

# Benjamin Smith, M.D.

Department of Emergency Medicine, University of North Carolina at Chapel Hill  
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## Training

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<b>Emergency Medical Services Fellowship</b> University of North Carolina at Chapel Hill Chapel Hill, NC	2017 - 2018
<b>Emergency Medicine Residency</b> University of Nevada School of Medicine Las Vegas, NV	2014 - 2017
<b>Doctor of Medicine</b> University of North Carolina at Chapel Hill Chapel Hill, NC	2010 - 2014
<b>Bachelor of Science, Applied Science, Biomedical Engineering Track with Highest Honors and Highest Distinction</b> University of North Carolina at Chapel Hill Chapel Hill, NC	2005 - 2009

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## Administrative and Educational Positions

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<b>Clinical Assistant Professor</b> Department of Emergency Medicine, Division of Emergency Medical Services University of North Carolina at Chapel Hill School of Medicine	2018 - Present
<b>Medical Director, Carolina Air Care</b> Assistant Medical Director	2021 - Present 2018 - 2021
<b>Medical Director</b> AirLife NC	2019 - Present
<b>Medical Director</b> UNC Hospitals Emergency Management	2018 - Present
<b>UNC Medical Center Committee Memberships</b> Highly Communicable Disease Response Steering Committee Emergency Management Oversight Committee – Co-Chair Clinical Preparedness Subcommittee	2018 – Present 2017 – Present 2017 – Present
<b>Assistant Medical Director</b> Orange County EMS	2017 - Present
<b>Assistant Medical Director</b> Lake Mead National Recreation Area, U.S. National Park Service	2016 - 2017

<b>EMS and Prehospital Care Coordinator</b>	2016 - 2017
EMS Committee Member	2014 - 2017
University of Nevada School of Medicine, Department of Emergency Medicine - Las Vegas, NV	

<b>South Orange Rescue Squad</b>	
Board Member	2018 - Present
Operations Captain - Technical Rescue Team	2013 - 2014
Training Captain - Technical Rescue Team	2010 - 2012
Training Lieutenant - Technical Rescue Team	2009

<b>Chief Advocate</b>	2011 - 2012
University of North Carolina at Chapel Hill School of Medicine	

<b>EMS Instructor</b> , Durham Tech. Community College	2009 - 2010, 2014, 2017 - Present
Durham, NC	

<b>Teaching Assistant</b> , University of North Carolina at Chapel Hill	
Department of Biomedical Engineering	2009 - 2010
Department of Physics and Astronomy	2007 - 2009
Chapel Hill, NC	

<b>Research Assistant</b> , University of North Carolina at Chapel Hill	
Department of Physics and Astronomy	2006
Chapel Hill, NC	

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### Clinical Experience

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<b>Attending Physician</b> , UNC Medical Center, Department of Emergency Medicine	2017 – Present
Chapel Hill, NC	

<b>Attending Physician</b> , North Carolina State Highway Patrol Medical Office	2017 – Present
Garner, NC	

<b>Resident Physician</b> ,	2014 – 2017
University Medical Center of Southern Nevada, Las Vegas, NV	
Mike O'Callaghan Military Medical Center, Nellis Air Force Base, NV	

<b>Event Physician</b> , Burning Man Festival	2014 - 2018
Black Rock City, NV	

<b>Event Physician</b> , Electric Daisy Carnival	2016, 2017
Las Vegas, NV	

<b>Event Physician</b> , Rock n' Roll Las Vegas Marathon and Half Marathon	2015, 2016
Las Vegas, NV	

<b>Event Physician</b> , NASCAR Sprint Cup Weekend	2015, 2016
Las Vegas, NV	

<b>Event Physician</b> , World's Toughest Mudder Competition	2014 - 2016
Henderson, NV	

**Student Health Action Coalition**  
Chapel Hill, NC

2011 - 2014

**South Orange Rescue Squad**

EMT-Basic

2008 - 2014

CPR Instructor

2008 - 2014

Technical Rescue Technician

2007 - 2014, 2017 - Present

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**Presentations and Workshops**

