Karen Denise Serrano, MD

Current Positi 2015-current	tion Clinical Assistant Professor Department of Emergency Medicine University of North Carolina School of Medicine at Chapel Hill
Education 2008-2011	Emergency Medicine Residency University of Wisconsin Hospital & Clinics Madison, WI
2005-2006	Internal Medicine Residency University of Wisconsin Hospital & Clinics Madison, WI
2000-2005	University of Chicago Pritzker School of Medicine Chicago, IL M.D., May 2005
1996-1998	Wheaton College Graduate School Wheaton, IL M.A. Bibilical & Theological Studies, May 1998
1991-1995	Wellesley College Wellesley, MA B.A. History, May 1995
Licensure/Ce	rtification
2011-	American Board of Emergency Medicine Certified Physician
2015-	North Carolina Medical License
2006-	Wisconsin Medical License
Professional	Experience
2018 – current	
2015-present	Clinical Assistant Professor Department of Emergency Medicine

Attending Physician

Chapel Hill, NC

University of North Carolina School of Medicine

2012-2015	Clinical Assistant Professor Attending Physician Department of Emergency Medicine University of Wisconsin Hospital & Clinics Madison, WI
2011-2014	Attending Emergency Medicine Physician Southern Wisconsin Emergency Associates Beloit Memorial Hospital, Beloit WI St. Mary's Hospital, Janesville, WI Stoughton Hospital, Stoughton, WI
2010-2011	Emergency Medicine Chief Resident University of Wisconsin Hospital & Clinics Madison, WI
2008-2011	Emergency Medicine Resident University of Wisconsin Hospital & Clinics Madison, WI
2006-2008	Medical Writer & Editor Healthday.com medical news website
2004-2008	Freelance Medical Writer Clients included Haines Medical Communications & PEPID.com

<u>Honors</u>

- 2022 UNC Tar Heel Trauma Leading the Way Award for exemplary leadership in the development and implementation of the UNC Trauma Resilience Program which screens trauma patients for PTSD
- 2020 UNC School of Medicine Academy of Educators Educational Mentor Award for working with resident trainees with identified knowledge gaps
- 2019 UNC School of Medicine Academy of Educators Inductee
- 2017 UNC Socrates award for outstanding didactic and clinical teaching
- 2011 UW Resident Award for Excellence in Pediatrics
- 2011 UW Resident Award for Excellence in Scholarship
- 2010 UW Resident Award for Excellence in Scholarship
- 2009 UW Resident Award for Excellence in Scholarship
- 2005 AMWA Glasgow-Rubin Commendation for Academic Achievement
- 2003 Alpha Omega Alpha (AOA) Honor Society Inductee

<u>Scholarship</u> Books & Chapters

- 1. Miller, Diane L and Serrano, Karen. (2020) Ch. 61. Sexual Assault. In: *Emergency Medicine Services: Clinical Practice and Systems Oversight*. David C. Cone, Ed. Wiley; 2020.
- 2. Serrano, Karen D. (2020). Sexually Transmitted Infections. In: Tintinalli JE, Ma O, Yealy DM, Meckler GD, Stapczynski J, Cline DM, Thomas SH (Eds.). *Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 9e*. McGraw Hill; 2020.
- **3.** Vissers RJ, Danzl DF, **Serrano K**. (2016). Intubation and Mechanical Ventilation. In: Tintinalli JE, Stapczynski J, Ma O, Yealy DM, Meckler GD, Cline DM. eds. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 8e* New York, NY: McGraw-Hill; 2016.
- **4.** Serrano, KD, Fruhan, SA. (2015). Pneumonia and other pulmonary infections. In: Brown D, editor. *Scientific American emergency medicine*. Hamilton (ON): Decker Intellectual Properties; September 2016. DOI: 10.2310/7900.4140. Available at http://www.deckerip.com.
- 5. Mottram A, Serrano K. (2015). Cardiac arrest and cardiopulmonary resuscitation: Recent advances in management approach for cardiopulmonary resuscitation. In Jagadeesh, Balakumar, and Maung,, eds. *Pathophysiology and Pharmacotherapy of Cardiovascular Disease*. Springer- Verlag, Springer-Verlag, 2015: 1135-1147.
- 6. Serrano K, Rebella G. (2012) Femoral Shaft Fractures. In *Essentials Emergency Imaging*. Lewiss, RE, ed. Philadelphia, PA: Lippincott; 2012.

