CURRICULUM VITAE

Ryan Hakimi, DO, MS, NVS, RPNI, CPB, FNCS, FCCM

Professor, Department of Medicine (Neurology)
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EDUCATION AND TRAINING

2022	Institute for Safe Medication Practice (ISMP) Medication Safety Intensive
	(represented Society of Critical Care Medicine Drug Shortages and
	Medication Safety Committee at 2-day International Workshop)
2020	Advanced Neurology and Neurosurgery Coding Certificate Program,
	American Academy of Professional Coders
2019-2020	Certified Professional Biller (CPB) Certificate Program, American Academy
	of Professional Coders
2007-2009	Neurocritical Care and Stroke Fellow, Duke University Medical Center,
	Durham, NC
2004-2007	Neurology Resident, Michigan State University-Beaumont Health
	(Botsford), Farmington Hills, MI
2003-2004	Internal Medicine Intern, Michigan State University-Beaumont Health
	(Botsford), Farmington Hills, MI
1999-2003	Doctor of Osteopathic Medicine, Michigan State University College of
	Osteopathic Medicine, East Lansing, MI
1997-1999	Master of Science in Environmental Health, Major Radiological Health,
	University of Michigan-Rackham Graduate School, Ann Arbor, MI
1993-1997	Bachelor of Science in Chemistry, Majors: Chemistry & Cell-Molecular
	Biology, University of Michigan, Ann Arbor, MI

PROFESSIONAL EXPERIENCE

Academic:	
2021-Pres	Professor, Department of Medicine, Neurology Division, University of
	South Carolina School of Medicine-Greenville, Greenville, SC
2019-2021	Associate Professor, Department of Medicine, Neurology Division,
	University of South Carolina School of Medicine-Greenville, Greenville, SC
2016-2018	Clinical Associate Professor, Department of Medicine, Neurology Division,
	University of South Carolina School of Medicine-Greenville, Greenville, SC

2015- 2016	Associate Professor, Department of Neurology, Director, Critical Care Neurology, University of Oklahoma Health Sciences Center, Oklahoma City, OK
2011-2016	Clinical Assistant Professor (voluntary faculty), Department of Internal Medicine, Oklahoma State University College of Osteopathic Medicine, Tulsa, OK
2009-2015	Assistant Professor, Department of Neurology, Director, Critical Care Neurology, University of Oklahoma Health Sciences Center, Oklahoma City, OK
1997-1999	Applied Health Physics Fellow, U.S. Department of Energy, Ann Arbor, MI and Albuquerque, NM (while obtaining Master's Degree)
1996-1997	Research Assistant, University of Michigan Department of Chemistry, Ann Arbor, MI (while obtaining Bachelor's Degree)
1995	Laboratory Teaching Assistant, University of Michigan Department of Chemistry, Ann Arbor, MI (while obtaining Bachelor's Degree)
1994-1995	Research Assistant, University of Michigan Medical School, Department of Biochemistry (while obtaining Bachelor's Degree)

Administrative:

2021-Present	Chair, Prisma Health-Upstate Pharmacy and Therapeutics Committee
2019-Present	Medical Director, Greenville Memorial Hospital TCD Services, Prisma
	Health-Upstate, Greenville, SC
2016-2023	Medical Director, Greenville Memorial Hospital Neuro ICU, Prisma
	Health-Upstate, Greenville, SC
2016-2019	Medical Director, Greenville Memorial Hospital Inpatient Neurology
	Services, Prisma Health-Upstate, Greenville, SC
2009-2016	Medical Director, OU Medical Center Neurosciences Intensive Care Unit,
	Oklahoma City, OK

Hospital/Agency:

nospital/Agen	icy:
2016-Present	Staff physician, Neurology service, Prisma Health-Upstate, Greenville, SC
2009-2016	Staff physician, Neurology service, OU Medical Center, Oklahoma City, OK
2009-2016	Consultant, The Children's Hospital of Oklahoma at OU Medical Center,
	Oklahoma City, OK
2008-2009	Staff neurologist, Moses Cone Medical Center, Greensboro, NC
2007-2008	Outreach Clinic neurologist, Dorthea Dix Hospital, Raleigh, NC
LICENSES	
2016-Pres	Medical License, State of South Carolina, Active
2009-2017	Medical License, State of Oklahoma, Inactive
2007-2009	Medical License, State of North Carolina, Inactive

Medical License, State of Michigan, Inactive

2003-2010

CERTIFICATION OR BOARD STATUS

2020-Present Advanced Neurology and Neurosurgery Coding Certification, American Academy of Professional Coders (no time limit)

2020-Present Board Certified in Neurocritical Care, The Society of Neurological

Surgeons Committee on Advanced Subspecialty Training (CAST) (no time

limit)

2020-Present Certified Professional Biller (CPB), American Academy of Professional

Coders (expires 11/30/23)

2019-Present Board Certified NVS (Neurovascular Specialist), American Society of

Neuroimaging (no time limit)

2018-Present Certified in ENLS (Emergency Neurologic Life Support), Neurocritical Care

Society (expires 2023)

2010- Present Registered Physician in Neurovascular Interpretation(RPNI) (Board

Certified in Neurosonology: Carotid Ultrasound, Transcranial Doppler Ultrasound, Ultrasound Physics), American Society of Neuroimaging (no

time limit)

2008-Present Board Certified in Neurology, American Osteopathic Board of Neurology

and Psychiatry (expires 12/31/28)

2003-Present Certified in ACLS and BLS

SCHOLARSHIP RESEARCH FUNDING

Active

A Safety and Efficacy Study of Defibrotide in the Prevention of Chimeric Antigen

Receptor-T-cell-associated Neurotoxicity Clinicaltrials.gov Identifier: NCT03954106

Funding: Jazz Pharmaceuticals

Role: Neurology Site PI

Completed

Stroke Outcomes Optimization Project (SOOP)

Role: Sub investigator from 2018-2020 Funding: Clemson University Seed Grant

Musical Intervention in the Critically III Setting

Role: CO-PI

Funding: NIH R21 application, declined

2019

Impact of Music in the ICU

Funding: Seed Grant GHS Foundation

Role: Sub investigator

2017-2018

A week in the neurocritical care unit: point prevalence observational study in

neurocritical care: PRINCE Study

Neurocritical Care Society International Research Consortium

Suarez, J.I., Martin, R.H., Bauza, C. et al. Worldwide Organization of Neurocritical Care:

Results from the PRINCE Study Part 1. Neurocrit Care 32, 172–179 (2020).

Role: Site PI Unfunded

7/21/2014 to 8/15/2014

ATACH-II, a five (5) year, multi-center, randomized, controlled, Phase-III trial with blinded outcome ascertainment to determine the efficacy of early, intensive anti-hypertensive treatment using intravenous nicardipine for acute hypertension in subjects with spontaneous supratentorial ICH.

National Institute of Neurological Disorders and Stroke part of the National Institutes of Health.

Role: Sub investigator Funded for \$110,064

2011-2014

Impact of Sepsis Intervention Program on Mortality, ICU Length of Stay, and Total Length of Stay. ISI Study

Role: PI Unfunded 2010-2012

Randomized trial of clazosentan in patients with aneurysmal subarachnoid hemorrhage undergoing endovascular coiling. CONSCIOUS-III Trial

Role: Sub investigator Actelion Pharmaceuticals Ltd, San Francisco, CA

Funded for \$18,000

2009-2010

MISTIE: minimally-invasive surgery plus rtPA for intracerebral hemorrhage evacuation

Role: Sub investigator during fellowship

2008-2009

NEST-2: Effectiveness and safety of transcranial laser therapy for acute ischemic stroke

Role: Sub investigator during fellowship

2008-2009

Accelerate Trial: Evaluation of IV clevedipine in patients with intracerebral hemorrhage and acute hypertension

Role: Sub investigator during fellowship

2007-2009

HELP Database: Characterizing all Code Blue data from Duke University Medical Center and frequency of hypothermia therapy provided in first year of implementation of a post-cardiac arrest therapeutic hypothermia protocol.

