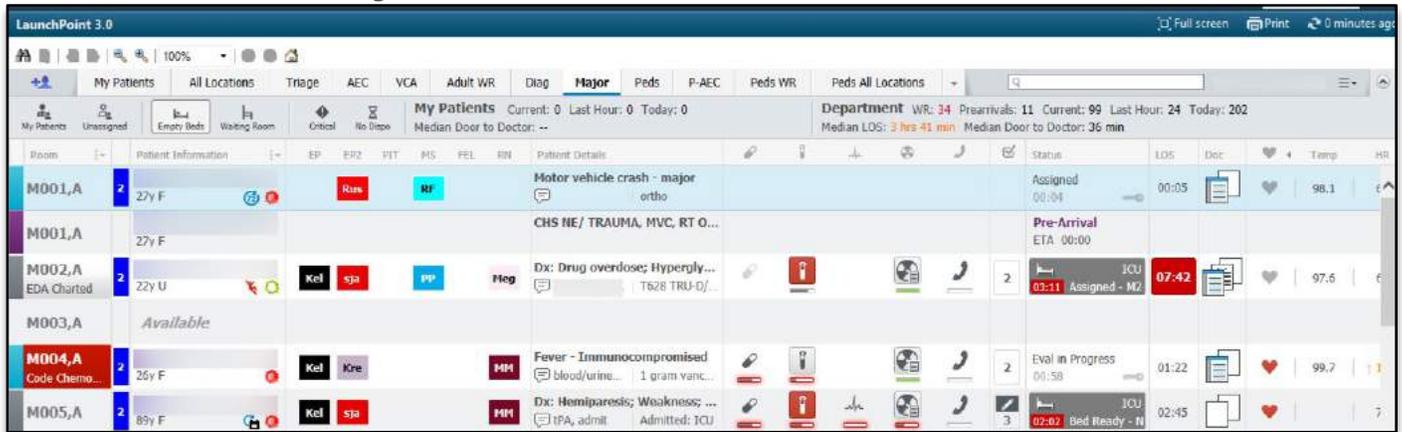
Physician Coverage

- Major Treatment:** Single attending 11pm-11am; Double attending coverage 11am-11pm. PGY3 from 7a-7a; PGY2 from 9a-5a; PGY1 from 11a-7a, PGY3 Teaching shift on Mon, Tues
- Diagnostics:** Single attending 24/7, PGY 2/3 24/7 overlapping 9 hour shifts, ACP 7a-3a, PGY1 9p-7a
- AEC:** Single attending during all hours of operation PGY1 11a-9p, 3p-1a; PGY3 Teaching shift 5p-1a
- Children's ED:** Single attending coverage 24/7; Additional attending in winter month 3p-11p PGY1: 9a-7p, 7p-5a,; PGY2/3 or Peds PGY2/3 7a-7a; ACP 11a-9p