Published Peer Reviewed Articles

- 1. DuCanto, J, Serrano K, Thompson R. (2016) Novel Airway Training Tool that Simulates Vomiting: Suction-Assisted Laryngoscopy Assisted Decontamination (SALAD) System. *West J Emerg Med.* E pub Nov. 8 2016.
- 2. Serrano K, Tupesis J. (2013) Small bowel obstruction from potato and broccoli bezoar mimicking mesenteric ischemia. *J Emerg Med.* 2013 Jan;44::79-81.
- 3. Serrano K, Rebella G, Sansone J, Kim M. (2012) A rare case of posterior interosseous nerve palsy associated with radial head fracture. *J Emerg Med.* 2012;43(2):e115-7.
- 4. Serrano K. (2011) Change of shift: Back from the dead. *Ann Emerg Med.* 2011 Nov;58(5): 494-5.
- 5. Serrano K. (2010) Change of shift: On being a resident and a mom. *Ann Emerg Med.* 2010 May;55(5):481-482.
- 6. Serrano K. (2007) Women residents, women physicians, and medicine's future. *Wisconsin Medical Journal*. 2007 Aug;106(5):260-265.
- 7. Curlin F, **Serrano K**, Baker M, Carricaburu S, Smucker D, Chin M. Following the call: How providers make sense of their decisions to work in faith-based and secular urban community health centers. *J Health Care Poor Underserved*. 2006 Nov;17(4):944-957.

Other Printed or Web-Based/ Digital Resource Publications:

- Serrano K, Shenvi C. Clevidipine for hypertensive emergencies. *Emergency Physicians Monthly*. June 2018. Available from: <u>http://epmonthly.com/article/clevidipine-for-hypertensive-emergencies/</u>
- 2. Serrano K, Shenvi C. Reducing relapses through opioid maintenance therapy. *Emergency Physicians Monthly*. May 2018. Available from: <u>http://epmonthly.com/article/rx-pad-reducing-relapses-through-opioid-maintenance-therapy/</u>
- 3. Serrano, K, Shenvi C. Navigating the penicillin pseudo-allergy pandemic. *Emergency Physicians Monthly*. Feb 2018. Available from: http://epmonthly.com/?s=Navigating+the+penicillin+pseudo-allergy+pandemic
- 4. Serrano, K, Shenvi C. Got calcium? *Emergency Physicians Monthly*. Nov 2017. Available from: <u>http://epmonthly.com/article/got-calcium/</u>
- Serrano, K, Shenvi C. The ABCs of BZDs: What you need to know about benzodiazepines. *Emergency Physicians Monthly*. Sept 2017. Available from: <u>http://epmonthly.com/article/abcs-bzds-need-know-benzodiazepines/</u>
- 6. Serrano, K, Shenvi C. Give me some sugammadex. *Emergency Physicians Monthly*. June 2017. Available from: <u>http://epmonthly.com/?s=Give+me+some+sugammadex</u>
- Serrano, K, Shenvi C. All about praxbind: Pradaxa's effective yet pricey reversal policy. *Emergency Physicians Monthly*. April 2017. Available from: <u>https://epmonthly.com/article/praxbind-pradaxas-effective-yet-pricey-reversal-agent/</u>
- 8. Serrano, K, Shenvi C. The non-opioid pain patch. *Emergency Physicians Monthly*. February 2017. Available from: <u>https://epmonthly.com/article/non-opioid-pain-patch/</u>
- 9. Serrano, K, Shenvi C. Using TXA for traumatic bleeds. *Emergency Physicians Monthly*. December 2016. Available from: <u>https://epmonthly.com/article/using-txa-traumatic-bleeds/</u>
- 10. Serrano, K, Shenvi C. Understanding haloperidol. *Emergency Physicians Monthly*. September 2016. Available from: <u>https://epmonthly.com/article/understanding-haloperidol/</u>
- 11. Serrano, K, Shenvi C. All about oxy. *Emergency Physicians Monthly*. August 2016. Available from: <u>https://epmonthly.com/article/all-about-oxy/</u>
- 12. Serrano, K, Shenvi C. Want less bleeding, use rivaroxaban. *Emergency Physicians Monthly*. June 2016. Available from: <u>https://epmonthly.com/article/want-less-bleeding-use-rivaroxaban/</u>
- 13. Serrano, K, Shenvi C. Lasix: The basics of furosemide. *Emergency Physicians Monthly*. April 2016. Available from: <u>https://epmonthly.com/article/lasix-basics-furosemide/</u>
- 14. Serrano, K. Course author for ACEP eCME: Clinical Policy: Procedural Sedation and Analgesia in the Emergency Department, Feb. 2015.
- 15. Serrano K. Critical decisions in emergency medicine: Reactive airway emergencies in pediatric patients. *ACEP News*. June 2014.
- 16. Serrano K, Westergaard, Ryan. Diagnosis and management of acute HIV in the emergency department. *Emergency Medicine Reports*. 2012 July;33(16).
- 17. Serrano K. Does this fracture need to be reduced? ED management of distal radial fractures in children. *Emergency Physicians Monthly*. July 2012;19(7):10-11.
- 18. **Serrano K**. E-professionalism: Implications of social media on professionalism in medicine. *SAEM Newsletter*. March/April 2012.
- 19. Serrano K, Bourdon R, Walters M. Diagnosis and management of splenic injuries. *EM Resident*. 2011 Feb/March;38(1): 42-43.
- 20. Serrano K, Rebella G. Femoral Shaft Fractures. In *Essentials Emergency Imaging*. Lewiss, RE, ed. Philadelphia, PA: Lippincott; 2012.

- 21. Serrano K. CPR changes may improve mortality. *Modern Resident: Newsletter of American Academy of Emergency Medicine/ Resident and Student Association*. August/September 2010.
- 22. Serrano K. The pediatric airway. Modern Resident: Newsletter of American Academy of Emergency Medicine/ Resident and Student Association. May/June 2010.
- 23. Serrano K. CO2 monitoring during procedural sedation with propofol. *Modern Resident: Newsletter of American Academy of Emergency Medicine/ Resident and Student Association.* March/April 2010.
- 24. Serrano K. Women in Medicine Interest Group Update. *Common Sense*. Vol. 17, Jan/ Feb.2010.
- 25. Woodson R, Serrano K. Anemia of Chronic Disease. Monograph for Point of Care/ BMJ website. Aug. 2007.
- 26. Serrano K. Mitral Valve Prolapse. PEPID Primary Care Plus. Skokie, IL: PEPID. Jan. 2005
- 27. Serrano K. Autoimmune Hemolytic Anemia. PEPID Primary Care Plus. Skokie, IL: PEPID. Jan. 2005
- 28. Serrano K. Aortic Stenosis. PEPID Primary Care Plus. Skokie, IL: PEPID. Jan. 2005.
- 29. Serrano K. Peptic Ulcer Disease. PEPID Primary Care Plus. Skokie, IL: PEPID. April 2005
- 30. Serrano K. Biliary Infections. PEPID Primary Care Plus. Skokie, IL: PEPID. April 2005
- 31. Serrano K. Postcholecystectomy Syndrome. PEPID Primary Care Plus. Skokie, IL: PEPID. April 2005