Duke University Medical Center, Durham, NC

Role: PI during fellowship

Unfunded 2007-2009

Triangle Health Care Providers Survey: a multi-center survey assessing role of hypothermia therapy in post cardiac arrest patients

Duke University Medical Center, Durham, NC; University of North Carolina Medical

Center, Chapel Hill, NC; Wake Med Health and Hospitals, Raleigh, NC

Role: PI during fellowship

Unfunded 2007-2009

TEACHING MATERIALS DEVELOPED

I LACITING IVI	ATEMALS DEVELOTES
2023	Co-Director of first-ever Joint Workshop between American Society of Neuroimaging and Neurocritical Care Society: Neuroimaging in
	Neurocritical (Phoenix, AZ)
2022	Neurocritical Care Society US Section: Creating an Ultrasound Program: Billing and Documentation
2022	American Academy of Neurology APP Education Series: What's New in Critical Care Neurology
2022	Neurocritical Care Society On Demand Education: Update on Optimization of Documentation, Share APP Billing, and Risk Adjustment
2022	Neurocritical Care ON CALL: Point of Care Ultrasound (POCUS)
2022	American Academy of Neurology APP Education Series: Spine
	Neuroimaging
2021	Neurocritical Care ON CALL Author Insights: Billing and Coding in the Neuro ICU
2021	American Academy of Neurology APP Education Series: Introduction to
	Brain CT and MRI
2020	Neurocritical Care ON CALL Author Insights: Introduction to TCD in
	Neurocritical Care
2017	Member (one of six), Exam Writing Committee for American Society of
	Neuroimaging Neurovascular Specialist (NVS) Certification Exam
2016	Neurocritical care curriculum for GHS Neuro ICU Advanced Practice
	Providers; including 17 hours of didactic sessions and procedural
	competencies

- 2014-2015 Neurology lectures adapted for teaching at Oklahoma City Community College, School of Nursing.
- 2010-2015 Neurosciences Intensive Care Unit Clinical Skills Sessions; bi quarterly half-day simulations at the OU Clinical Skills Education and Training Center teaching residents and advanced practice providers central line placement with and without ultrasound assistance, endotracheal intubation, bag-mask ventilation, and lumbar puncture.
- 2012-2013 Nervous System Course for MS-I students, Oklahoma State University College of Osteopathic Medicine (OSUCOM), Tulsa, OK. Nervous System Core Curriculum Development Committee Member. Invited by Dean of OSUCOM to be the only neurologist on the committee.

PUBLICATIONS

Refereed journals (all of the following publications are peer-reviewed)

- 1) Rubin, M, Rinksy, B, Tegeler, C, Douville, C, Bennett, J, LaRovere, K, Schlick, C, O'Brien, N, Genova, R, Rundek, T, **Hakimi, R**, Alexandrov, AV. American Academy Of Neurology Revised TCD Guidelines (manuscript)
- 2) Lucas, T, Barrara, J, Blum, B, Ward, A, Schammel, C, Madeline, L, Lynn, M, **Hakimi, R**. Insurance Status Influence on Discharge Location and Length of Stay After Ischemic Stroke (manuscript)
- 3) Patel, M, Chinha, A, Wang, S, **Hakimi, R**. Drug Shortage Alert: Heparin Sodium Solution for Injection. *Society of Critical Care Medicine: Medication Shortage and Drug Safety Resources* (in press)
- 4) **Hakimi, R.** The Business of Neurocritical Care: Billing Updates for 2023, *Currents,* May 2023 (in press).
- 5) **Hakimi, R**, Brown, AR. Reducing Medication Errors in a Crisis. *SCCM Critical Connections*, Vol. 22, No. 1, Winter 2023.
- 6) **Hakimi, R**. Imaging of Central Nervous System Hemorrhage. *CONTINUUM*: Lifelong Learning in Neurology, *Neuroimaging*, Vol.29, No.1; p. 73-103, February 2023. doi: 10.1212/CON.00000000001219.
- 7) **Hakimi, R.** The Business of Neurocritical Care:Quality-based compensation: The future of physician incentive programs? *Currents,* October 2022.
- 8) **Hakimi, R.** The Business of Neurocritical Care: Understanding Split-share Billing with APPs. *Currents*, August 2022.
- 9) Sarwal, A, Venegas, C, Skinner, E, LaRovere, K, Puckett, M, Fields, E, **Hakimi, R**.

 Neurocritical Care ON CALL: Point of Care Ultrasound (POCUS), *Neurocritical Care ON CALL*, July 2022.
- 10) Yakhkind, A, Nobleza, C, Hakimi, R. The Business of Neurocritical Care: Business of Neurocritical Care: Choosing a First Job after Fellowship: Review of Practice Models from a New Grad Perspective. Currents, February 2022.
- 11) **Hakimi, R.** The Business of Neurocritical Care: How Your Documentation Impacts Your Hospital. *Currents*, December 2021.
- 12) Hakimi, R. The Business of Neurocritical Care: Practice Models and Models of

- Documentation. Currents, August 2021.
- 13) Hakimi, R. The Business of Neurocritical Care: Getting Started. Currents, May 2021.
- 14) Stollings, J, Chaykosky, D, **Hakimi, R.** Neuromuscular Blocking Agents in the ICU: Shortages, Pitfalls, and Strategies Moving Forward. *SCCM Critical Connections*, November/December 2020.
- 15) **Hakimi, R** and Wagner, M. Optimization of Pharmacy Services When Time Is of the Essence. *SCCM Critical Connections*, Fall 2020.
- 16) **Hakimi,** R, Alexandrov, AV, Garami, Z. Neuroimaging: Neuro-ultrasonography. *Neurologic Clinics* 38 (2020) 215–229.
- 17) Lee, DC, Fiester, SE, Madeline, LA, Fulcher, JW, Ward, ME, Schammel, CMG, **Hakimi, R**. Acanthamoeba spp. and Balamuthia mandrillaris leading to fatal granulomatous amebic encephalitis. *Forensic Science, Medicine and Pathology*, November 2019.
- 18) Wagner, M and **Hakimi, R**, Clinical Considerations in Managing the IVIG Shortage. *SCCM Critical Connections*, November/December 2019.
- 19) **Hakimi, R**. Greenville Memorial Hospital Neuro ICU Continues to Grow. *Currents*, November 2019.
- 20) **Hakimi R**, Fritschle, AC, Sheffler, M, Roberts, R. Peripheral Vasopressors: Friend or Foe? *SCCM Critical Connections*, May/June/July 2019.
- 21) Lucas, T, Pahlavanzadeh, M, Massey, P, Schammel, C, **Hakimi, R**. Mechanical Mitral Valve Replacement Without Anticoagulation: A Case Report. *Current Neurobiology*. 2019; 10(3): 130-133.
- 22) **Hakimi, R**, Pahlavanzadeh M, Barrera J, Schammel C, Morris S, Sivakumar SS. Elective proctocolectomy to facilitate treatment of Cerebral Venous Thrombosis (CVT) in Ulcerative Colitis (UC) complicated by gastrointestinal hemorrhage: A case report. *Current Neurobiology* 2019; 10(2): 79-83.
- 23) **Hakimi, R** and Sivakumar, SS, Neuroimaging of Carotid Dissection. *Current Pain and Headache Reports*, 23(2); 2019.
- 24) **Hakimi, R**, Liebeskind, DS, Rundek, T, Alexandrov, AV, Extended Window of Treatment in Acute Stroke is Not for All Brain Imaging is Critical, *Currents*, 2018;13(1):9.
- 25) Fritschle, AC, Walker, P, **Hakimi R**. Cost, safety, and clinical considerations for IV to Oral Conversions of Antiepileptic Medications. *SCCM Critical Connections*, 17 (3); June/July 2018.
- 26) Elfritz, J, Mahmoud, A, **Hakimi, R**. Ethical Dilemmas Related to Drug Shortages. *SCCM Critical Connections*, 2; April 2017.
- 27) **Hakimi, R**, Glass, M, Wilson, SS. Drug Shortage Communication-Who, When, and How. *SCCM Critical Care Connections*, 4; August 2016.
- 28) **Hakimi, R** and Garg, A. Imaging of Hemorrhagic Stroke. *CONTINUUM*: Lifelong Learning in Neurology. Vol. 22, No. 5, *Neuroimaging*:1424-1450, October 2016.
- 29) Ludwig, A, Duvall, J, Peterson, JE, **Hakimi R**. Marburg's Variant of Multiple Sclerosis with Extensive Brain Lesions: An Autopsy Case Report. *International Journal of Neurology and Neurotherapy*, 2015; 2(2):1-4.

