

Diane Lee Miller, MD, MS, FACEP, FAEMS

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Education

Wake Technical Community College Basic Law Enforcement Certification	2017
University of North Carolina-Chapel Hill Fellowship, Emergency Medical Services	2014-2015
University of North Carolina-Chapel Hill Residency, Emergency Medicine	2011-2014
Tufts University School of Medicine M.D.	2007-2011
University of Maryland-College Park M.S., Biology	2004-2007
University of Michigan-Ann Arbor B.S., Anthropology-Zoology	1998-2002
American University-Washington, D.C. Washington Semester Program, Journalism	2001

Professional Experience

North Carolina State Highway Patrol Medical Director Manage operations of the medical office including trooper and applicant physicals, sick call, bloodborne pathogen exposure evaluations, special occurrence testing, fit for duty evaluations, and critical incident counseling. Provide oversight of approximately 160 providers of a basic life support EMS system including protocol development, curriculum development, QI/QA, and online medical control. Created and managed the agency COVID-19 response plan, including protocol development, direct patient care, patient and family support, and education. Also served as a COVID-19 liaison for the agency with the North Carolina Department of Public Safety and North Carolina State Lab.	May 2017-Present
North Carolina State Bureau of Investigation Medical Director, Tactical Physician	May 2017-Present
University Of North Carolina EMS Fellowship Program Program Evaluation Committee Chair Core Faculty	July 2016-Present

University of North Carolina School of Medicine, Department of Emergency Medicine Clinical Assistant Professor	July 2015-Present
North Carolina State Highway Patrol Deputy Medical Director	July 2015-April 2017
Durham Technical Community College Emergency Medical Services Program Medical Director	July 2015- June 2021
Caswell County Emergency Services Medical Director	September 2015-September 2017
North Carolina Alcohol Law Enforcement Reserve Special Agent Medical Director Tactical Physician	May 2014-Present
North Carolina Law Enforcement Assistance Program Clinician and Peer Support Team Member	November 2014-Present
North Carolina State Highway Patrol Members Assistance Team	November 2014-Present
Orange County Emergency Services Assistant Medical Director	July 2014-Present
University of Maryland-College Park, Department of Neuroscience Faculty Research Assistant, Dr. Arthur N. Popper Aquatic Bioacoustics Laboratory	December 2003-August 2007
University of Maryland-College Park, Department of Biology Graduate Teaching Assistant	December 2003-August 2007
Children's National Medical Center Instructor, Emergency Medical Services Education Program	May 2003-September 2004
Children's National Medical Center, Center for Prehospital Pediatrics Research Assistant, PECARN Grant	January 2003-September 2004

Licensure/Certification

Board Certified in Emergency Medical Services	2017
Board Certified in Emergency Medicine	2015
North Carolina Medical License	2013

Honors

Fellow, National Associated of EMS Physicians	2023
Meritorious Service Award, North Carolina State Highway Patrol	2021
University of North Carolina Academy of Educators	2021
Fellow, American College of Emergency Physicians	2017
Samaritan Award, North Carolina State Highway Patrol	2015
Humanitarian Award, Department of Emergency Medicine, University of North Carolina	2013
Scholars Award, Massachusetts Medical Society	2011
Service Award, MassPRO	2009
Fellowship National Finalist, Dolores Zohrab Liebmann Fund	2009
Secretary's Citation, Department of Transportation, State of Maryland	2005
University Honors, University of Michigan	2002
Order of Omega National Honor Society, University of Michigan	2002
Delta Epsilon Iota National Honor Society, Epsilon Scholarship, University of Michigan	2002

Scholarship

Book Editor

1. Section Editor, Emergency Medical Services Operations, Prehospital Emergency Medicine Care Secrets, R.P. Olympia and J.S. Lubin. 2021.

Book Chapters

1. **D.L. Miller** and K. Serrano. (2021) Sexual Assaults, Emergency Medical Services: Clinical Practice and Systems Oversight, D. Cone, J.H. Brice, T.D. Delbridge, J.B. Myers, 3rd Ed.

