

Curriculum Vitae

Name: Merrick Miles
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Training

08/2000 - 05/2004 B.S. in Chemical Engineering from North Carolina State University, NC United States
08/2006 - 05/2010 M.D. from Wake Forest University School of Medicine, NC United States
06/2010 - 06/2014 Residency in Anesthesiology from University of North Carolina at Chapel Hill, Chapel Hill, NC
07/2014 - 06/2015 Fellowship in Critical Care from Vanderbilt University Medical Center

Licensure and Certification

07/2010 - Present M.D., Medical Doctor of Tennessee United States
06/2015 - Present Anesthesiology United States
10/2017 - Present Critical Care Medicine

Academic Appointments

07/2015 - Present Assistant Professor of Anesthesiology, Vanderbilt University (Nashville, Tennessee)

Professional Organizations

2011 American Society of Anesthesiologists
2016 Neurocritical Care Society, Member
2016 International Anesthesia Research Society, Member

Professional Activities

Intramural

04/2016 - Present Anesthesia Supply and Equipment Committee, Anesthesiology, Chair
05/2016 - Present MEOC, Anesthesiology, Member
07/2017 - Present Fellowship Clinical Competency Committee, Anesthesiology, Member
01/2019 - Present Neurointensive Care Unit, Anesthesiology, Associate Medical Director

Teaching Activities

06/2015 - 06/2015 Airway Skills: Intern Boot Camp, Instructor
07/2015 - 07/2015 Drug Toxicity in the ICU, Instructor
02/2016 - 02/2016 Multimodal Analgesia, Instructor, 1 hour
02/2016 - 02/2016 Neurological Support: Critical Care Skills Week, Instructor, Four 2-hour lectures and SIMs completed (8 hrs total)
03/2016 - 03/2016 APC: Advanced Procedures Course, Instructor, Cadaver Lab, Taught chest tubes, emergent cricothyrotomies, and IO access
04/2016 - 04/2016 FCCS: Pregnancy in Critical Illness, Instructor, SIM, 3 hrs
04/2016 - 04/2016 FCCS: Trauma and Burn Resuscitation, Instructor, SIM, 1 hr
05/2016 - 05/2016 Critical Illness: CCSW, CELA, 4 hours
05/2016 - 05/2016 Dx and management of shock: CCSW, Instructor, CELA, 1 hour
05/2016 - 05/2016 Ventilator work shop: CCSW, Instructor, CELA, 4 hours
09/2016 - 09/2016 FCCS: Ethic in Critical Care Medicine, Instructor
09/2016 - 09/2016 FCCS: Management of Life Threatening Electrolyte Abnormalities, Nashville, TN
09/2016 - 09/2016 NCS: Airway Skills, Washington DC
09/2016 - 09/2016 NP Boot Camp: Vent Management, Nashville, TN, 4 classes taught
11/2016 - 2016 ISC: Monitoring Oxygen Balance, Sim, 4 lectures taught, 2 hours a piece, 8 hours total
11/2016 - 11/2016 Board Review Course, Instructor, MCE, 1 hour

12/2016 - 12/2016	Anesthesiology OSCE Assessment, Instructor, SIM LAB, OSCE evaluations with education research team from University of Kentucky. 16 hours total, 9 total evaluations done
02/2017 - 02/2017	ISC: Trauma and Burn Resuscitation, 4 hours
05/2017 - Present	Anesthesiology: Lung Injury and Ventilator Basics, Lecturer
08/2017 - 08/2017	Cook Course: Line Placement, Instructor, CELA, 3 hours
09/2017 - Present	Periop: Perioperative DM Management, Periop
02/2018 - Present	NCU: SAH, NCU
02/2018 - Present	NCU: Ventilator Management, NCU
04/2018 - 04/2018	Critical Care Medicine Basics: Pulmonary Dysfunction and Vent Modes, Lecturer, MCE, 1 hr
05/2018 - 05/2018	ABA lecture series: Inhalational Anesthetics, Lecturer
06/2018 - 06/2018	FCCS: FCCS, Instructor, CELA, 8 hours
09/2018 - 09/2018	Ventilator Basics, NCU
09/2018 - 09/2018	SAH, NCU
10/2018 - 10/2018	CCSW: Electrolyte Management, CELA, 2 hrs
10/2018 - 10/2018	CCSW: Electrolyte Management, c, 2 hours
10/2018 - 10/2018	CCSW: Neurological Support, CELA, 2 hours
10/2018 - 10/2018	CCSW: Neurological Support, CELA, 2 hours
12/2018 - 12/2018	CCM Basics: Sedation, Analgesia, Delirium, 1.5 hr, 12/10/18
01/2019 - 01/2019	Ventilator Basics, NCU
01/2019 - 01/2019	SAH, NCU
02/2019 - 02/2019	ARDS and ventilator management, BICU, 1hr
04/2019 - 04/2019	Swan Ganz Basics, Lecturer, BICU, 30 minutes
04/2019 - 04/2019	Shock and pressors, Lecturer, BICU, 30 minutes
04/2019 - 04/2019	ARDS and ventilator management, Lecturer, 11 South, half hour
05/2019 - 05/2019	SAH, lecturer, NCU
06/2019 - 06/2019	Stevens-Johnson Syndrome, lecturer, BICU
06/2019 - 06/2019	Delirium in the ICU, lecturer, BICU
07/2019 - 07/2019	ARDS and ventilator basics, lecturer, BICU
07/2019 - 07/2019	Pressors, lecturer, BICU
08/2019 - 08/2019	Ventilator basics, lecturer, 60 min
08/2019 - 08/2019	SAH, lecturer, 60 min
09/2019 - 09/2019	CCSW: Cardiopulmonary/Cerebral Resus, lecturer, 120 min
09/2019 - 09/2019	CCSW: Cardiopulmonary/Cerebral Resus, lecturer, 120 min
10/2019 - 10/2019	Ventilator basics, lecturer, 60 min
10/2019 - 10/2019	Preop and consent for blocks, lecturer, 30 min
11/2019 - 11/2019	Ventilator basics, lecturer, 60 minutes
11/2019 - 11/2019	Stroke basics, lecturer, 60 min