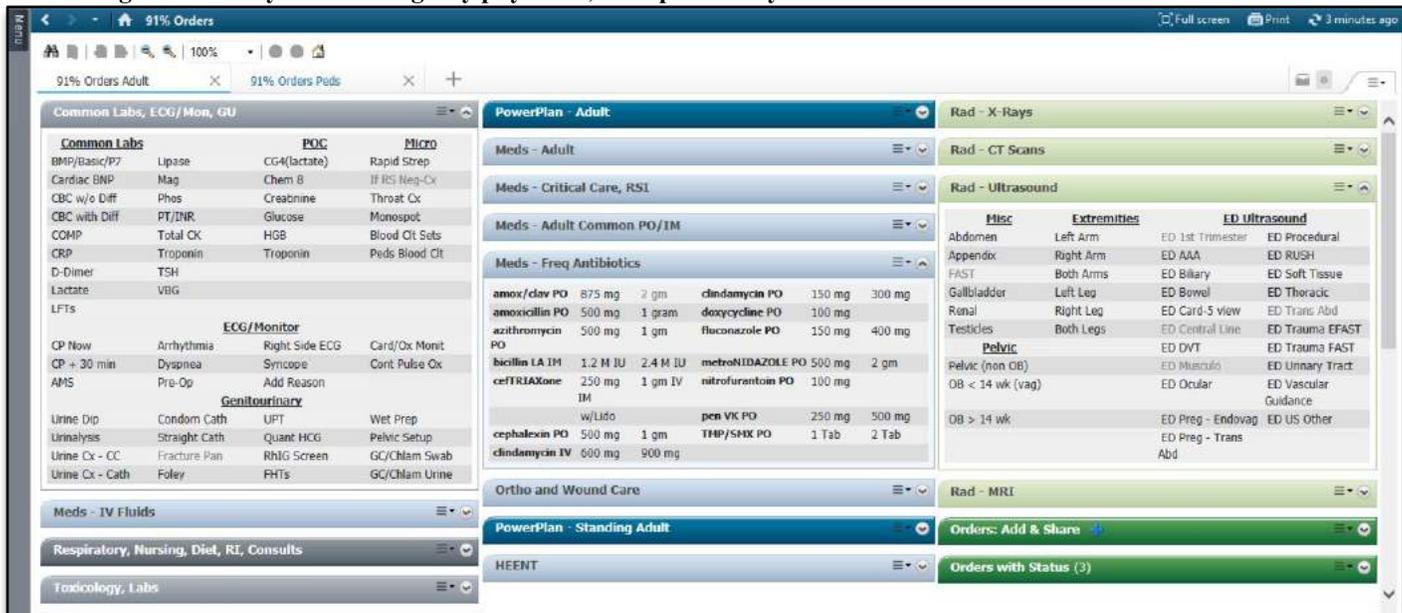
Ancillary Equipment:

- Radiology:** 24/7 interventional radiology, C-arm fluoroscopy in ED, Bedside US (7 machines)
- Point of Care Testing:** Electrolytes, troponin, hemoglobin, cardiac BNP, d-dimer, INR, lactate
- Electronic Medical Record:** Cerner patient tracking, Power Chart, dynamic documentation, Dragon voice recognition software.
- Ancillary Support:** Language interpreters, Techs, Respiratory Therapists, MSW, Patient Rep, Child Life, Fast Track Scheduler

Cerner FirstNet Patient Tracking Board



“91% Page” created by CMC emergency physician, incorporated by Cerner



Cerner Dynamic Documentation

Chief Complaint

pt c/o ETOH withdrawal. pt states she drinks every day up until 2 days ago. presents with tremors and would like to go to rehab.

Time Seen

Time Seen:
KENNING, BRITTANY MD 09/11/2017 05:38

History of Present Illness

This is a 24-year-old female with PMH of anxiety, ADHD who presents to the ED with alcohol withdrawal and desire to enter inpatient rehabilitation. Says that she has been drinking roughly 2 bottles of wine or a fifth of vodka nightly for the last few months, this started after she had built up a tolerance to alcohol and was needing to drink more and more without being able to stop. With the help of her parents she decided it was time to quit. Stopped drinking yesterday but last night was feeling extremely uncomfortable. Trying to drink some wine but threw it up, then decided to go to the ED this morning. At this time she is ready to enter an inpatient facility, parents are at bedside. She complains of tremulousness, stiffness in her neck and legs but denies any seizure activity.

Review of Systems

Gen.: Denies fever, chills, malaise
HEENT: Denies headache, changes in vision, nasal drainage, sore throat
Cardio: Denies chest pain, heart palpitations, edema
Resp: Denies SOB, cough, chest wall tenderness
GI: Denies abdominal pain, distention, constipation, diarrhea, melena
GU: Denies dysuria, hematuria
MSK: Denies muscle tenderness, weakness
Skin: Denies rash, easy bruising
Psych: Denies changes in mood, SI/HI. Desires to quit drinking for good. Is seen by a psychiatrist.

Physical Exam

Vitals & Measurements

T: 98.0 °F (Oral) HR: 101 (Peripheral) RR: 18 BP: 137/85 SpO2: 99%
HT: 170.18 cm WT: 60 kg BMI: 20.72

Gen.: Awake and alert, laying in bed, appears somnolent and uncomfortable
HEENT: Normocephalic, atraumatic, EOML, PERLL. No thyromegaly, no cervical lymphadenopathy.
Cardio: Tachycardic with regular rhythm, no murmurs, gallops, rubs. Normal peripheral perfusion. No edema.
Respiratory: Lungs clear to auscultation with no wheezes, rales, rhonchi. No chest wall tenderness.
GI: Soft, nontender, nondistended, normoactive bowel sounds.
GU: Deferred
MSK: No deformity, no muscle tenderness
Neuro: No focal deficits, CN II-XII intact
Psych: Alert and oriented x4, tremulous but no agitated mood, cooperative with exam.
Skin: Warm, dry, no rash on exposed areas.