- 30) Fesler, JR, **Hakimi R**, Fields, EM, Hakimi AS. Does the Benefit of Therapeutic Hypothermia in Refractory Status Epilepticus Depend on Seizure Etiology? *International Journal of Neurology and Neurotherapy*, 2015; 2(1):1-5.
- 31) **Hakimi, R**, Oklahoma Medical Center Neurosciences ICU Continues to Expand, *Currents*, 2014; 9(3):24-25.
- 32) Van Straten AF, **Hakimi R**, Thompson D, Fesler J, Hakimi AS. SIRPIDs: Prevalence and outcome in critically-ill patients, *Journal of Clinical Neurophysiology*, 2014; 31(5):418-421.
- 33) **Hakimi, R**, McDonagh, DL. Unconsciousness in the intensive care unit: A practical approach. *International Anesthesiology Clinics*. 2008; 46(3):171-194.
- 34) Guilmette, RA, **Hakimi, R**, Durbins, PW, Xu, J, Raymonds, N, Competitive binding of Pu and Am with bone mineral and novel chelating agents, *Radiation Protection Dosimetry*, 2003; 105(1-4):527-534. Presented as platform presentation by **Hakimi, R** at 1999 Annual International Health Physics Society, Philadelphia, PA.
- 35) Cheng, J, Farutin, V, Wu, Z, Jacob-Mosier, G, Riley, B, **Hakimi, R**, Cordes, EH, Purine nucleoside phosphorylase-catalyzed, phosphate-independent hydrolysis of 2-amino-6-mercapto-7-methylpurine ribonucleoside, *Bioorganic Chemistry*, 1999; 27(4):307-325.
- 36) Farutin, V, Masterson, L, Andricopulo, AD, Cheng, J, Riley, B, **Hakimi, R**, Frazier, JW, Cordes, EH, Structure-activity relationships for a class of inhibitors of purine nucleoside phosphorylase, *Journal of Medicinal Chemistry*, 1999; 42:2422-2431.

Non-refereed and other publications

- 1) Goodloe, J and Hakimi, R, Post-cardiac Arrest Treatment-Adult and Pediatric. EMS
 System for Metropolitan Oklahoma City and Tulsa 2014 Medical Control Board
 Treatment Protocols. Emergency Medical Services for Metropolitan Oklahoma
 City and Tulsa, Medical Control Board, Office of the Medical Director. 2013.
 http://app.okctulsaomd.com/src/47_PROTOCOL_4_J_STATE_OF_OKLAHOMA_EMS_PROTOCOLS_2014_POST_CARDIAC_ARREST_TREATMENT_ADULT_PEDIATRIC_MCB_VERSION_2014_MCB_pdf
- 2) **Hakimi, R**, Durham County (NC), EMS Post-cardiac Arrest Therapeutic Hypothermia Protocol. 2008.

Book chapters

- 1) Wang, J, **Hakimi, R**. Brain-PocUS: TCCS / TCD as a complementary assessment tool in coma patients (manuscript).
- 2) **Hakimi, R**, Sivakumar, SS. Vertebral Steal. *Neurovascular Sonography: A Pocket Reference*. Ziai, WC and Cornwell, CL; Springer 2022.
- 3) Young, P, Philips, AK, **Hakimi, R.** TCD Equipment, Accreditation, Reimbursement, and Practice Issues. *Neurovascular Sonography: A Pocket Reference*. Ziai, WC and Cornwell, CL; Springer 2022.
- 4) Sivakumar, SS, **Hakimi, R**. Reversed Robin Hood Syndrome. Neurosonology in Critical Care (NESCC). https://doi.org/10.1007/978-3-030-81419-9.
- 5) Pinillos, OM, Rodriguez, CN, **Hakimi, R**. Transcranial Doppler Ultrasound Pulsatility Index (PI): Utility and Clinical Interpretation. Neurosonology in Critical Care (NESCC). https://doi.org/10.1007/978-3-030-81419-9

6) **Hakimi, R**, Dority, J, McDonagh, DL, Occlusive Cerebrovascular Disease. Fundamentals of Neuroanesthesia: A Physiological Approach to Clinical Practice. 2013.

Abstracts

(*denotes mentor)

- 1) Mullaguri, N., Batenini, A., and **Hakimi, R**.* Tiered Neurocritical care Advanced Practice Providers Advancement through Annual Educational and Procedural competence pathway. Poster Presentation at American Academy of Neurology Annual Meeting (virtual)
- Batenini, A., Mullaguri, N., and Hakimi, R.* Proposal for Tiered Neurocritical care Advanced Practice Providers Advancement through Annual Educational and Procedural competence pathway. Poster Presentation at Neurocritical Care Society Annual Meeting, Chicago, IL
- 3) Mattner, O., Serna, D., and **Hakimi, R**.* Hemicraniectomy Resulting in Intracranial Double-Pulse Phenomenon as Captured on TCD. Poster Presentation at American Society of Neuroimaging Annual Meeting, Scottsdale, AZ
- 4) Hajighasemi, F. and **Hakimi, R**.* Hyperemia on TCD can suggest EVD related ventriculitis despite negative CSF cultures. Poster presentation at American Society of Neuroimaging
- 5) Lee, DC, Fiester, SE, Madeline, LA, Fulcher, JW, Ward, ME, Schammel, CM, **Hakimi, R**.* Acanthamoeba spp. and Balamuthia mandrillaris leading to fatal granulomatous amebic encephalitis. Poster presentation at American Society of Neuroimaging Annual Meeting, Atlanta, GA. *J Neuroimaging*.
- 6) Lucas, T, Barrara, J, Blum, B, Ward, A, Schammel, C, Madeline, L, Lynn, M, **Hakimi, R***. Ischemic Stroke Treatment and Outcomes by Initial Severity for Greenville Health System 2014-2016. Poster presentation at 2019 South Carolina Medical Association Meeting.
- 7) Lucas, T, Barrara, J, Blum, B, Ward, A, Schammel, C, Madeline, L, Lynn, M, **Hakimi, R***. Insurance Status Influence on Discharge Location and Length of Stay After Ischemic Stroke. Best Medical Student Poster Award Winner at the University of South Carolina School of Medicine, Health Science Research Showcase 2019.
- 8) **Hakimi, R*** and Hierholzer, S. Chronic Sinusitis Leading to Massive Spontaneous Pneumocephalus from an Ethmoid Sinus Encephalocele and Fistula. Poster presentation at American Society of Neuroimaging Annual Meeting, San Juan, Puerto Rico. *J Neuroimaging*.
- Hakimi, R* and Hierholzer, S. Aorto-tracheo/pulmonic Fistula from Squamous Cell Carcinoma Leading to Cerebral Air Embolism. Poster presentation at American Society of Neuroimaging Annual Meeting, Austin, TX. J Neuroimaging, 2018;28(2):225-233.
- 10) Pahlavanzadeh, M and Hakimi, R*. Lumbar Puncture as a Treatment for IVH in Patients with a Good Neurological Examination. Poster presentation at American Society of Neuroimaging Annual Meeting, Austin, TX. J Neuroimaging, 2018;28(2):225-233.