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*National*

**“Point of Care Ultrasound: Small Probe, Big Clinical Impact”**

October 2022

Air Medical Transport Conference, Tampa, FL

**“Guiding Resuscitation with Point of Care Ultrasound”**

November 2019

Air Medical Transport Conference, Atlanta, GA

**“Ultrasound in the Field: Applications, Utility, and Feasibility”**

November 2018

EMS World Expo, Nashville, TN

**“The Art of Airway”**

March 2018

National Collegiate EMS Foundation, Philadelphia, PA

**“MDMA, Hyperthermia, Dantrolene, and You”**

February 2017

Mass Gathering Medicine Summit, Las Vegas, NV

**“Party Drugs”**

September 2015

EMS World Expo, Las Vegas, NV

**“MCI for the NPS”**

October 2015

Annual meeting of the Association of National Park Rangers, Black Mountain, NC

**“Bites and Stings and Nasty Things”**

October 2015

Annual meeting of the Association of National Park Rangers, Black Mountain, NC

*Regional & Local*

May Day Trauma Conference

**Radiation Injury**

5/6/2022

**Prehospital Trauma Care: Past, Present, and Future**

5/1/2019

**Hurricane Field Response Panel**

5/2/2019

UNC Emergency Medicine Faculty Education

**COVID-19 Update**

February 2020

**Disaster Response**

February 2018

UNC Trauma Surgery Faculty Education

**Radiation Injury**

12/7/2021

## UNC Emergency Medicine Resident Education

**Mass Casualty Management and Functional Exercise**

August 2022

**Intro to HEMS**

12/2019

**Radiation Injury**

11/ 2019, 11/2021

**Altitude Physiology**

November 2019

**MCI Response in the Emergency Department**

February 2019

**Disaster Response Lecture and Tabletop Exercise**

January 2018

**Event Medicine**

December 2017

## UNC Emergency Medical Services Fellow Education

**Altitude Physiology**

2/2019, 1/2020, 8/2020, 8/2021, 8/2022

**Intro to Air Medicine**

11/2018, 1/2020, 8/2020, 8/2021, 8/2022

**Technology in EMS**

March 2018

## UNC Pediatric ICU Fellow Education

**Altitude Physiology**

April 2023

## Carolina Air Care Continuing Education

**Case Review – Paroxysmal SVT and Ultrasound Review**

May 2023

**Case Review – Crush Syndrome, Penetrating Chest Trauma**

March 2023

**Case Review – Physiologically Difficult Airway, Bleeding Track, Chest Injury**

January 2023

**Case Review – Septic Shock and Vasopressor Therapy**

November 2022

**Case Review – Precipitous Deliver and Pulmonary Hypertension**

September 2022

**Case Review – Vent Management for Severe ARDS**

June 2022

**Case Review – Cricothyrotomy, Difficult Airway, Rib Fractures**

April 2022

**Case Review – Slow V-Tach**

January 2022

**Case Review – Subtle STEMIs and eFAST**

December 2021

**Case Review – Hydrocarbon Toxicity and Beta Blocker Overdose**

September 2021

**Case Review – Unstable Angina converted to STEMI and eFAST**

August 2021

**Case Review – Airway Confirmation and Error Avoidance**

June 2021

**Case Review – Head Injury and Elevated ICP Management**

April 2021

**Case Review – POCUS and Syncope EKGs**

January 2021

**Case Review – Critical Airway Decisions**

November 2020

**Case Review – Heat Stroke and DIC**

August 2020

**eFAST Exam – Didactics and skills**

July – Sept 2020

**Case Review – Trach Emergencies**

July 2020

**Case Review – COVID, ARDS, and proning**

May 2020

**Case Review – APRV, POCUS to guide fluids**

February 2019

**Case Review – C-Spine Injury, EKG Review, Penetrating Neck Trauma**

November 2019