Medical Decision Making

This is a 24-year-old female who has been drinking heavily daily for the last few months, now presenting in acute alcohol withdrawal and desiring inpatient rehabilitation. On presentation she was tachycardic and hypertensive, tremulous, but denies any seizure activity. Parents are supportive and at bedside. Initially received 1 dose IV Ativan 1 mg and IV Zofran. Social work was contacted, secured patient a bed at an inpatient facility.

Problem List/Past Medical History

Ongoing
ADHD (attention deficit hyperactivity disorder)
Anxiety
Encounter for immunization
Sebaceous cyst
STD exposure
Historical
Boil, axilla
Well adult exam

Procedure/Surgical History

Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; with screening by automated system and manual rescreening, under physician supervision. (05/01/2015). Incision and drainage of abscess (eg, carbuncle, suppurative hidradenitis, cutaneous or subcutaneous abscess, cyst, furuncle, or paronychia); complicated or multiple. (07/11/2011).

Medications

Inpatient
No active inpatient medications
Home
Adderall XR 20 mg oral capsule, extended release, 20 mg, 1 capsule, ORAL, qAM (every morning)
ALPRAZolam 0.5 mg oral tablet, 0.5 mg, 1 tablet, ORAL, TID (3 times a day), PRN
Beyaz oral tablet, 1 tablet, ORAL, Daily, 6 refills
Lexapro 10 mg oral tablet, 10 mg, 1 tablet, ORAL, Daily
naltrexone
Zofran ODT 4 mg oral tablet, disintegrating, 4 mg, 1 tablet, ORAL, TID (3 times a day)

Allergies

penicillin

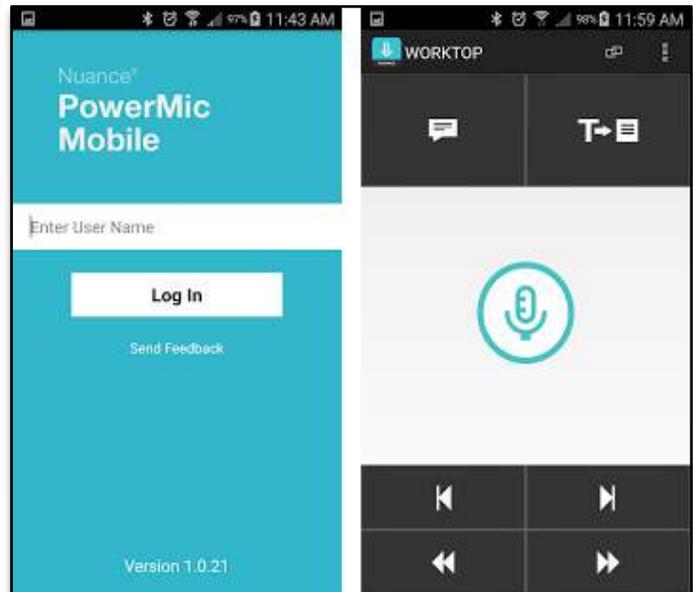
Social History

Alcohol
Current, Frequency: Occasionally.
Drug Abuse
Denies
TOBACCO
Never smoker, 0 Yrs Smoker. 0 Avg # Packs Per Day.

Family History

COPD (chronic obstructive pulmonary disease)..... Grandparent.
Heart disease..... Grandparent.

Lab Results



Scribes present in Major and Diagnostics, available to all EM residents after 3rd ED month.

Atrium Health

Second largest non-profit healthcare system in the country (based on **number of hospitals** in the system).

Includes 35 hospitals in North and South Carolina, urgent care centers, nursing homes, physician practices, home health agencies, radiation therapy facilities, rehabilitation facilities, behavioral health facilities, free standing emergency departments, comprising more than 7,600 licensed beds and approximately 60,000 employees.