- 11) Topoluk, N, Collins, J, Schammel, C, Schammel, D, Lynn, M, Madeline, L, Hakimi, R* Clinical Correlations of Vectors of Neoplastic Spread in Patients with Pituitary Adenomas. Presented as platform poster presentation at American Society of Neuroimaging Annual Meeting, Los Angeles, CA. J Neuroimaging, 2017;27(2):262-267.
- 12) Hakimi, R*, Butchee, M, Duvall, J, Fields, E, Hakimi, AS. Should a Ketogenic Diet be Considered Earlier in the Treatment Course of Adults with Super-refractory Status Epilepticus? Poster presentation at the Neurocritical Care Society Annual Meeting, Seattle, WA. Abstract in Neurocritical Care (2014) 21:S277.
- 13) Fesler J, **Hakimi R***, Talsania S, Fields E. Does the Benefit of Therapeutic Hypothermia in Refractory Status Epilepticus Depend on Seizure Etiology? American Academy of Neurology 66th Annual Meeting Poster Presentation. Abstract in *Neurology* April 2014: 82 (10); Supplement P1.273.
- 14) **Hakimi, R*,** Talsania, S, Fesler, J, Fields, E. Does the Efficacy of Therapeutic Hypothermia in Refractory Status Epilepticus Depend on Seizure Etiology? 11th Annual Neurocritical Care Society Meeting, Philadelphia, PA. Abstract in *Neurocritical Care* (2013) 19:S218.
- 15) Van Straten, AF, **Hakimi**, **R**, Hakimi, AS. SIRPIDs: Prevalence and Outcome in Critically-ill Patients. 2013 American Society of Clinical Neurophysiology Annual Meeting, Miami, FL. Abstract in *J. Clin Neurophys* 30(3):213-234, June 2013.
- 16) Brabec, J and **Hakimi, R***. Southern Tick Associated Rash Illness (STARI) Presenting as Meningoencephalitis and Status Epilepticus. 2012 Society for Critical Care Medicine Annual Congress, Houston, TX. Abstract in *Critical Care Medicine*. 39(12):264, December 2011.
- 17) **Hakimi, R***, Welte, SE, Bass, EL. Deceptive Imaging: MRI Brain Demonstrates Subacute Intracranial Hemorrhage Missed on CT. Poster presentation at 2011 American Society of Neuroimaging Annual Meeting, Sanibel Island, FL. *J. Neuroimaging*, 2011;21(1):97
- 18) Garg, A and **Hakimi, R***. Recurrent Cerebral Edema and Herniation in a Young Patient on Chronic Hemodialysis who Presented with PRES, *Neurocritical Care*, 2010; 13:S141 (abstract). Presented at 2010 Neurocritical Care Society Meeting, San Francisco, CA.
- 19) **Hakimi, R**, Katz, LM, Glickman, SW, Cairns, CB, Olson, DM, Graffagnino, AC, Graffagnino, C, Improving Implementation of Post-cardiac Arrest Hypothermia Therapy, *Neurocritical Care*, 2008; 9:S152 (abstract). Presented at 2008 Neurocritical Care Society Annual Meeting, Las Vegas, NV.
- 20) Rieman, K, **Hakimi, R**, Olson, B, Halley, N, Thoyre, S, Olson, D. The Role of Glasgow Coma Scores in Modeling APACHE IV Scores in Neuro-ICU Patients, *Am J Crit Care* May 2008 vol. 17 no. 3 276-294. Presented as platform presentation by K. Rieman at 2008 National Teaching Institute and Critical Care Exposition Chicago, IL.
- 21) Rieman, K, Hakimi, R, Olson, B, Halley, N, Thoyre, S, Olson, D, Contribution of GCS in calculation of APACHE IV scores to predict mortality and length of stay in NICU patients, *Neurocritical Care*, 2008; 8(61):177 (abstract). Presented at 2007 Neurocritical Care Society Annual Meeting, New Orleans, LA.

PRESENTATIONS

Local

- 3/23 Medicine Grand Rounds Lecture, "New Trends in Neurocritical Care"-University of South Carolina-Greenville, Greenville, SC.
- 5/22 Neurology Grand Rounds Lecture, "Brain Death Determination in Adults"-University of South Carolina-Greenville, Greenville, SC.
- 4/17 Medicine Grand Rounds Lecture, "Evaluating Brain Death in Adults"-University of South Carolina-Greenville Health System, Greenville, SC.
- 4/14 Integris Baptist Hospital Neurology Grand Rounds, "Dilemmas in Management of Intracranial Hemorrhage" Oklahoma City, OK
- 2/14 Vascular Medicine Grand Rounds, "Clinical Applications of Transcranial Doppler Ultrasound"-University of Oklahoma Health Sciences Center
- 8/13 OUMC Respiratory Therapy Grand Rounds, "Assessing Brain Death in Adult Patients"- University of Oklahoma Health Sciences Center
- 11/11 Integris Baptist Hospital Neurology Grand Rounds, "Update on Brain Death in Adults" Oklahoma City, OK
- 11/10 Integris Baptist Hospital Neurology Grand Rounds, "Fundamentals of Neurocritical Care Part II: Status Epilepticus and Post-Cardiac Arrest Therapeutic Hypothermia" Oklahoma City, OK
- 4/10 Integris Baptist Neurology Grand Rounds, "Critical Care Neurology"-Oklahoma City, OK
- 2/10 Charcot Neurological Society Meeting, "Critical Care Neurology"-Oklahoma City, OK

Regional

- 5/23 Oklahoma Osteopathic Association Annual Conference, "Ischemic Stroke Risk Management for Primary Care Providers, Oklahoma City, OK (presented virtually)
- 2/23 South Carolina Osteopathic Medical Association Winter Conference, "Specialist Panel: How Primary Care Providers Can Make Better Referrals", Hilton Head, SC.
- 11/22 12th Annual Prisma Health Stroke Symposium, "ICP Management: Pre-hospital to Neuro ICU", Greenville, SC
- 6/22 South Carolina Osteopathic Medical Association Annual Conference, "5 Minute Neuro Exam", Spartanburg, SC.
- 10/21 South Carolina Chapter of the American College of Physicians Scientific Meeting, "Acute Stroke Management for Internists", Charleston, SC.
- 5/21 Spartanburg Regional Medical Center, Surgical Critical Care Grand Rounds, "Contemporary Status Epilepticus Management", virtual.
- 2/21 South Carolina Osteopathic Medical Association Winter Conference, "Outpatient Ischemic Stroke Management", virtual.
- 10/20 2020 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, "Fatal granulomatous amebic encephalitis in Upstate South Carolina", Greenville, SC.