Poster presentations:

- Short NA, Brady M, Dasema R, Lechner M, Serrano K, Witkemper K, McLean SA. Acceptability of a Brief, Mobile Phone-Based Intervention Targeting Anxiety Sensitivity among Women Sexual Assault Survivors Presenting for Emergency Care: A Pilot Uncontrolled Trial. Symposium accepted for presentation at the annual meeting of the Anxiety and Depression Association of America. Washington, DC. April, 2023.
- 2. Serrano K, Svenson J. Black clouds, full moons, and the Q-word: Investigating superstitions among emergency medicine residents. Poster Presentation. American Academy of Emergency Medicine Scientific Meeting. Orlando, FL. March 2011.
- 3. Serrano, K, Svenson J. Photo Competition: Shoulder Pain. Poster Presentation. American Academy of Emergency Medicine Scientific Meeting. Orlando, FL. March 2011.
- 4. Curlin F, **Serrano K**, Carricaburu S, Smucker D, Chin M. Following the call: Self-reported rewards and costs of current employment for providers in faith-based and non-faith-based urban community health centers. Poster presentation. American Public Health Association National Meeting, Philadelphia, PA. November 2002.

National Presentations:

2021 Integrated Care in the Emergency Department: Implementation of a traumafocused mental health provider for sexual assault and other trauma patients. Collaborative Family Health Care Association Annual Conference. Virtual. October 21, 2021.

2015	Anaphylaxis—is it rash to discharge after the rash? Pecha Kucha Series.
	American Academy of Emergency Medicine Scientific Meeting. Austin, TX.
	March 3, 2015.

Regional Presentations:

2022	STI Treatment and Emergency Contraception. UNC SANE training course. March 24, 2022.
2021	STI Treatment and Emergency Contraception. UNC SANE training course. Feb. 18, 2021.
2020	Medical Care of the Sexual Assault Patient. UNC SANE Training Course. February 27. 2020.
2019	Moderator in regional event: UNC Child Physical Abuse Simulation Lab, University of North Carolina, Chapel Hill. Feb 13, 2019.
2018	Detecting the subtle signs of child abuse: What every ED provider needs to know. North Carolina College of Emergency Medicine (NCCEP) Fall Conference: Update in Trauma and Emergency Care. Asheville, NC. Co-presented with LaClaire Stewart, MD, MPH. Oct 8, 2018.

Teaching Activities

Course Director

2022-present	Pulmonary medicine block co-director, UNC EM Residency Conference	
2016-present	Internal medicine block co-director, UNC EM Residency Conference	
2016-2020	Advance Practice Selective, Subspecialties in Emergency Medicine, UNC	
	Hospitals Emergency Medicine (ERMD 408)	
2014-2015	Boards Review Director, UW EM Residency	

Lectures

2023 Trauma-informed care. UNC EM Residency Curriculum. January 25, 2023.

EKG workshop. Bootcamp for 4th year medical students. March 21, 2023.

2022 EKG workshop. Bootcamp for 4th year medical students. March 22, 2022.

Making friends with failure. UNC EM Residency Curriculum. April 13, 2022.

Intro to EKG for rising 2nd years. June 6, 2022.

Intern lecture series: The Febrile Infant. July 8, 2022.

Intern lecture series: ACS. July 8, 2022.

2021 EKG workshop. Bootcamp for 4th year medical students. March 22, 2021.

Care of the Sexual Assault Patient. UNC EM Residency Curriculum. April 14, 2021.

Internal medicine EKGs. UNC EM Residency Curriculum. April 14, 2021.

Intro to EKG for rising 2nd year medical students. June 7, 2021.

Introduction to Shock. New Intern curriculum. Video module. June 10. 2021.

Becoming a Jedi Master of Arrhythmias. August 11, 2021.

Child Maltreatment: Recognition, Reporting, and Evaluation. EMS Fellowship Lecture Series. August 17. 2021.