Carolinas Medical Center – Main

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. www.levinechildrenshospital.org



High Patient Volume

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

High Patient Acuity

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

- 70% from Major Treatment
- 22% from Diagnostics
- 10% from Children’s ED

Unusually Diverse Payer Mix

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

Diverse Patient Mix

Medical 26% Surgical/Trauma 23% Pediatrics 27% Ob/Gyn 21% Psych/Tox 3%

Annual Trauma Registry

4600 trauma code activations (89% blunt, 9% penetrating, 2% burns / hangings / drownings. Sixth highest trauma volume amongst level one trauma centers in the US.

Prehospital Care / EMS

Ground EMS services within Mecklenburg county are provided by the Mecklenburg EMS Agency, or **MEDIC**. Faculty member Doug Swanson, MD serves as the agency's **Medical Director**. MEDIC tallied ~ 145,980 responses; 112,879 patient transports for fiscal year ending June 2017. Another EM faculty member, Eric Hawkins MD serves as the **Medical Director** for Union and Anson Counties' EMS.



Aeromedical services provided by **MedCenter Air**, assets owned and operated by Atrium.

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 EM provides on-line medical control for MEDIC and MedCenter Air ground and flight services.

PGY1: orientation, meet the providers, optional rides 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: **advanced EMS elective** can include experience with **Carolinas MED-1** (as available),

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 EM Orientation
4 months of EM
1 month of Orthopedics
1 month MICU
1 month Pediatrics
1 month Trauma
1 month OB/GYN
1 month Cardiology
1 month US / Anesthesia

Responsibilities

10, 10 hour shifts
20 – 21, 10 hour shifts
ED consults only
5 nights (9p-9a) / month
6 nights / month
9-10 nights (7p-9a) / month
5-7 nights / month
No Call
No Call

PGY 2

1 Presentation

Curriculum

6 months of EM
1 month Ped EM
1 month CCU
1 month MICU
1 month TICU
1 month Toxicology
1 month EMS

Responsibilities

19-20, 9-10 hour shifts
16, 8 hour shifts
No night calls, Leave by 8-9pm.
Night Call q 3-4th night.
Night Call q 3-4th night.
15 Home night calls, Tox Presentation
No Call

PGY 3

1 Presentation

Curriculum

8 months of EM
1 month PICU

3 months of Electives
- Weekend Shifts in ED
- 1 Saturday, 1 Sunday

Responsibilities

Weekdays: alternating Long Call (6a-7p) and Short Call (6a-1p)
- 10 (7p-9a) shifts / month
- 2 Full weekends OFF
Global Health, Ultrasound, Critical Care, Teaching/Academics,
Radiology, Administration, Infectious Disease, Research
Advanced Airway, Simulation, Cardiology, Community EM

ACLS, PALS and ATLS are offered during hospital wide intern orientation as well as other times throughout the year.

Resident Requirements

- Submit one manuscript of publishable quality before graduation.
- Take the yearly in-service exam in February.
- Take USMLE Step 3 during their intern year.



Didactics

Through the utilization of a block format, 4 hours of educational conferences provide optimal resident learning experience that reinforces clinical education, encourages life-long-learning, accentuates residents as educators, and assists residents in becoming masterful emergency medicine physicians. These educational conferences are patient centered, interactive, and innovative providing a rich variety of formats as well as traditional didactics.

General Topics

Core Content covered in interactive ways
M&M weekly
Toxicology conference
Cardiology conference
Bimonthly Ped EM Topics

Dedicated Symposia

Airway - twice yearly
Wound Care
How to Find a Job
Risk Management Written Board Review
Oral Board Review



Simulation

CMC simulation center is 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. The medical director is Mark Bullard, MD, one of the CMC EM Faculty.



Journal Club

Monthly at faculty member's home, designed to identify an evidence-based answer to a clinical vignette, 2-3 articles focusing on landmark EM papers

Global Health

Under the guidance of CMC EM faculty member Erin Noste, MD, the Global Health track helps residents prepare for **international elective rotations**, provides educational offerings to enhance knowledge on global health topics, and offers mentorship to those seeking a career in global health. Program structure includes bi-monthly meetings to discuss related topics, online case studies and simulation-based training. Current sites include Dar es Salaam in **Tanzania**, Mezam in **Cameroon**, Tauranga Hospital in **New Zealand**, and Buenos Aires in **Argentina**. An additional site is being developed in Escuintla, **Guatemala**.