- 4/20 4th Annual Dempsey Research Conference, "Acanthamoeba spp. and Balamuthia mandrillaris leading to fatal granulomatous amebic encephalitis", Greenville, SC.
- 2/20 South Carolina Osteopathic Medical Association Winter Conference, "Billing and Documentation for Inpatient Providers", Columbia, SC.
- 4/19 South Carolina Medical Association Annual Meeting, "Ischemic Stroke Treatment and Outcomes by Initial Severity: a single institution survey", Charleston, SC.
- 4/19 University of South Carolina School of Medicine, Health Science Research Showcase, "Insurance Status Influence on Discharge Location and Length of Stay After Ischemic Stroke", Greenville, SC.
- 4/19 2019 Upstate Vascular Symposium, "Clinical Applications of TCD", Greenville, SC
- 10/16 Greenville Health System Stroke Symposium, "New Frontiers in Intracerebral Hemorrhage", Greenville, SC.
- 9/14 Oklahoma Critical Care Consortium: 2014 Critical Care Essentials, "Understanding Intracerebral Hemorrhage", OKC, OK (published as hardcopy and utilized as for teaching at Oklahoma College Community College, College of Nursing)
- 9/14 Oklahoma Critical Care Consortium: 2014 Critical Care Essentials, "Evaluation and Management of Traumatic Brain Injury Patients", OKC, OK (published as hardcopy and utilized for teaching at Oklahoma College Community College, College of Nursing)
- 6/14 Oklahoma Osteopathic Association Trauma Conference, "Evaluation and Management of Patient with Blood on Head CT"-Lawton, OK (published as hardcopy)
- 4/14 Oklahoma Osteopathic Association Annual Convention, "Dilemmas in Management of Intracranial Hemorrhage"-Norman, OK (published as electronic copy)
- 4/14 Oklahoma Osteopathic Association Annual Convention, "Clinical Uses of Transcranial Doppler Ultrasound"-Norman, OK (published as electronic copy)
- 9/13 Oklahoma Critical Care Consortium: 2013 Critical Care Essentials, "Determining Brain Death in Adult Patients", Norman, OK (published as hardcopy)
- 8/13 Oklahoma Osteopathic Association Summer CME Meeting, "Evaluation and Management of Concussion in Sports"-Midwest City, OK (published as electronic and hardcopy)
- 6/13 OSRC Oklahoma Society for Respiratory Care Annual Summer Seminar, "Assessing Brain Death in Adult Patients", Shawnee, OK (published as hardcopy)
- 2/12 LifeShare Advisory Board Presentation, "Update on Brain Death in Adults", Stroud, OK
- 8/11 Oklahoma Osteopathic Association Summer CME Meeting, "Post-cardiac Arrest Therapeutic Hypothermia"-Oklahoma City, OK (published as electronic and hardcopy)
- 1/11 Oklahoma Osteopathic Association Neurological Update, "Advance in Preventing Primary and Secondary Stroke"-Tulsa, OK (published as electronic and hardcopy)
- 8/10 Kansas City College of Osteopathic Medicine Summer CME Conference "Fundamentals of Neurocritical Care"-Kansas City, MO (published as hardcopy)

- 4/10 University of Oklahoma Annual Anesthesia Symposium, "Current Trends in the Management of Traumatic Brain Injury"-Oklahoma City, OK (published as hard copy)
- 3/10 University of Oklahoma Neurology Nursing Symposium, "Stroke and "Critical Care Neurology Update"-Oklahoma City, OK (published as hardcopy)
- 3/10 University of Oklahoma 18th Annual Symposium on Neurology for Primary Care Providers, "Critical Care Neurology for Primary Care Providers"-Oklahoma City, OK (published as hardcopy)
- 2/10 Oklahoma Osteopathic Association Neurological Update, "Update on Critical Care Neurology"-Tulsa, OK (published as hardcopy)

National and International

- 8/23 Co-Director of Joint Workshop between American Society of Neuroimaging and Neurocritical Care Society: Neuroimaging in Neurocritical (Phoenix, AZ)
- 1/23 NCS POCUS Webinar: "Creating an Ultrasound Program: Billing & Documentation" (published electronically)
- 10/22 20th Neurocritical Care Society Annual Meeting, "Cerebrovascular TCD Cases", San Antonio, TX (presented virtually), (published electronically)
- 10/22 20th Neurocritical Care Society Annual Meeting, "Critical Care Documentation and Billing in APP Led Teams", San Antonio, TX (presented virtually), (published electronically)
- 10/22 American Academy of Neurology Fall Conference, "Neuroimaging for Advanced Practice Providers", Las Vegas, NV.
- 10/22 American Academy of Neurology Fall Conference, "Neurocritical Care for Advanced Practice Providers", Las Vegas, NV.
- 10/22 American Osteopathic Association Annual Educational Meeting (OMED) 2022, "Dizziness Evaluation in the ED", Boston, MA (presented virtually), (published electronically)
- 9/22 American Academy of Neurology Advance Practice Provider Neurology Education Series, "What's New in Critical Care Neurology", Virtual Meeting (published electronically)
- 6/22 Panelist at NCS Professional Development Workshop Series, "Billing and Coding" (virtual)
- 6/22 Houston Methodist TCD Master Class, "TCD in the Neuro ICU", Houston, TX (presented virtually).
- 4/22 51st Congress of the Society of Critical Care Medicine, "Critical Care Crosstalk Session: "Building the Multidisciplinary Multi-professional ICU Team", (virtual), (published electronically).
- 4/22 American Academy of Neurology, "Case-based Neuroimaging for Advanced Practice Providers", Seattle, Washington (published electronically).
- 2/22 Panelist at NCS Professional Development Workshop Series "Hospital Metrics and Rankings" (virtual)

- 11/21 American Academy of Neurology Advance Practice Provider Neurology Education Series, "Spine Neuroimaging", Virtual Meeting (published electronically)
- 10/21 19th Neurocritical Care Society Annual Meeting, "How to Build a TCD program: Billing, Coding, Reports, and Accreditation", Chicago, IL (published electronically)
- 10/21 American Osteopathic Association Annual Educational Meeting (OMED) 2021, "Acute Stroke Management for the EM Provider", Virtual Meeting (published electronically)
- 2/21 50th Congress of the Society of Critical Care Medicine, "Critical Care Crosstalk Session: How to Build a Multidisciplinary Multi-professional ICU Team: Perspectives from Neurology, Surgery, and Emergency Medicine Trained ICU Directors", (virtual), (published electronically).
- 2/21 50th Congress of the Society of Critical Care Medicine, "Continue the Conversation: Osteopathic Section", (virtual), (published electronically).
- 1/21 American Society of Neuroimaging Annual Meeting, "Incorporating Neuroimaging in Prognostication Post Cardiac Arrest", (virtual), (published electronically).
- 1/21 American Society of Neuroimaging Annual Meeting, "Critical Care Neurosonology", (virtual), (published electronically).
- 9/20 18th Neurocritical Care Society Annual Meeting, "Maximizing Billing with Efficient Documentation", Virtual Meeting (published electronically)
- 7/20 American Academy of Neurology Advance Practice Provider Neurology Education Series, "Neuroimaging", Virtual Meeting (published electronically)
- 7/20 Neurocritical Care On Call Series, "Introduction to TCD in Neurocritical Care", Virtual Meeting (published electronically)
- 3/20 American Society of Neuroimaging Annual Meeting, "Multimodal Imaging Guiding the Stroke Alert Process", Atlanta, GA (published electronically)
- 3/20 American Society of Neuroimaging Annual Meeting, "Imaging Strategies for Stroke Patients in the ED", Atlanta, GA (published electronically)
- 3/20 American Society of Neuroimaging Annual Meeting, "CT Basics", Atlanta, GA (published electronically)
- 2/20 49th Congress of the Society of Critical Care Medicine, "Critical Care Crosstalk Session: So You Want to be a Medical Director, Now What?"
- 10/19 17th Neurocritical Care Society Annual Meeting, "Debates Session: Palliative Care Should be Provided by the Primary Team", Vancouver, British Columbia
- 5/19 American Academy of Neurology Annual Meeting, "Acute Stroke Imaging for Advanced Practice Providers", Philadelphia, PA (published electronically)
- 5/19 American Academy of Neurology Annual Meeting, "Imaging Findings in Anoxic Brain Injury", Philadelphia, PA (published electronically)
- 5/19 American Academy of Neurology Annual Meeting, "Introduction to MRI Imaging Sequences", Philadelphia, PA (published electronically)
- 2/19 Society of Critical Care Medicine, "Clinical Pharmacy and Pharmacology Section Cross Talk Session Drug Shortages: Playing to our Advantage", San Diego, CA