Peer Reviewed Publications

1. W.P. Bozeman, G.M. Vilke, C. Hall, D.A. Klinger, D.L. Ross, C. Bennell, N.P. Petit, **D.L. Miller**, K.K. Ford, B. Hiestand, J.P. Stopyra. (2022) Safety of Vascular Neck Restraint Applied by Law Enforcement Officers. J Forensic and Legal Medicine, 92:e-pub 2022 Oct 9.
2. M.W. Bachman, J.B. Meyers, J.G. Williams, **D.L. Miller**, B. Currie, M. Lyons, J. Zalkin, J. Register-Mihalik, H. Tibbio-Valeriotte, V.J. De Maio, A.W. Jones, A.K. Kronhaus. (2015) Retrospective validation of a protocol to limit unnecessary transport of assisted-living residents who fall. Prehosp Emerg Care, 19(1):68-78.
3. C. Conrad, Y. Konuk, P. Werner, C.G. Cao, A. Warshaw, D. Rattner, L Stangenberg, H Ott, D.B. Jones, **D.L. Miller**, D. Gee. (2012). A Quality Improvement Study on Avoidable Stressors and Countermeasures Affecting Surgical Motor Performance and Learning. Annals Surg. 255:6, 1190-1194.
4. P.E. Gordon, **D.L. Miller**, C. Conrad. (2010) Image of the Month: Cholecystocutaneous Fistula (Jean-Lois Petit's Phlegmon). Arch Surg. 146:4, 487-488.
5. A.S. Kane, J. Song, M.B. Halvorsen, **D.L. Miller**, L.E. Wysocki, J.D. Salierno, A.N. Popper. (2010) Exposure of fish to high intensity mid- and low-frequency sonar does not induce immediate pathology in auditory or non-auditory tissues. J Fish Biol. 76, 1825-1840.
6. C. Conrad, C. Kaiser, **D.L. Miller**, K-W Jauch, R. Huss. (2011) Spindle Cell Metaplastic Breast Carcinoma with Leiomyoid Differentiation. Breast Care. 6, 230-233.

7. A.N. Popper, M.B. Halvorsen, A. Kane, **D.L. Miller**, M.E. Smith, J. Song, P. Stein, L.E. Wysocki. (2007) The effects of high-intensity, low frequency active sonar on rainbow trout. *JASA*. 122, 623-635,
8. D. Oxman, R. Barnett-Johnson, M.E. Smith, A.B. Coffin, **D.L. Miller**, R. Josephson, A.N. Popper. (2007) The effect of vaterite deposition on sound reception, otolith morphology, and inner ear sensory epithelia in hatchery-reared Chinook salmon (*O. tshawytscha*). *Can. J. Fish. Aquat. Sci.* 64(11), 1469-1478.
9. M.E. Smith, A.B. Coffin, **D.L. Miller**, A.N. Popper. (2006) Anatomical and functional recovery of the goldfish (*Carrasius Auratus*) saccule following noise exposure. *J Exper. Biol.*, 209, 4193-4202.
10. A.N. Popper, M.B. Halvorsen, **D.L. Miller**, M.E. Smith, J. Song, L.E. Wysocki, M.C. Hastings, A.S. Kane, P. Stein. (2005). Effects of surveillance towed array sensor system (SURTASS) low frequency active sonar on fish. *JASA*, 117(4), 2440.
11. A.N. Popper, M.B. Halvorsen, A.S. Kane, **D.L. Miller**, M.E. Smith, J. Song, L.E. Wysocki. (2005) Effects of Low Frequency Sonar on Fishes. Poster presentation, Annual Meeting for the Association for Research in Otolaryngology, New Orleans.

Journal Articles

1. **D.L. Miller**. (2015) Pilot project trains EMS to bypass the ED with mental health patients. *EP Monthly*. 2015 May 25.

Poster Presentations

1. M.W. Bachman, J.B. Myers, J.G. Williams, **D.L. Miller**, B. Currie, M. Lyons, J. Zalkin, J. Register-Mihalik, H. Tibbo-Valeriotte, V.J. De Maio, A.W. Jones, A.K. Kronhaus. (2013) Emergency Medical Services Evaluation of Falls in Assisted Living Facilities: A retrospective cohort study and clinical protocol evaluation. Poster presentation, NAEMSP Conference.
2. D. Oxman, R. Barnett-Johnson, M.E. Smith, A.B. Coffin, **D.L. Miller**, R. Josephson, A.N. Popper. (2006) Otolith crystal type affects hearing sensitivity in Chinook salmon. Poster presentation, Annual Meeting for the Association for Research in Otolaryngology, Baltimore, MD.
3. M.E. Smith, A.B. Coffin, **D.L. Miller**, A.N. Popper. (2006) Anatomical and functional recovery of the goldfish (*Carrasius Auratus*) saccule following noise exposure. Poster presentation, Annual Meeting for the Association for Research in Otolaryngology, Baltimore, MD.
4. T. Hook, E. Rutherford, G. Fleisher, and **D.L. Miller**. (1998) Contributions of recruits from drowned river mouths and nearshore areas to the Lake Michigan alewife population. Seminar, American Fisheries Society Meeting, Baltimore, MD.