Inclusion and Health Equity

Our program and the entire division of Medical Education is dedicated to promoting a diverse, inclusive and equitable environment for our learners and our patients. Specifically, EM has been working intentionally on evolving our department to reflect the population we are privileged to serve. In addition, to being leaders in our academic space in this area, we also extend outside the walls of our ED to connect with the **community of Charlotte** through a myriad of direct clinical care and educational opportunities all of which are open to our residents.

Some recent **Community Service Projects**:

- **Stop the Bleed Campaign**
- **CPR Education**
- **Shelter Health** for Homeless Women and Children

Resident Learning Portal

Carolinas Electronic Compendium (www.cmcedmasters.com) provides high-yield full text educational materials organized by rotation month, and a centralized location for block schedules, shift schedules, schedule requests, journal club articles, patient care protocols such as Code Stroke, Code Sepsis, Code Cool criteria. Resident-run blogs on Orthopedics, Cardiology, Toxicology and Pediatric Emergency Medicine, allow all to benefit from educational pearls encountered as residents rotate on these services.



Next Generation Education

While traditional means of disseminating education are valuable, understanding and being a part of the electronic communities is also critical for all EM providers. We are well versed and adept at authoring medical texts at Carolinas Medical Center, but we are also providers of **educational blogs and podcasts**. In addition to the content on cmcedmasters.com, our faculty and residents also actively produce high end content via multiple venues, including the **J. Lee Garvey Innovation Studio**. Resident developed, and hosted, content is published regularly published on www.EMGuideWire.com.

Fellowship Programs

Research
Toxicology
EMS
Ultrasound
Pediatric EM
Disaster Preparedness / Operational Medicine
Global Medicine

Michael Runyon, MD
Christine Murphy, MD
Douglas Swanson, MD
Tony Weekes, MD
Stacy Reynolds, MD
Dave Callaway, MD
Erin Noste, MD

Graduate Statistics

The residency program began in 1976.

As of June 30, 2018 Atrium has graduated **387 emergency physicians**.

Of these, 104 are in academic practice (~27%), and 283 are in private practice (~73%).

Over the past 5 years, approximately **26% academic practice; 74% private practice**.

ABEM Performance (past 5 years)

Written: **97.2% pass rate** vs. 91.2% nationally

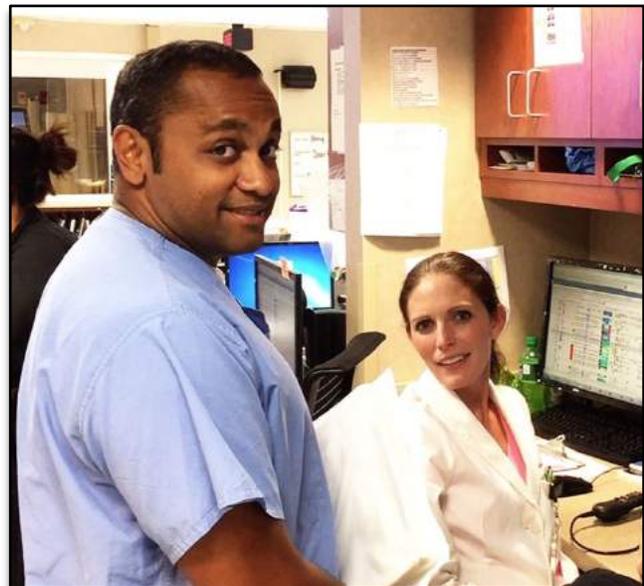
Oral: **98.6% pass rate** vs. 97.2% nationally

Faculty (biographies available online)

Of 41 faculty, 15 are dual boarded (2 Peds/EM, 3 Peds/PEM, 1 EM/PEM, 2 Critical Care/EM, 4 Tox/EM, 4 EMS/EM). Four more are fellowship trained in emergency ultrasound, one is fellowship trained in medical informatics and one is fellowship trained in research.