- 1/19 American Society of Neuroimaging Annual Meeting, "Neuroimaging for Trainees to Advanced Practice Providers", San Juan, PR (published electronically)
- 9/18 16th Annual Neurocritical Care Society Annual Meeting, "TCD Stroke Cases", Boca Raton, FL (published electronically)
- 9/18 16th Annual Neurocritical Care Society Annual Meeting, Moderator and faculty for TCD Workshop (15-hour 2 day session), Boca Raton, FL (published electronically)
- 9/18 Osler Institute Neurology Board Review, "Imaging of the Spine and Peripheral Nerves", Chicago, IL (published electronically and in print)
- 9/18 Osler Institute Neurology Board Review, "Diffusion and Perfusion Imaging", Chicago, IL (published electronically and in print)
- 9/18 Osler Institute Neurology Board Review, "Neuroimaging in Epilepsy", Chicago, IL (published electronically and in print)
- 9/18 Osler Institute Neurology Board Review, "Imaging of Cranial Nerves", Chicago, IL (published electronically and in print)
- 4/18 American Academy of Neurology Annual Meeting, "Brain MRI for the Clinician", Los Angeles, CA (published electronically)
- 4/18 American Academy of Neurology Annual Meeting, "A Practical Approach to Neuroimaging of the Spine", Los Angeles, CA (published electronically)
- 4/18 American Academy of Neurology Annual Meeting, "Navigating Your Career: Successful APP-Physician Team Models Panel", Los Angeles, CA (video recorded and published electronically for purchase)
- 1/18 American Society of Neuroimaging Annual Meeting, "New Frontiers for TCD in Neuro ICU", Austin, TX (published electronically)
- 1/18 American Society of Neuroimaging Annual Meeting, "Spine Neuroimaging", Austin, TX (published electronically)
- 10/17 15th Annual Neurocritical Care Society Annual Meeting, "Evidence Supporting the use of TCD for Monitoring of Subarachnoid Hemorrhage", Kona, HI (published electronically)
- 10/17 15th Annual Neurocritical Care Society Annual Meeting, Moderator and faculty for TCD Workshop (15 hour 2 day session), Kona, HI (published electronically)
- 10/17 15th Annual Neurocritical Care Society Annual Meeting, "Supervision and Collaboration Models", Kona, HI (published electronically)
- 10/17 15th Annual Neurocritical Care Society Annual Meeting, Moderator for "Neuromonitoring Session", Kona, HI (published electronically)
- 4/17 American Academy of Neurology Annual Meeting, "Neuroimaging 101", Boston, MA (published electronically)
- 4/17 American Academy of Neurology Annual Meeting, "Navigating Your Career: Successful APP-Physician Team Models Panel", Boston, MA (published electronically)
- 1/17 American Society of Neuroimaging Annual Meeting, "Specific TCD Applications for Patients with SAH", Los Angeles, CA (published electronically)

- 1/17 American Society of Neuroimaging Annual Meeting, "Introduction to MRI Head Imaging", Los Angeles, CA (published electronically)
- 9/16 14th Annual Neurocritical Care Society Annual Meeting, "Neurocritical Care Society TCD Course", Washington, DC.
- 9/16 14th Annual Neurocritical Care Society Annual Meeting, "Medication Safety in the Neurocritical Care Unit", Washington, DC.
- 5/16 10th Annual Anchorage Resuscitation and Critical Interventions Conference, "When are We Sure about Brain Death?", Anchorage, AK.
- 1/16 American Society of Neuroimaging Annual Meeting, "Neuroimaging Bootcamp for Advanced Practice Providers and Junior Physicians", Orlando, FL (published electronically)
- 4/15 Oklahoma Resuscitation Academy, "Neurological Considerations in Post-Cardiac Arrest Therapeutic Hypothermia, Oklahoma City, OK (published as hardcopy)
- 1/15 American Society of Neuroimaging Annual Meeting, "Introduction to MRI Head Imaging", Carefree, AZ (published electronically)
- 1/15 American Society of Neuroimaging Annual Meeting, "Introduction to CT Head Imaging", Carefree, AZ (published electronically)
- 1/15 American Society of Neuroimaging Annual Meeting, "Introduction to Carotid and Transcranial Doppler Ultrasound", Carefree, AZ (published electronically)
- Hakimi, R on behalf of the American Heart Association Comprehensive Stroke Center Emergency Medical Services Routing Practices Committee, "Routing Practices Survey for Optimizing Transport of Stroke Patients to Primary vs Comprehensive Stroke Centers." Webcast presentations 1/17/2014, 3/14/2014, 5/13/2014, 7/29/2014, 8/26/2014, 10/28/2014, 1/27/15, 2/24/2015, 4/28/2015, 5/12/2015, 6/24/2015.
- 4/14 Oklahoma Resuscitation Academy, "Neurological Considerations in Post-Cardiac Arrest Therapeutic Hypothermia", Oklahoma City, OK (published as hardcopy)

Teaching

Department

- 9/15 Neurology Resident Lecture, "Coma and Encephalopathy"- University of Oklahoma Health Sciences Center
- 7/15 Neurology Resident Lecture, "Examination of the ICU Patient, Coma, and Brain Death" University of Oklahoma Health Sciences Center
- Neurosciences Intensive Care Unit Clinical Skills Sessions (2/9/15, 11/24/14, 10/27/14, 9/8/2014, 8/18/2014, 5/5/2014, 4/14/2014, 3/3/2014, 2/10/2014, 11/4/2013, 10/14/2013, 9/9/2013, 8/19/2013, 5/13/2013, 4/29/2013, 3/11/2013, 2/11/2013, 11/26/2012, 11/12/2012, 8/27/2012, 8/20/2012, 5/23/2011, 5/16/2011, 2/28/2011, 2/21/2011, 11/22/2010, 11/19/2010, 8/30/2010, 8/16/2010, 8/10/2010)
 - Half-day simulations at the OU Skills Education and Training Center teaching residents and advanced practice providers central line placement with and

- without ultrasound assistance, endotracheal intubation, bag-mask ventilation, and lumbar puncture.
- 9/14 Neurology Resident Lecture, "Common Causes of Coma and Encephalopathy"-University of Oklahoma Health Sciences Center
- 6/14 Neurology Resident Lecture, "Focused Examination of the ICU Patient, Coma, and Brain Death" University of Oklahoma Health Sciences Center
- 9/13 Neurology Grand Rounds, "Evaluation and Management of Intracranial Hemorrhage"-University of Oklahoma Health Sciences Center
- 9/13 Neurology Resident Lecture, "Coma and Encephalopathy"- University of Oklahoma Health Sciences Center
- 9/13 Neurology Resident Lecture, "Diagnosis and Medical Management of Subarachnoid Hemorrhage" University of Oklahoma Health Sciences Center
- 7/13 Neurology Resident Lecture, "Examination of the ICU Patient and Brain Death"-University of Oklahoma Health Sciences Center
- 12/12 Neurology Grand Rounds, "Neurosciences ICU Quality Improvement and Outcome Measures"- University of Oklahoma Health Sciences Center
- 10/12 Neurology Resident Lecture, "Diagnosis and Management of Subarachnoid Hemorrhage" University of Oklahoma Health Sciences Center
- 9/12 Neurology Resident Lecture, "Intracranial Hypertension and Herniation Syndromes"-University of Oklahoma Health Sciences Center
- 8/12 Neurology Resident Lecture, "Examination of the ICU Patient and Brain Death"-University of Oklahoma Health Sciences Center
- 10/11 Neurology Grand Rounds, "Determining Brain Death in Adults" University of Oklahoma Health Sciences Center
- 7/11 Neurology Resident Lecture, "Introduction to Neurocritical Care"-University of Oklahoma Health Sciences Center
- 6/11 Neurology Grand Rounds, "Complications of Neurological Surgery"-University of Oklahoma Health Sciences Center
- 4/11 Neurology Resident Conference, "Assessment and Management of Spinal Cord Injury"-University of Oklahoma Health Sciences Center
- 6/10 Neurology Resident Conference, "Complications of Neurological Surgery"
 University of Oklahoma Health Sciences Center
- 5/10 Neurology Resident Conference, "Respiratory Failure due to Neuromuscular Disease"-University of Oklahoma Health Sciences Center
- 12/09 Neurology Grand Rounds, "Post-cardiac arrest Therapeutic Hypothermia" University of Oklahoma Health Sciences Center
- 9/09 Neurology Resident Education Series, "Principles of Neurocritical Care" University of Oklahoma Medical Center