Publication Peer Reviewer

Pregerson, DB. (2017) ***Emergency Medicine 1-Minute Consult Pocketbook***. Los Angeles: EMresource.org

Prehospital Emergency Care, 2015

Other Research: Served as a research assistant on multiple projects with the PECARN research consortium (<https://pecarn.org>)

“The effectiveness of oral dexamethasone for acute bronchiolitis: A multicenter randomized clinical trial”

“Disparities Study Grant Planning”

“PECARN Core Data Project (PCDP): Characterizing patient populations in the Pediatric Emergency Care Applied Research Network (PECARN)”

“Hypothermia for Pediatric Cardiac Arrest Planning Grant”

“A Survey to Evaluate Prehospital Provider Attitudes; EMSC Research”

“The use of lorazepam for the treatment of pediatric status epilepticus”

“Referral Patterns and Resource Utilization for Pediatric Emergency Department Patients Presenting with a Psychiatric or Mental Health Problem: The PECARN Psych/Mental Health Working Group Pilot Study.”

Prepared 2004 Report “The State of Emergency Medical Services for Children in the Mid-Atlantic Region.”

Teaching Activities

Regional/National Presentations

1. Session Moderator, National Association of EMS Physicians Annual Meeting, Tampa, FL, January 28, 2023.
2. “Caring for our Brothers and Sisters in Blue.” Oral presentation given to approximately 50 participants at the State OEMS conference in October 2018. Greensboro, N.C.

Local Presentations

Emergency Medical Services Education

Caswell County, North Carolina EMS

“Death and Dying- Delivering Bad News.” Oral presentation to approximately 20 participants in 2015. Yanceyville, NC.

“Medical Director Updates.” Oral presentation to approximately 20 participants in 2015, 2016. Yanceyville, NC.

“High Risk Refusals.” Oral presentation to approximately 20 participants in 2016. Yanceyville, NC.

“Destination Decision Making.” Oral presentation to approximately 20 participants in 2016. Yanceyville, NC.

PHTLS- Shock. Oral presentation with practical skills sessions for approximately 20 participants in 2016. Yanceyville, NC.

Wake County, North Carolina EMS

“Pharmacology” Oral presentation to approximately 100 participants per session during 3 sessions in 2011. Raleigh, NC.

“Cardiac Arrhythmias.” Oral presentation to approximately 100 participants per session during 3 sessions in 2011. Raleigh, NC.

“Pediatric Drug Abuse.” Oral presentation to approximately 100 participants during 3 sessions in 2014. Raleigh, NC.

“A Guide to EKG Interpretation.” Oral presentation to approximately 100 participants during 3 sessions in 2014. Raleigh, NC.

“Approach to Pediatric Trauma.” Oral presentation to approximately 100 participants during 3 sessions in 2015. Raleigh, NC.

North Carolina State Highway Patrol

“COVID Vaccination Update and the Delta Variant.” Lecture present to the North Carolina State Highway Patrol, North Carolina Alcohol Law Enforcement, and North Carolina State Bureau of Investigation via WebEx. Lecture presented on 7/27/2021 for approximately 250 participants. Recording was distributed to all members of the agencies. Raleigh, NC.

“COVID and COVID-19 Vaccination 101.” Lecture presented to the North Carolina State Highway Patrol via WebEx. Lecture presented on 1/6/2021 and 1/13/2021 for a total audience of around 350 participants, which was then required viewing the recorded video for all >1000 active troopers statewide. Raleigh, NC.

“Trooper Wellness: Preparing for Retirement.” Lecture presented to 40 participants at each of 3 sessions at the annual Commander’s Summit. Sessions occurred in September 2019. Durham, NC.

“Women and Leadership.” Oral presentation given to approximately 50 participants at the NCSHP Women’s Conference in 2018. Raleigh, N.C.

“Environmental Hazards.” Recorded session in 2015 for approximately 180 EMS providers as part of annual continuing education. Raleigh, NC.

Hemorrhage Control. Recorded session in 2015 for approximately 180 EMS providers as part of annual continuing education. Raleigh, NC.

“Medical Office Services” Oral presentation to newly promoted sergeants given 2-3 times annually to approximately 20 participants in 2016-2023. Raleigh, N.C.

“Introduction to the Individual First Aid Kit.” Recorded session in 2017 for all 1800 troopers. Also viewed by future additions to the NCSHP.

North Carolina State Bureau of Investigation

“Approach to Patient Assessments.” Presented to 20 members of the Special Response Team. Combination of lecture and hands on skills stations, January 14, 2022. Charlotte, N.C.

“Approach to the MARCH trauma assessment for the tactical operator.” Combination of lecture and hands on skills stations, June 16, 2021. Crossnore, N.C.