13 Carolinas Medical Center – Allen, Antoniazzi, Bullard, Craig, Hawkins, Heffner, Noste, Runyon, Salzman, Swanson, Tayal, Wares, West

1 East Carolina University – Scarboro
1 Denver Health Med Center - Pearson
3 Columbia University – Colucciello, Chaudoin, Weihmiller
1 Henry Ford Hospital – Asimos
1 George Washington/Georgetown University - Pelucio
1 Indianapolis – MacNeill
1 Penn State - Kerns
1 North Shore – Beuhler
1 Jacobi Medical Center - Weekes
2 Maryland – Fox, Fraga
2 Pittsburgh – Gibbs, Reynolds
1 Beth Israel – Callaway
1 Medical University of South Carolina – Lewis
1 Baystate Med Center/Tufts – Patel
2 Virginia Commonwealth – Murphy, Magill
1 Boston Medical Center – Griggs
1 CHOP – Puchalski
1 Cincinnati – VanderHave
1 Einstein Philadelphia - Kopec
1 Orlando Health – Dragoo
1 Mt. Sinai – Cox
1 Carilion/VA Tech – Manning
1 Chicago - Constantine
1 Morristown Memorial Hospital - Geib



"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
- **Brendan Furlong** – 1995, Chair at Georgetown
- **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** – 2001, Assistant Professor, Research Director, Northwestern University, Feinberg School of Medicine
- **Alan Jones** – 2002, Chairman, University of Mississippi, President, SAEM
- **Mike Runyon** – 2003, Director of Research, Carolinas Medical Center
- **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, Research Director, University of Florida
- **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, Research Director, University of Mississippi
- **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, Operational & Disaster Medicine Fellowship, CMC
- **Katharine Modisett** – 2014, Critical Care Fellowship Georgetown, DC
- **Peter McCahill** – 2014, Operational and Disaster Medicine Fellowship CMC
- **Jonathan Bronner** – 2014, Assistant Program Director at University of Kentucky
- **Revathi Jyothindran** – 2015, Administrative Fellow at Baylor Medical Center, Dallas TX
- **Lacey King** – 2015, Pediatric Emergency Medicine Fellow at Harbor UCLA, CA
- **Nicholas Sawyer** – 2016, faculty member UC Davis, CA
- **Ben Graboyes** – 2016, U/S Fellowship UT, Chattanooga
- **Kathryn West** – 2016, CMC Main Faculty Member
- **Abena Akomeah** – 2017, University of Maryland Academic Fellowship
- **Adeline Dozois** – 2018, CMC Global Medicine Fellowship
- **Matt Reaven** – 2018, Critical Care Fellowship, Emory, GA

Research and Scholarly Activity

Physical Plant:

Cannon Research Center

Opened in 1991

60,000 square ft. facility

Small and large animal investigations

Close proximity to ED facilitates processing of clinical samples



Departmental Personnel:

4 full-time research coordinators 3 full-time research interns

1 full-time research nurse

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

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

Andrew Asimos, MD – Stroke, seizures, and other neurological emergencies

Stacy Reynolds, MD – Diagnostic imaging of trauma patients

Emily MacNeill, MD – Pediatric Trauma

Tony Weekes, MD – Echocardiography, pulmonary embolism, emergency ultrasound

Chad Scarboro, MD – Pediatric head injury and diagnostic imaging

Mark Bullard, MD – Medical simulation

Christine Murphy, MD - Alternative therapies for calcium channel blocker toxicity,
Current trends in recreational drug abuse

Doug Swanson, MD – Prehospital care

Erin Noste, MD – Disaster medicine, EMS and global emergency medicine

Russ Kerns, MD – Cardiovascular toxins, snake envenomation and antidotal therapy

Vivek Tayal, MD – Ultrasound, Airway, Health Policy

Margaret Lewis, MD – Ultrasound education and applications

David Callaway, MD – Trauma, disaster medicine, tactical medicine

Kathryn Kopec, DO – Drugs of abuse, envenomation, global toxicology

Chris Griggs, MD – Opioid abuse, pain management in the ED, health policy

Cathy Wares, MD - Neuroprognostication in post-cardiac arrest and simulation education