Campus

Preceptor for OU Physician Associate Program (2014-2016 and 2010-2011)

7/14 OUMC Neurology Nursing Residency Module, "A Review of Anticoagulants, their Indications, and Reversal strategies" (1 hour)

- 1/14 University of Oklahoma Physician Associate Program, "Introduction to Neurocritical Care"-Oklahoma City, OK (2 hours)
- 5/13 OUMC Neurology Nursing Residency Module, "Post-Cardiac Arrest Therapeutic Hypothermia" (2 hours)
- 3/13 OUMC Neurology Nursing Residency Module, "Introduction to Neurocritical Care" (2 hours)
- 3/13 Trauma Grand Rounds, "Assessing Brain Death in Adults"-University of Oklahoma Health Sciences Center (1 hour)
- 1/13 University of Oklahoma Physician Associate Program, "Introduction to Neurocritical Care"-Oklahoma City, OK (2 hours)
- 10/12 Anesthesia Resident Wednesday Educational Bloc Lecture, "Neuromonitoring" University of Oklahoma Health Sciences Center (2 hours)
- 4/12 University of Oklahoma Physician Associate Program, "Introduction to Neurocritical Care"-Oklahoma City, OK (2 hours)
- 10/11 Anesthesia Resident Wednesday Educational Bloc Lecture, "Neuromonitoring" University of Oklahoma Health Sciences Center (2 hours)
- 6/11 Anesthesia Resident Wednesday Educational Bloc Lecture, "Clinical Neuroanatomy and Neurophysiology"-University of Oklahoma Health Sciences Center (2 hours)
- 5/11 Anesthesia Resident Wednesday Educational Bloc Lecture, "Multimodality Neurophysiological Monitoring"-University of Oklahoma Health Sciences Center (2 hours)
- 3/11 University of Oklahoma Physician Associate Program, "Common Clinical Scenarios in the Neurosciences ICU Critical Care Neurology"-Oklahoma City, OK (2 hours)
- 10/10 Internal Medicine Resident Conference, "Examination of the Unconscious Patient"- University of Oklahoma Health Sciences Center (1 hour)
- 6/10 Neurosurgery Resident Conference, "Mechanical Ventilation of the Neurosurgical Patient"-University of Oklahoma Health Sciences Center (1 hour)
- 4/10 University of Oklahoma Physician Associate Program, "Fundamentals of Critical Care Neurology"-Oklahoma City, OK (2 hours)
- 11/09 Neurosciences Nursing In Service, "Team Based Neurocritical Care"-University of Oklahoma Medical Center (2 hours)

Other

- 3/23 MSI Lecture, "ICC Clinical Integration Session: NIH Stroke Scale", Edward Via College of Osteopathic Medicine-Spartanburg, SC (6 hours over 2 days)
- 3/23 MSIII Lecture, "The Approach to Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 1/23 MSIII Lecture, "Basics of Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 11/22 MSIII Lecture, "Basics of Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)

- 9/22 MSIII Lecture, "Introduction to Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 7/22 MSIII Lecture, "Primer on Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 5/22 MSIII Lecture, "Basics of Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 3/22 MSIII Lecture, "Introduction to Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 1/22 MSIII Lecture, "The Approach to Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 11/21 MSIII Lecture, "Basics of Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 10/21 MSIII Lecture, "Brain CT and MRI" -University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 7/21 MSIII Lecture, "Primer on Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 5/21 MSIII Lecture, "Introduction to Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 4/21 MSIII Lecture, "Basics of CT and MRI Brain Imaging"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 2/21 MSIII Lecture, "Brain CT and MRI Primer"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 1/21 MSIII Lecture, "Practical Approach to Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 11/20 MSIII Lecture, "CT and MRI Brain Imaging"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 8/20 Nursing Lecture, "Blood Pressure Management in the Neuro ICU"-Prisma Health Greenville Memorial Hospital Neuro ICU. (4 presentations)
- 8/20 MSIII Lecture, "Brain CT and MRI Imaging"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 6/20 MSIII Lecture, "Brain CT and MRI Primer"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 4/20 MSIII Lecture, "Brain CT and MRI Sequences"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 1/20 MSIII Lecture, "Brain CT and Brain MRI 101"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 11/19 MSIII Lecture, "Brain CT and MRI Primer"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 9/19 MSIII Lecture, "Brain CT and MRI for New Learners"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 5/19 MSIII Lecture, "Brain CT and MRI Basics"-University of South Carolina School of Medicine-Greenville, SC (1 hour)

- 4/19 MSIII Lecture "Brain CT and MRI Sequences"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 1/19 Vascular Sonographer Lecture "Introduction to TCD"-Prisma Health-Upstate, Patewood Campus, Greenville, SC (1 hour)
- 1/19 MSIII Lecture "Fundamentals of Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 11/18 MSIII Lecture "Basics of Brain CT and MRI"-University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 9/18 MSIII Lecture "Introduction to Brain CT and MRI" University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 8/18 MSIII Lecture "Interpretation of Brain CT and MRI" University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 5/18 "Status epilepticus evaluation and management simulation for Medical Students"- University of South Carolina School of Medicine-Greenville, SC (2 hours)
- 5/18 MSIII Lecture "Practical Approach to Brain CT and MRI"- University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 4/18 MSIII Lecture, Introduction to Spine Neuroimaging"- University of South Carolina-Greenville, SC (1 hour)
- 1/18 MSIII Lecture "Introduction to Brain CT and MRI" University of South Carolina School of Medicine-Greenville, SC (1 hour)
- 2/17 MSIII Lecture "Head CT and MR Imaging"- University of South Carolina School of Medicine-Greenville, SC (1 hour)
- Preceptor for University of South Alabama Acute Care Nurse Practitioner Program (2014-2016)
- 2/14 MSI Lecture "Neurological Examination of the Conscious Patient" Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1.5 hours)
- 2/14 MSI Neurology Clinical Skills Lab- Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (4 hours total)
- 2/13 MSII Clinical Neurology Module, "Differential Diagnosis of Dementia"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 2/13 MSII Clinical Neurology Module, "Seizures and Status Epilepticus"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 2/13 MSII Clinical Neurology Module, "Cerebrovascular Disease and Aphasias" Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 2/13 MSII Clinical Neurology Module, "Coma"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 2/13 MSI Lecture "Neurological Examination of the Conscious Patient" Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1.5 hour)
- 2/13 MSI Neurology Clinical Skills Lab- Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (4 hours total)
- 3/12 MSII Clinical Neurology Module, "Differential Diagnosis of Dementia"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)

- 3/12 MSII Clinical Neurology Module, "Seizures and Status Epilepticus"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 3/12 MSII Clinical Neurology Module, "Cerebrovascular Disease and Aphasias"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK
- 3/12 MSII Clinical Neurology Module, "Coma"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 2/12 MSI Lecture "Neurological Examination of the Conscious Patient" Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 2/12 MSI Neurology Clinical Skills Lab- Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (4 hours total)
- 3/11 Clinical Neurology Module, "Cerebrovascular Disease and Aphasias"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 3/11 Clinical Neurology Module, "Coma"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 1/10 Clinical Neurology Module, "Examination of the Unconscious Patient"-Oklahoma State University College of Osteopathic Medicine, Tulsa, OK (1 hour)
- 5/09 Critical Care Grand Rounds, "Improving Implementation of Post-cardiac Arrest Hypothermia Therapy"-Duke University Medical Center (1 hour)
- 4/09 Neurology Noon Conference, "Post-cardiac Arrest Hypothermia Therapy and Barriers to its Implementation"-University of Pennsylvania Medical Center (1 hour)
- 3/09 Acute Care Nurse Practitioner Lecture series, "ICU Hematology Review"-Duke University School of Nursing (1 hour)
- 1/09 Neurology Noon Conference, "Aggressive Stroke Management-Role of Hemicraniectomy in MCA Infarcts"-Albany Medical Center (1 hour)
- 1/08 Critical Care Grand Rounds, "Endovascular Stroke Management"-Duke University Medical Center (1 hour)
- 11/07 Critical Care Grand Rounds, "Ethics in the Neuro-ICU"-Duke University Medical Center (1 hour)
- 10/07 Critical Care Grand Rounds, "CJD"-Duke University Medical Center (1 hour)