EKG: Acute coronary syndrome August 25, 2021.

2020 EKG: Acute Coronary Syndrome. August 26, 2020.

EKG: arrhythmias. August 12, 2020.

Internal medicine EKGs. April 15, 2020.

Instructor for Internal Central Line course. June 22, 2020.

EKG basics for interns. June 17. 2020.

Intro to EKG for 2nd year medical students. May 4, 2020.

Detecting the subtle signs of child abuse: What every ED physician needs to know. EMS Fellowship Lecture Series. February 4, 2020.

2019 EKG: Acute coronary syndrome. UNC Residency Program lecture series, Aug 21, 2019.

EKG: Becoming a Jedi Master of Arrhythmias. UNC Residency Program lecture series, Aug 14, 2019.

EKG Introduction for New Interns. UNC Intern Orientation. June 24, 2019.

Central venous access. UNC Intern central line course. Hospital-wide annual central line training for interns. June 19, 2019.

Detecting the subtle signs of child abuse: What every ED physician needs to know. UNC EMS Fellowship Lecture Series. April 23, 2019.

Care of the Sexual Assault Patient. UNC Residency Program lecture series. April 17, 2019.

EKG workshop: case studies. UNC Residency Program lecture series. April 17, 2019.

EKG workshop. Bootcamp for 4th year medical students. March 29, 2019.

Detecting the subtle signs of child abuse: What every ED physician needs to know. UNC Residency Program Core Conference. Jan. 23, 2019.

Worst case scenario: Toxicology. UNC Residency Program Core Conference. Jan 23, 2019.

Care of the Adult Sexual Assault Patient. UNC SANE RN training course. Jan. 4, 2019.

2018 Becoming a Jedi Master of Arrhythmias. UNC Residency Program Intern Lecture Series. Dec UNC Residency Program Intern Orientation. Dec. 5, 2018.

Introduction to EKG. UNC Residency Program Intern Orientation. June 27, 2018.

Child abuse: Recognition, evaluation, and reporting. UNC Family medicine residency conference. May 16, 2018.

EKG: Intern cases part II. UNC Residency Program Core Conference. Jan 31, 2018.

EKG: Intern cases part I. UNC Residency Program Core Conference. Jan 3, 2018.

2017 Child abuse: Recognition, evaluation, and reporting. UNC EMS Fellowship conference. Dec 5, 2017.

EKG: Arrhythmias. UNC Residency Program Core Conference. July 19, 2017.

EKG: Acute coronary syndrome. UNC Residency Program Core Conference. July 12, 2017.

Introduction to EKG. UNC Residency Program Intern Orientation. June 26, 2017.

Central venous access. UNC Intern central line course. Hospital-wide annual central line training for interns. June 2, 2017.

Anaphylaxis. UNC Emergency Medicine Residency Program Core Conference. April 26, 2017.

Worst case scenario: Internal medicine. UNC Residency Program lecture series. April 12, 2017.

Anaphylaxis. Duke Emergency Medicine Residency conference. March 9, 2017.

2016 Worst case scenario: Critical care. UNC Residency Program lecture series. July 20, 2016.

Fever in the elderly patient. UNC MS4 Boot camp lecture series. April 20, 2016.

Worst case scenario: Airway. UNC Residency Program lecture series. February 27, 2016.

2015 Anaphylaxis. UW EM Residency Program Core Conference. October 6, 2014. Madison, WI.

Boards Review Lecture series. Multiple presentations. January 15, 2015, February 5, 2015. April 30, 2015, May 77, 2015. Madison, WI.

2014 Medical Writing. UW EM Residency Program Education Track. October 23, 2014. Madison, WI.

Boards Review Lecture Series, course facilitator with multiple presentations, 8/21/14, 9/4/14, 9/25/14, 10/23/14, 11/20/14, 12/18/14.