“Approach to Patient Assessments.” Presented to 15 EMS providers at the semi-annual continuing education session, December 4, 2020. Jackson Springs, N.C.

“Approach to Musculoskeletal Injury Assessment and Treatment.” Presented to 15 EMS providers at the semi-annual continuing education session, December 4, 2020. Jackson Springs, N.C.

“Murphy’s Law: You can never be too prepared.” Presented to 15 EMS providers at the semi-annual continuing education session, December 4, 2020. Jackson Springs, N.C.

“Wound Care in the Austere Environment.” Presented to 15 EMS providers at the semi-annual continuing education session, December 4, 2020. Jackson Springs, N.C.

North Carolina Alcohol Law Enforcement

“Tactical Medicine for the SWAT Operator.” Presented to the Special Operations Group at annual medical training in November 2012. Guilford County, NC.

“An Approach to Altered Mental Status.” Presented to the Special Operations Group at annual medical training in November 2015. Guilford County, NC.

“Splinting Techniques.” (2015)

“Self Aid-Buddy Aid: Hemorrhage Control Techniques.” Presented to the Special Operations Group at annual medical training in November 2015. Guilford County, NC.

“Diabetic Emergencies” Presented to the Special Operations Group at annual medical training in November 2015. Guilford County, NC. (2018)

“Naloxone and Opioid Overdoses.” 3 WebEx and 1 in person session in 2020 with a total of 109 participants. Additional annual refresher training offered in person to a class of 10-12 with recording shared with 100 additional agents.

“Stop the Bleed Course.” Oral presentation and skills session for district agents in June 2020. Johnston County, N.C.

“Extraction and Extrication of the Trauma Patient.” Hands on training provided to members of the Special Operations Group. August 30, 2021. Wake Technical Community College.

“Bloodborne Pathogens.” NC Alcohol Law Enforcement Academy. March 4, 2022; January 20, 2023. Samarcand Training Academy.

Orange County, North Carolina EMS

“Cardiac Arrhythmias.” Oral presentation to approximately 20 participants in 2013. Carrboro, N.C.

“Common Neuromuscular Disorders.” Oral presentation to approximately 20 participants in 2013. Carrboro, N.C.

“Drugs of Abuse.” Oral presentation to approximately 20 participants in 2013. Carrboro, N.C.

“Approaches to Pain Management.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014. Hillsborough, N.C.

“Naloxone Use for the Treatment of Respiratory Depression.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014. Hillsborough, N.C.

“Annual Protocol Review.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014. Hillsborough, N.C.

“Ebola Preparedness” Oral presentation and skills sessions given to approximately 20 participants per session during 3 sessions in 2014. Chapel Hill, N.C.

“Active Threat Preparedness.” Oral presentation and skills sessions given to approximately 20 participants per session during 3 sessions in 2014. Chapel Hill, N.C.

“Rocuronium In-service.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014. Hillsborough, N.C.

“Subcutaneous Epinephrine In-service.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014. Hillsborough, N.C.

“Death and Dying.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014 and 2015. Hillsborough, N.C.

“Patient Refusals and Referrals.” Oral presentation to approximately 20 participants per session during 3 sessions in 2014. Hillsborough, N.C.

“Measles In-service.” Oral presentation to approximately 20 participants per session during 3 sessions in 2015. Hillsborough, N.C.

“Destination Planning- UNC Hospital System.” Oral presentation to approximately 20 participants per session during 3 sessions in 2015. Hillsborough, N.C.

“Traumatic Brain Injury.” Oral presentation to approximately 20 participants in 2015. Cedar Grove, N.C.

Durham Technical Community College – Paramedic Program

“The Art of the Oral Board Exam.” Oral presentation for paramedic students. Offered to 2 class annually, 2013-2023. Hillsborough, N.C.

“Prehospital Pediatric Assessment and Management.” PALS Curriculum presentation and skills practicum in 2013. Hillsborough, N.C.

“Peripheral IV Access Practical.” Skills session for paramedic students in 2014.

“EKG Bootcamp.” Oral presentation for paramedic students in 2014. Hillsborough, N.C.

National Registry of Emergency Medical Technicians, Paramedic Exam Facilitator. 2015. Hillsborough, N.C.

Prehospital Trauma Life Support Course, Instructor. 2015. Hillsborough, N.C.

“Approach to Patient Assessments.” Program given to 10-15 paramedic students twice a year in 2018-2023. Hillsborough, N.C.

“Written and Verbal Communication.” Oral presentation offered to paramedic students twice a year in 2018-2023. Hillsborough, N.C.