John Manning, MD – Medical Informatics

CMC at SAEM 2018 – Schedule

Sean Fox, MD presents in the “Breakout Session on Pediatric Emergency Medicine Education and Scholarship” at the 2018 Academic Emergency Medicine Consensus Conference: Aligning the Pediatric Emergency Medicine Research Agenda to Reduce Health Outcome Gaps

Simone Lawson, MD presents “Pediatric Pain Assessment in the Emergency Department: Determining Correlation Between Patients and Their Caregivers When Using the Wong Baker FACES ® and the Faces Pain Scale-Revised” (co-authors: Melanie Hogg, BS, CCRA; Charity G. Moore, PhD, MSPH; William E. Anderson, MS; Michael Runyon, MD, MPH; and Stacy L. Reynolds, MD)

Matthew Reaven, MD presents “Factors Associated With Early Mortality in Septic Shock” (coauthors: Megan Templin, MS; Alan Heffner, MD)

Emily MacNeill, MD presents in the Didactic session “Mentoring: Communicating Across Differences”

Stephen Pecevich, MD presents “Comparing Anticoagulation Alone vs Thrombolysis in Submassive and Massive Pulmonary Embolism” (co-authors: Daniel Troha, MD; Melanie Hogg, BS, CCRA; Pavel Dudin, MD; Judith Keller, RN; Michael S. Runyon, MD, MPH)

Adeline Dozois, MD presents “Comparison of Injury Severity and Case Fatality of Injured Patients Based on Gender in Tanzania to the United States” (co-authors: Juma Mfinanga, MD; Michael S. Runyon, MD, MPH; Hendry R. Sawe, MD; Paulina Nkondora, MD; Victor Mwafongo, MD; Jacquelyn M. Simonis, MD; Dean W. Tanner, MD; Erin E. Noste, MD)

Dean Tanner, MD presents “Clinical Characteristics and Functional Outcomes of Road Traffic Injury Patients Presenting to a Tanzanian Emergency Department” (co-authors: Hendry R. Sawe, MD; Michael S. Runyon, MD, MPH; Erin E. Noste, MD; Paulina Nkondora, MD; Victor Mwafongo, MD; Jacquelyn M. Simonis, MD; Adeline Dozois, MD; Juma Mfinanga, MD)

Ana Romero-Vázquez, BS presents “Racial and Ethnic Disparities in In-Hospital Cardiac Arrest Outcomes” (co-authors: Nicole Bensen, BS; Melanie Hogg, CCRA; Kelly L. Goonan, MPH, CPHQ; Ben Covell, MD; Anthony Weekes, MD; Kathi Kraft, RN; Michael S. Runyon, MD, MPH; David A. Pearson, MD, MS, MBA)

Kathryn Lupez, MD presents “Baseline Predictors of Pulmonary Embolism Quality of Life Outcomes at One Month” (co-authors: Jaron Raper, MD; Carly A. Cox, MD; Pilar Tochiki; Michael Runyon, MD, MPH; Anthony J Weekes, MD)

Abena Akomeah, MD presents “Emergency Medicine Residency Training in Africa: Overview of Curriculum: (co-authors: Hendry Sawe, MD; Michael Runyon, MD, MPH; Erin Noste, MD; Juma Mfinanga, MD)

SonoGames Featuring the pride of the CMC EM Ultrasound Division: “The FAST and the Furious: Move it or Lube it” starring **Drs. Kitchen, Trigonis, and Lupez.**

Daniel Troha, MD presents “Code PE: A Multidisciplinary, Multicenter Program for the Treatment of Severe Pulmonary Embolism” (co-authors: Glen Fandetti, MD; Michael Green, MD; Michael S. Runyon, MD, MPH; Melanie Hogg, CCRA)

Jacquelyn M. Simonis, MD presents “Comparison of Injury Severity and Case Fatality of Injured Pediatric Patients in Tanzania to the United States” (co-authors Erin E. Noste, MD; Juma Mfinanga, MD; Michael S. Runyon, MD, MPH; Paulina Nkondora, MD; Victor Mwafongo, MD; Dean W. Tanner, MD; Adeline Dozois, MD; Hendry R. Sawe, MD)