Burnout-proofing your career: Avoiding the occupational hazards of emergency medicine. Alumni Lecture Series, UW EM Residency Program Alumni Lecture Series. Sept. 2014.

Central venous access. University of Wisconsin Hospital & Clinics. Hospital-wide annual central line training for interns. Jul. 2014.

Stroke syndromes. UW EM Residency Program Core conference. Jan. 2014.

Pneumonia. UW EM Residency Program Core conference. Jan. 2014.

2013 Aortic emergencies. UW EM Residency Program. Nov. 2013.

Central venous access. University of Wisconsin Hospital & Clinics. Hospital-wide annual central line training for interns. Jul. 2013.

Approach to the patient with psychiatric complaints. UW EM Residency Program Intern lecture series. Jul. 2013.

Suture workshop. UW EM Residency Program Intern lecture series. Jun. 2013.

2012 Boards Review: Infectious disease. UW EM Residency Program Boards Review Series. October 2012. 2011 Updates in the Treatment of Sepsis. UW Emergency Medicine Grand Rounds. August 2011.

Morbidity and mortality conference. UW Emergency Medicine Grand Rounds. Apr. 2011.

2010 Morbidity & mortality conference. UW Emergency Medicine Grand Rounds. Nov. 2010.

The approach to abdominal pain in the emergency department. UW School of Medicine and Public Health. Medical student lecture series. Aug. 2010

Shock in trauma. UW EM Residency Program Case Conference. Jul. 2010.

Procedural sedation with ketofol. UW Hospital & Clinics. Pediatric Sedation Conference. Mar. 2010.

Bezoar causing small bowel obstruction. UW EM Residency Program Case Conference. Jan. 2010.

2009 Morbidity and mortality conference. UW Emergency Medicine Grand Rounds, Aug. 2009.

Treating sepsis in the emergency department. UW Emergency Medicine Grand Rounds. Jul. 2009.

Posterior interosseous nerve injury associated with radial head fracture. UW EM Residency Program Case Conference. Apr. 2009.

Methanol poisoning. UW EM Residency Program Case Conference. Apr. 2009. Approach to the child with altered mental status. UW EM Residency Program Pediatric Intake Conference, Mar. 2009.

Pneumonia in kids. UW EM Residency Program. Boards Review. Feb. 2009. Boards Review: Pediatric exanthems. UW EM Residency Program Boards Review Series. Jan. 2009. Boards Review: Pulmonary embolism. UW EM Residency Program Boards Review Series. Jan. 2009.

2008 Boards review: Diabetic ketoacidosis. UW EM Residency Program Boards Review Series. Oct 2008.

Boards Review: Adrenal insufficiency and adrenal crisis. UW EM Residency Program Boards Review Series. Oct. 2008.

Boards Review: Thyroid disorders. UW EM Residency Program Boards Review Series. Oct. 2008.

Boards Review: Lightning injuries. UW EM Residency Program Boards Review Series. Oct. 2008.

Boards Review: Carbon monoxide poisoning. UW EM Residency Program Boards Review Series. Oct. 2008.

Intussusception. UW EM Residency Program Pediatric Intake Conference. Sept. 2008. Boards Review: Vaginal bleeding and abdominal pain in the non pregnant patient. UW EM Residency Program Boards Review. Sept. 2008.

Boards Review: Local and regional anesthesia. UW EM Residency Program Boards Review. Aug. 2008.

Clinical Teaching:

2015- currentAttending Emergency Medicine Physician, UNC Emergency Department2012-2014Attending Emergency Medicine Physician, UW Emergency Department

<u>Grants</u>

Active

 Victims of Crime Act (VOCA) Grant: UNC SANE Program 2021 Role: PI Dates: Oct 1, 2021-Sept 30, 2023 Source: NC Department of Public Safety/Governor's Crime Commission Amount: \$305,854 Objective: Improve delivery of care to patients experiencing sexual violence by funding full-time SANE coordinator, trauma specialist, and medical director positions.