“Approach to Differential Diagnoses.” Oral presentation offered to approximately 10-15 paramedic students twice a year in 2019-2023. Hillsborough, N.C.

South Orange Rescue Squad

“Approach to the Trauma Patient.” In-service oral presentation and skills session for EMT’s in 2013. Carrboro, N.C.

North Carolina Law Enforcement Assistance Program

“Cops, Docs, and Medicine.” A presentation offered twice a year in 2015-present to 30-50 participants in a post critical incident seminar. Cary, N.C.

University of North Carolina School of Medicine

Advanced Trauma Life Support Course, Department of Surgery, Chapel Hill, NC

Knowledge and Skills Assessment. Administer end of course scenario based exam. 2021-Present.

“Airway Management in the Trauma Patient.” Oral presentation and skills session to approximately 30 students per session in 2017, 2018, 2019.

“Trauma in the Pregnant Patient.” Oral presentation and skills session to approximately 30 students in 2020.

EMS Fellowship Education, University of North Carolina, Department of Emergency Medicine

“An Introduction to Tactical Medicine.” Offered annually to EMS fellows at regular didactic education in 2016-2021. Chapel Hill, N.C.

Resident Education, Department of Emergency Medicine

Course Director, Emergency Medical Services Rotation, 2012-Present

“Ebola Preparedness” Oral presentation and skills session for 30 residents in 2014. Chapel Hill, N.C.

Course Director, Emergency Medical Services Conference Block, 2015-Present. Chapel Hill, N.C.

“Worst Case Scenarios.” Facilitated group discussion for 30 residents in 2016. Chapel Hill, N.C.

“Tactical Medicine: An Introduction to the Austere Environment.” Presented to 30 residents during weekly resident education session in 2017, 2019, 2021. Chapel Hill, N.C.

Resident Disaster Tabletop Exercise. Facilitate group exercised for 30 residents in 2018. Chapel Hill, N.C.

Medical Student Education

“Resident Panel-Choosing a Career in Medicine.” Panel member at medical student education session. Approximately 40 students in 2013. Chapel Hill, N.C.

“Capstone Course: Introduction to Ultrasound.” Skills session instructor for approximately 30 students in 2013, 2014, 2015. Chapel Hill, N.C.

Course Director, Emergency Medical Services Rotation, 2016-Present. Chapel Hill, N.C.

Course Director, Mass Casualty Incidents and Disasters Elective. All instruction done via Zoom, May 11-22, 2020.

Grants

1. North Carolina General Assembly Crime Victims' Services Grant, NCDPS Integrated Behavioral Services Grant, Awarded 2019

The Integrated Behavioral Health Services program (IBHS) will provide regional counseling services and support resources to employees whom suffer work-related primary and secondary victimization in the performance of duties directly involving critical incidents or ongoing environmental abuse in law enforcement and correctional settings.

Professional Service

National Association of EMS Physicians	
Chair, Program Committee	2023-present
Vice Chair, Program Committee	2021-2023
Committee Member, Special Operations Committee	2020-Present
North Carolina Chapter of NAEMSP	2022-Present
Board of Directors	
North Carolina Department of Justice, Training and Standards	March 2022-Present
Americans with Disabilities Act Committee	
North Carolina Medical Society	2011-2014
Chair, Resident and Fellow Section	
Durham-Orange County Medical Society	2011-2014
Board Member, Board of Trustees	
American Medical Association-Resident and Fellow Section	2011-2013
Delegate	
Massachusetts Medical Society	2010-2011
Committee Member, Committee on Legislation	
Massachusetts Medical Society-Medical Student Section	2010-2011
Vice Chair, Secretary, Governing Council Member	
American Medical Association	2010-2011
Alternate Delegate	

American Medical Association-Medical Student Section 2008-2009
Region VII Chair
Committee on Legislation and Advocacy
Committee on Long Range Planning
A'09 Reference Committee

Laurel Volunteer Rescue Squad 2003-2010
EMT-B, Firefighter

Department Service

UNC Department of Emergency Medicine Wellness Committee July 2017-Present
Committee Member
Involved in the committee tasked with maintaining morale of the department

UNC Department of Emergency Medicine Recruitment Committee July 2017-Present
Committee Member
Involved in the committee tasked with recruiting and hiring new Emergency Medicine faculty

University Service

UNC EMS January 2021-Present
Assistant Medical Director
-Undergraduate student led organization that is funded by UNC Campus Health that is dedicated to improving the health of students on campus through providing emergency first responder service and support of COVID response operations. COVID responses include testing and vaccination efforts by Campus Health. Students are dispatched through Department of Public Safety for medical emergencies on campus providing first response at the EMT level.