Erin E. Noste, MD presents “Comparison of Injury Severity and Case Fatality of Injured Patients in Tanzania to the United States” (co-authors: Hendry R. Sawe, MD; Juma Mfinanga, MD; Michael S. Runyon, MD, MPH; Paulina Nkondora, MD; Victor Mwafongo, MD; Dean W. Tanner, MD; Adeline Dozois, MD; Jacquelyn M. Simonis, MD)

David A. Pearson, MD, MBA presents “Impact of Team-Focused CPR Implemented in the ED on Neurological Outcomes” (co-authors: Blake Johnson, MD; Ben Covell, MD; Mike Przybysz, MD; Nicole Bensen; Ana Romero; Cate Lounsbury, MD; Kathy Kraft; Kamala Swayampakala; Katherine Barnard, RN; Jaime Wilcox, RN; Brandee Khoshnevis, RN; Michael S. Runyon, MD, MPH; Anthony Weekes, MD)

Simone L. Lawson, MD presents “Pediatric Pain Assessment in the Emergency Department: A Comparison of the Wong Baker FACES ® and the Faces Pain Scale-Revised (co-authors: Melanie Hogg, BS, CCRA; Charity G. Moore, PhD, MSPH; William E. Anderson, MS; Michael Runyon, MD; and Stacy L. Reynolds, MD)

Ben Covell, MD presents “Degradation in Outcomes after Implementation of Novel Inpatient Resuscitative Pathway” (co-authors: Blake Johnson, MD; Mike Przybysz, MD; Nicole Bensen, BS; Ana Romero, BS; Kathi Kraft, RN; Kamala Swayampakala, PhD; Michael S. Runyon, MD; Cathy Wares, MD; Anthony Weekes, MD; David Pearson, MD, MBA)

Stephen C. Jackson, MD presents “Hyperdense Basilar Artery Sign and Radiodensity on Non-Enhanced Computed Tomography for the Diagnosis of Basilar Artery Occlusion” (co-authors: D. Richard Sassano, MS; Michael S. Runyon, MD, MPH; Enayetur Raheem, PhD; Jonathan D. Clemente, MD; Jeremy B. Rhoten; Sam J. Singh; Andrew W. Asimos, MD)

Aaren Hunt, MD presents “Feasibility of a Continuous Sternal ECG Patch Monitor, Carnation Ambulatory Monitor (CAM), in the Emergency Department” (co-authors: Daniella Fatti, RN; Marcia Messer, RN; Natalie Bullock, RN; Michael Runyon, MD, MPH; David Pearson, MD, MBA)

Published Resident Academic Projects

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
(2011)

Comparison of serial qualitative and quantitative assessments of caval index and 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
(2012)

Prehospital initiation of therapeutic hypothermia in adult patients after cardiac arrest does not 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

Jaelyn 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)
Bryant Allen (2015)	Association of inflammatory and endothelial cell activation biomarkers with acute kidney injury after sepsis
David Kiefer (2015)	Prospective evaluation of ultrasound-guided short catheter placement in internal jugular veins of difficult venous access patients.
Karina Reyner (2015)	Urinary obstruction is an important complicating factor in patients with septic shock due to urinary infection.
Daniel Troha (2015)	Diagnostic Accuracy of Right Ventricular Dysfunction Markers in Normotensive Emergency Department Patients With Acute Pulmonary Embolism
Jessica Goldonowicz (2016)	The electrocardiogram of chest and limb lead reversal
Angela Johnson (2016)	Interobserver and Intraobserver Agreement on Qualitative Assessments of Right Ventricular Dysfunction With Echocardiography in Patients With Pulmonary Embolism
Joshua Robertson (2016)	Law enforcement-applied tourniquets: a case series of life-saving interventions.
Blake Johnson (2017)	Team-Focused CPR (TFCPR): Implementation of a Streamlined Cardiac Arrest Resuscitation Protocol to Improve In-Hospital CPR Quality and Outcomes
Andrew Puciaty (2017)	Case Report: Life Saving Application of Commercial Tourniquet in Pediatric Extremity Hemorrhage.

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2018-2019 E-mail Address List

PGY 1

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*Kathryn Lupez
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Cornelius Powell
Kyle Roedersheimer
*Russell Trigonis
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*Christina Zauner

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