Research Supervision / Mentorship

08/2016 - Present	Kristen Lee, M.D. Vanderbilt University Medical Center, Current Position: Resident. (Resident, General Mentorship)
08/2016 - Present	Erica Adkins, M.D. Vanderbilt University Medical Center, Current Position: Resident. (Resident, General Mentorship)
05/2018 - Present	Elisa Dolson (Resident, General Mentorship)

Other Significant Activities

01/2016	MMI Presenter: Intraoperative Surgeon Requests for Medication
01/2016	Reviewed article for Anesthesiology:

Grants and Funding

Grant number unavailable Non-federal Baxter Phase II PIVA Grant Role: Co-Investigator	Susan Eagle (PI)	02/2016 - 02/2017
Grant number unavailable Baxter Peripheral Venous Waveform Analysis	Susan Eagle (PI)	05/2016 - 07/2017

Role: Co-Investigator

Grant number unavailable Kelly Kohorst (PI) 12/2017 - 12/2019
Comparison of Peripheral Intravenous Analysis to invasive intracardiac monitoring in patients
undergoing elective right heart catheterization
Baxter Healthcare Corporation
Role: Co-Investigator

Honors / Awards

08/2002	Summer Undergraduate Research Fellowship, Howard Hughes Medical Institute
05/2004	Graduated Magna Cum Laude, North Carolina State University
10/2006	Honor Council Member, Wake Forest School of Medicine

Patents & Copyrights

03/12/2007	Low pH development solutions for chemically amplified photoresists. Mark Wagner, James DeYoung, Merrick Miles, Chris Harbinson. (7,329,483)
06/26/2007	Low pH development solutions for chemically amplified photoresists. Wagner, Mark; Miles, Merrick; Harbinson, Chris. (7,235,347)

Publications

Peer Reviewed Publications

Research Papers

1. **Miles M**, Alvis BD, Hocking K, Baudenbacher F, Guth C, Lindenfeld J, Brophy C, Eagle S. Peripheral Intravenous Volume Analysis (PIVA) for Quantitating Volume Overload in Patients Hospitalized With Acute Decompensated Heart Failure-A Pilot Study. Journal Of Cardiac Failure 2018 May;May 2018: PMID: 29777760.

Editorials

1. Merrick **Miles**, Mark Rice. Recent Advances in Perioperative glucose monitoring. Current Opinion in Anesthesiology 2017 December;718-722. PMID: 29095207.
2. Merrick Miles, Yangdong Jiang. Are we practicing Anesthesia in a "current" manner. Current Opinion in Anesthesiology 2017 December;688-690. PMID: 28938304.

Abstracts

1. Merrick Miles, Bret Alvis, Kyle Hocking, Franz Baudenbacher, Susan Eagle. Peripheral Venous Waveform Analysis in Congestive Heart Failure Patients. Supplement to Critical Care Medicine 2016 November;44(12):192-192.

Non-Peer Reviewed Publications

Research Articles

1. Alvis BD, McCallister R, Polcz M, Lima JLO, Sobey JH, Brophy DR, **Miles M**, Brophy C, Hocking K. Non-Invasive Venous waveform Analysis (NIVA) for monitoring blood loss in human blood donors and validation in a porcine hemorrhage model. Journal of Clinical Anesthesia 2019 November; PMID: 31786067.
2. **Miles M**, Mueller D, Gay-Betton D, Baum Miller SH, Massa S, Shi Y, Shotwell MS, Lane-Fall M, Schlesinger JJ. Observational Study of Clinician Attentional Reserves (OSCAR): Acuity-Based Rounds Help Preserve Clinicians' Attention. Critical Care Medicine 2019 December; PMID: 31876529.