 Stop Violence Against Women (Stop-VAWA) Grant: UNC SANE Program VAWA Forensic RN Role: PI Dates: Oct 1, 2021-Sept 30, 2022 Source: NC Department of Public Safety/Governor's Crime Commission Amount: \$187,751 Objective: Improve delivery of care to patients experiencing sexual violence by funding full-time forensic RN position.

Inactive

 Stop Violence Against Women (Stop-VAWA) Grant: UNC SANE Program Supplies and Training (2020) Role: PI Dates: Feb 1, 2020-June 30, 2021 Source: NC Department of Public Safety/Governor's Crime Commission Amount: \$218,633 Objective: Improve delivery of care to patients experiencing sexual violence by expanding the supply of SANE nurses, including funding new and continuing training opportunities.

- Stop Violence Against Women (Stop-VAWA) Grant: UNC SANE Program 2019— Equipment and Travel Role: PI Dates: Oct 1, 2019-June 30, 2021 Source: NC Department of Public Safety/Governor's Crime Commission VAWA Amount: \$26,067
- Objective: Improve delivery of care to patients experiencing sexual violence by improving system processes and organizational structure, and funding necessary equipment and training opportunities for SANE nurses.
- Child Maltreatment Telemedicine Outreach Program Role: Consultant, 27% Effort PI: Molly Berkoff, MD Source: The Duke Endowment Amount: \$581,710 Dates: 2016-2018.
 Objective: Improve delivery of care to abused pediatric patients in NC by developing a child maltreatment telehealth network for UNC Hospitals.

Professional Service

Medical Director, Sexual Assault Nurse Examiner (SANE) and Forensic Nurse Program and Chair, SANE Leadership Team, 2018-present

- Lead the transformation of the UNC SANE program, from using on-call nurses with significant staffing gaps to a best practice model utilizing full-time forensic nurses and a trauma specialist, a dedicated mental health provider with expertise in trauma care
- Successfully lobbied the hospital to fund a full-time SANE program coordinator and a full-time forensic nurse
- Secured over \$700,000 in grant funding from the NC Governor's Crime Commission to hire a trauma specialist and an additional full-time forensic nurse
- Expanded to a full Forensic Nursing Program in 2022, with additional services offered including sexual assault, child maltreatment, elder abuse, domestic violence, and human trafficking cases
- Created an annual regional SANE training course, which drew trainees from all over the state, helping to increase the supply of SANE nurses in North Carolina by training 59 nurses since course inception in 2020
- Tackled the larger area of accountability and excellence within the field of forensic nursing and created a statewide database, *Stay SANE*, which tracks SANE training and certifications within the state of North Carolina
- Partnered with the *Better Tomorrow Network* to enroll patients in the RISE study, a smartphone-based intervention aimed at reducing PTSD symptoms following sexual assault
- Partnered with Human Trafficking Capacity Building Center to create a local network of advocacy organizations to provide services to human trafficking victims

Statewide

2016-current	North Carolina Committee on Child Abuse and Neglect, a statewide committee of medical professionals and other community stakeholders working together to improve care of vulnerable children	
Regional 2018-present	Orange County Sexual Assault Response Team (SART), a regional group involving health professionals, law enforcement, advocacy groups, and shelters working to improve care of sexual assault victims.	
University of North Carolina at Chapel Hill School of Medicine		
2016-current	EM Residency Clinical Competency Committee	
2019 -current	UNC School of Medicine Academy of Educators	
UNC Hospitals		
2022-current	UNC EM Finance Committee	
2020-current	UNC EM Diversity, Equity & Inclusion Committee	
2017	Aging Gracefully in Emergency Medicine Taskforce	
2016-current	Central Line Insertion Course Project	
2016-current	UNC EM Educational Committee	
2016-current	Core Faculty, Department of Emergency Medicine	
2015-2017	UNC Hospital Infection Control Committee	