**Case Review – Sepsis, Diagnostics, Vasculitis**

August 2019

**Post Cardiac Arrest Care**

February 2019

**Case Review – Atrial Fibrillation, Airway Burns**

December 2018

**Endocrine Emergencies**

August 2018

**Case Review – Rhabdomyolysis**

July 2018

## Air Methods Training – Northeast Region

**Simulation Lab – Instructor**

September 2021

– High Risk OB, pediatric airway management, needle decompression

UNC School of Medicine <i>Medical Student Disaster/MCI Elective</i> <b>Hospital Emergency Preparedness</b>	May 2020
<i>Physician Assistant Program</i> <b>Disaster Preparedness</b>	October 2021
Durham Tech. Community College <b>Intro to Ventilator Management</b> – USAF Critical Care Paramedic Course	November 2020
Wake County EMS Continuing Education <b>Pain Management</b> <b>Pediatric Cardiac Emergencies</b>	May/June 2018 December 2017
Orange County EMS Continuing Education <b>Third Trimester Pregnancy and Post-Partum Emergencies</b> <b>Infectious Disease for EMS</b>	January 2018 August 2017
Lake Mead Parkmedic Refresher Course <b>Overdose and Psychiatric Emergencies for Park Rangers</b>	November 2016
<b>Poisoning, Allergic Reaction, Diabetic, and Pharmacology Review</b>	November 2015
JTM Training Group, SOF MED Course, Las Vegas, NV <b>“Prehospital Ventilator Management”</b> <b>“Pharmacology Review”</b>	October 2015 October 2015
Las Vegas Fire and Rescue, Las Vegas, NV <b>Airway Cadaver Lab</b>	October 2015
<i>University of Nevada School of Medicine, Emergency Medicine Grand Rounds</i>	
<b>Emergency Medicine Case Conference</b>	May 2017
<b>EKG Rounds - Syncope and Review</b>	January 2017
<b>EKG Rounds - Ischemia</b>	September 2016
<b>“Evidence Based Guide to Intracranial Hemorrhage”</b>	August 2016
<b>EKG Rounds</b>	June 2016
<b>EMS / Emergency Medicine / Critical Care Case Conference</b>	April 2016
<b>“Genitourinary Trauma”</b>	March 2016
<b>Radiology Rounds - Head CT</b>	October 2015
<b>CPC Case Presentation</b>	September 2015
<b>“Mobile Integrated Healthcare and Community Paramedicine”</b>	July 2015
<b>“Assessing Dehydration and Rehydration Strategies in Adults”</b>	May 2015
<b>Emergency Medicine Case Conference</b>	May 2015
<b>CPC Case Presentation</b>	October 2014

*Selected Exercises*

<b>UNC Hospitals</b>	
Pediatric MCI Functional Exercise	May 2023
Pediatric MCI Tabletop Exercise	April 2023
UNC Hillsborough Hospital Active Shooter Full Scale Drill	December 2021

Scarce Resource Allocation Tabletop Exercise	January 2021
ED Trauma Surge During COVID Tabletop Exercise	June 2020
Dialysis Emergency Tabletop Exercise	August 2018
Incident Management Team Tabletop Exercise	July 2018
Full Scale MCI Exercise	April 2018
<b>RITN Tabletop Exercise</b>	August 2018
UNC Medical Center, Radiation Injury Treatment Network	
<b>Active Shooter Exercise</b>	April - June 2018
Orange County EMS, UNC Police, Chapel Hill Fire Department	
<b>Integrated Capstone Event</b> , Hospital Incident Commander	April 2018
Center for Domestic Preparedness, Anniston, AL	
<b>RDU MCI Exercise</b>	March 2018
Raleigh-Durham Airport, RDU Fire, Wake County EMS, Durham County EMS	
<b>Active Shooter Exercise</b>	October 2017
Durham County EMS, Durham Police, Durham Fire Department	
<b>Mass Casualty Exercise</b>	November 2016
University Medical Center, Las Vegas, NV	

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### Research, Abstracts, and Presentations