Book Chapters

1. M.Miles, A. Kumar. Decompressive Craniectomy in Diffuse Traumatic Brain Injury: The DECRA Trial. 50 Studies Every Intensivist Should Know. Editors: Edward A. Bittner. United States 2018 February; ISBN: 9780190467654.
2. M. Miles, H. Bow. Subdural Evacuating Port System (SEPS) Placement for Chronic Subdural Haematoma Evacuation. Neurointensive Care. United States 2019 July; ISBN: 9780199481439.

3. A. Yengo-Kahn, M. Miles. Cervical Spine Fixation with the Halo Brace. Neurointensive Care. United States 2019 July; ISBN: 9780199481439.

Case Reports

1. Merrick Miles, Kimberley Nichols. Unintended Dural Puncture After Epidural Steroid Injection for Labor Analgesia: Case Report. *Anesthesiology News* 2018 April; April 2018:18-19.
2. Merrick Miles, Kimberly Nichols. Case Report: Unintended Dural Puncture After Epidural Steroid Injection for Labor Analgesia. 2018 October.

Abstracts

1. Merrick Miles, Susan Eagle, Brett Alvis, Kyle Hocking. INTRAVASCULAR VOLUME STATUS ASSESSMENT IN CONGESTIVE HEART FAILURE PATIENTS USING PERIPHERAL INTRAVENOUS WAVEFORM ANALYSIS.

Presentations

Invited Presentation - National

1. Neurocritical Care Society 2016 National Meeting. Neurocritical Care Society; Washington, District of Columbia. 2016 Sep 16; Airway Workshop.

Presentations at Scientific Meetings

1. International Society for Optical Engineering National Conference. San Jose, California. 2006 Apr; Development of EUV resists in supercritical CO2 solutions using CO2 compatible salts (CCS) : Results from a two level full factorial design of experiments (DOE).
2. Merrick Miles. ICU Liberation and Animation. Society of Critical Care medicine; Nashville, Tennessee. 2015 Sep 9; Simulation Workshop.
3. International Anesthesia Research Society Annual Meeting. International Anesthesia Research Society; San Francisco, California. 2016 May 22; Proof of concept of a novel Non-Invasive Volume Assessment (NIVA) device created to observe the effects of intravascular volume on vascular waveform harmonics: a pilot study.
4. IARS. San Francisco, California. 2016 May 22; Intravascular Volume Status Assessment in Congestive Heart Failure Patients Using Peripheral Intravenous Waveform Analysis.
5. NCCS. NCCS; Washington, DC 2016 Sep 16; Advance Airway Management Workshop.
6. Kyle Hocking. Vanderbilt Anesthesia Department Research Conference. Nashville, Tennessee. 2018 May 4; NIVA in the general Population.
7. Bethany Morris, MD, Leslie Fowler, MEd, Merrick Miles. ASA. ASA; San Francisco, California. 2018 Oct 15; e-Abstract Presentations: Managing Equipment in the Perioperative Space: A Needs Assessment.

Other

1. Medical Student Research Day, Wake Forest University School of Medicine. Winston-Salem, North Carolina. 2007 Jul; Development of a Novel Nanotechnological Approach to Noninvasive Assessment of Tissue Pressure.
2. University of North Carolina Resident Scholarly Project Meeting. Chapel Hill, North Carolina. 2013 Mar; Oxygen Use in the PACU: Are patients being over exposed to oxygen?.

Medically Challenging Cases

1. Kathleen Rissi, Merrick Miles. ASA 2019. Orlando 19 Oct 19; Thoracic Epidural Catheter Removal In A Patient With Coagulopathy After Extended Right Hepatectomy.
2. ASA National Conference. Washington, District of Columbia. 2012 Oct; Unusual Clinical Presentation of Large Epidural Hematoma After Bloodless Wet Tap During Attempted Thoracic Epidural Placement.
3. ASA National Conference. San Francisco, California. 2013 Oct; An Unnecessary and Expensive Complication: Should We Continue to Teach Landmark-Guided Techniques for Central Venous Catheter Placement to Our Residents?.
4. ASA National Conference. San Francisco, California. 2013 Oct; Neuraxial Anesthesia for Labor After Epidural Steroid Injection.
5. Jason Quevreaux, Merrick Miles, Ann Walia. ASA. ASA; Boston, Massachusetts. 2017 Oct 21; Medically Challenging Cases: Difficult Airways in the ICU; Managing Multiple Comorbidities During Intubation.

Workshop

1. Neurocritical Care Society 2016 National Meeting. Neurocritical Care Society; Washington, District of Columbia. 2016 Sep 16; Airway Workshop.

Internal Grand Rounds

1. Lori Lee, Daltry Dot. MMI. Nashville, Tennessee. 2016 Jan 29; Intraoperative Surgeon Request for Medication.