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- Smith BA**, Padron C, Martin-Gill C. Neurologic Disorders. Chapter in: *Advanced Medical Life Support*, 4<sup>th</sup> Ed. Currently in copy-edit.
- Smith BA**. Trauma Stabilizing Procedures. Chapter in: *Emergency Medical Services: Clinical Practice and Systems Oversight*, 3<sup>rd</sup> Ed. Wiley. 2021.
- Grover JM, **Smith BA**, Williams JG, et. al. Novel use of telemedicine by hurricane evacuation shelters. *Prehosp Emerg Care*. 2020 Mar 3:1-9.
- Smith BA**, Michalik M. Hyperthermia: "I'm Hot Blooded; Check It and See." Chapter in: *Case Studies in Emergency Medicine: LEARNing Rounds: Learn, Evaluate, Adopt, Right Now*. Springer. 2020.
- Smith BA**. Don't let the opioid furor cloud your judgement. *EMS World*. 2018 July;(47)7:8.
- Smith BA**, Bledsoe BE, Nicolazzo P. General management of trauma in the wilderness. Chapter 21 in: Hawkins S. *Wilderness EMS*. Philadelphia: Wolters Kluwer Health; 2018.
- Smith BA**, Carrison D, Carlo P, Rubel N. Aggressive cooling prior to transport from a large mass gathering event results in favorable neurologic outcomes for drug-induced hyperthermia. [ Poster presentation at NAEMSP annual meeting ] 2017.
- Smith BA**. Feasibility of light emitting diodes as an excitation source for fluorescent capsule endoscopy. Poster presentation at: University of North Carolina School of Medicine Student Research Day, Chapel Hill, NC. (2012).

Dennis RG, **Smith B**, et. al. Bioreactors for guiding muscle tissue growth and development. *Adv Biochem Eng Biotechnol*. 2009;112:39-79.

**Smith BA**. A new rapid manufactured device for mechanical loading and testing of engineered tissue scaffolds in culture.

Oral presentation at: First Alexandria International Tissue Engineering Congress, Alexandria, Egypt. (2009).

**Smith BA**. Development of modular bioreactor system for study of engineered tissue in vitro. Senior honors thesis at the University of North Carolina at Chapel Hill. May 2009.

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### Honors and Awards

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**Save of the Month** 2015  
University of Nevada School of Medicine, Emergency Medicine Residency

**Higgins and Langley Memorial Award** 2013  
National Association for Search and Rescue (NASAR)

**Medal of Valor** 2012  
Town of Apex, NC

**Flexcell Award** 2009  
University of North Carolina at Chapel Hill, Department of Biomedical Engineering

**Presidential Volunteer Service Award - Gold Level** 2008  
The President's Council on Service and Civic Participation

#### *Scholarships*

Brown Medical Scholarship	2013 - 2014
Joyner Medical Scholarship	2012 - 2013
Inducted into John B. Graham Research Society	2012
Sarah Kenan Medical Scholarship	2011 - 2012
Isaac Manning Medical Scholarship	2010 - 2011
Parenteral Drug Association, SE Chapter Scholarship	2008
Progress Energy Merit Based Scholarship	2005 - 2009

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### Professional Memberships

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Air Medical Physician Association (AMPA)	2018 - Present
National Association of EMS Physicians (NAEMSP)	2016 - Present
American College of Emergency Physicians (ACEP)	2013 - Present
American Academy of Emergency Medicine (AAEM)	2014 - 2017
Emergency Medicine Resident Association (EMRA)	2013 - 2017
Wilderness Medical Society (WMS)	2013 - 2014
North Carolina Association of Rescue and EMS (NCAREMS)	2007 – 2014, 2017 - Present

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**Physician Licensing**

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North Carolina, Full Medical License	Active
South Carolina, Full Medical License	Active
Nevada, Full Medical License	Expired

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**Other Licenses and Certifications**

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	<i>American Board of Emergency Medicine</i>	
Emergency Medicine		Board Certified: June 2018
Emergency Medical Services		Board Certified: October 2019

*Other Coursework and Certifications*

AMPA– Medical Director Core Curriculum  
NAEMSP – National EMS Medical Directors Course and Practicum  
Advanced Trauma Life Support (ATLS) - Instructor  
Advanced Cardiac Life Support (ACLS)  
Pediatric Advanced Life Support (PALS)  
Basic Life Support (BLS)

“Healthcare Leadership for Mass Casualty Incidents” - Center for Domestic Preparedness  
“Integrated Capstone Event” – Center for Domestic Preparedness  
SARTECH-II  
Swiftwater Rescue Technician - Advanced  
FEMA IS-00100, IS-00200, IS-00700, IS-00800b