Mentoring

Research

- Olivia Mattner, Medical Student, Edward Via College of Osteopathic Medicine who collaborated on a poster submission to the 2022 American Society of Neuroimaging Annual Meeting and was accepted to Florida Atlantic University's neurology residency program
- Anusha Battineni, MD, Neurology Resident, University of South Carolina School of Medicine-Greenville who collaborated on a poster submission to the 2021 Neurocritical Care Society Annual Meeting and the 2022 American Academy of Neurology Annual Meeting
- 3) Fatemeh Hajighasemi, MD (International Medical Graduate) who completed a research project leading to a poster presentation at a national meeting and was later

- accepted to the University of Miami Neurology Residency program
- 4) Daniel Lee, MSII, University of South Carolina School of Medicine-Greenville with multiple poster presentations and publications
- 5) Taylor Lucas, MSIV, University of South Carolina School of Medicine-Greenville with multiple poster presentations and publications
- 6) John Barrara, MSIV, University of South Carolina School of Medicine-Greenville with multiple poster presentations and publications
- 7) Mahsa Pahlavanzadeh, MD (International Medical Graduate) with poster and multiple manuscripts
- 8) Sarah Hierholzer, ACNP-CNP (Neurology Nurse Practitioner) with poster and who is a currently a colleague at Neuroscience Associates/Greenville Health System
- 9) Sarah Denes Morris, ACGNP-CNP (Neuro ICU Nurse Practitioner) with national presentation and publication who is a currently a colleague at Neuroscience Associates/Greenville Health System
- 10) Priscilla Massey, ACGNP-CNP (Neuro ICU Nurse Practitioner) with publication and who is a former colleague at Neuroscience Associates/Greenville Health System
- 11) Natasha Topoluk, PhD (Medical Student) with award winning poster presentation, publication, and national presentation
- 12) Emma Fields, APRN-CNP (Neurology Instructor) with multiple national presentations, posters, and publications
- 13) Ayumi Ludwig, MD (Neurology Resident) with publication (2015)
- 14) Margo Butchee, MD Neurology Resident) with poster presentations and publication (2014-2016)
- 15) Jaclyn Duvall, MD (Neurology Resident) with poster presentations and publication (2014-2016)
- 16) Jessica Fesler, MD (Neurology Resident) with multiple research projects, publications, and poster presentations (2012-2015)
- 17) Jiri Brabec, MD (Neurology Resident) with publication and poster presentation (2010-2012)
- 18) Amanda Van Straten, MD (Neurology Resident) with publication and poster presentations (2010-2013)
- 19) Ankur Garg, MD (Neurology Resident, fellow, and junior faculty) with publication and poster presentation (2009-2011). Co-authored *Continuum* Article in 2016.

Career

- 1) Josiah Williams, AGACNP (Neuro ICU Nurse Practitioner) who is currently a colleague at Prisma Neurology/Prisma Health-Upstate
- 2) Sevtalana Antoshuk, AGACNP (Neuro ICU Nurse Practitioner) who is currently a colleague at Prisma Neurology/Prisma Health-Upstate
- 3) Annie Reid, AGACNP (Neuro ICU Nurse Practitioner) who is currently a colleague at Prisma Neurology /Prisma Health-Upstate
- 4) Sinead McFarlane, PA-C (Neuro ICU Physician Assistant) who is currently a colleague at Prisma Neurology /Prisma Health-Upstate

- 5) Cassie Drummond, FNP-BC (Neuro ICU Nurse Practitioner) who is a currently a colleague at Prisma Neurology /Prisma Health-Upstate
- 6) Fatemeh Hajighasemi, MD (International Medical Graduate) who completed a research project leading to a poster presentation at a national meeting and was later accepted to the University of Miami Neurology Residency program
- 7) Emmie Hayden, PA-C (Neuro ICU Physician Assistant) who is currently a colleague at Prisma Neurology /Prisma Health-Upstate
- 8) Ashley Alexander, ACGNP-BC (Neuro ICU Nurse Practitioner) who is a former colleague at Neuroscience Associates/Prisma Health-Upstate
- 9) Melissa Bouassaba, DNP-BC (Neuro ICU Nurse Practitioner) who is a former colleague at Neuroscience Associates/Prisma Health-Upstate
- 10) Daniel Lee, MSII who is currently a medical student aiming pursuing a career in neurology
- 11) Sparkle Toland, AGCNP-BC (Neuro ICU Nurse Practitioner) who is a former colleague at Neuroscience Associates/Prisma Health-Upstate
- 12) Kathleen Ward, AGCNP-BC (Neuro ICU Nurse Practitioner) who is a currently a colleague at Prisma Neurology/Prisma Health-Upstate
- 13) Melissa Vorpahl, AGCNP-BC (Neuro ICU Nurse Practitioner) who is a former colleague at Neuroscience Associates/Prisma Health-Upstate
- 14) Mahsa Pahlavanzadeh, MD (International Medical Graduate) who completed a twomonth observership in the Neuro ICU and was later accepted to the Virginia Tech Carilion School of Medicine Neurology Residency program
- 15) Marisha Trelinski, FNP-CNP (Neuro ICU Nurse Practitioner) who is a former colleague at Neuroscience Associates/Greenville Health System
- 14) Priscilla Massey, ACGNP-CNP (Neuro ICU Nurse Practitioner) who is a former colleague at Neuroscience Associates/Greenville Health System
- 15) Sarah Denes, ACGNP-CNP (Neuro ICU Nurse Practitioner) who is a currently a colleague at Prisma Neurology/Prisma Health-Upstate
- 16) Sarah Hierholzer, ACNP-CNP (Neuro ICU Nurse Practitioner) who is a currently a colleague at Prisma Neurology/Prisma Health-Upstate
- 17) Annette, Davis ACGNP-CNP (Neuro ICU Nurse Practitioner) who is former colleague at Neuroscience Associates/Greenville Health System
- 18) Emma Fields, APRN-CNP (Neurology Instructor) who is a former colleague at OU Department of Neurology. Nominated and accepted as the first Advanced Practice Provider appointed to the American Society of Neuroimaging Program Committee. Later nominated and accepted as the first Advanced Practice Provider appointed to the American Society of Neuroimaging Board of Directors and Treasurer. We continue to collaborate on publications, CME, and as Board members of the American Society of Neuroimaging.
- 19) Amber Erben CNS-APRN (Neurology Instructor) who is a former colleague at OU Department of Neurology.
- 20) Kevin Wheelock, PA-C (Neurology Instructor) who is a former colleague at OU Department of Neurology.

- 21) Ankur Garg, MD (Neurology resident) who went on to complete Stroke and Neurointerventional fellowships OUHSC, joined as junior faculty and is now on faculty at Florida Hospital Department of Neurosurgery.
- 22) Jessica White, PA-C (Neurology APP) who is a former colleague at OU Department of Neurology who went on to become the lead APP at The Yale University Neuro ICU and the head of the APP Section at the Neurocritical Care Society.
- 23) Scott Saucedo, MD (Neurology resident) who went on to complete Neurocritical Care fellowship at Emory University (GA) and is now on faculty at Novant Health
- 24) Sudhir Datar, MD (Neurology resident) who went on to complete Neurocritical Care fellowship at Mayo Clinic (MN) and is now an Associate Professor at Wake Forest University Baptist Medical Center (NC)
- 25) Sohel Ahmad, MD (Neurology resident) who went on to complete Neurocritical Care fellowship at Rush (IL) and is now the Neuro ICU Medical Director at Mercy Hospital in Toledo, OH.
- 26) Sam Gilchrist, PA-C (former Neurology Instructor) who went on to become a Pediatric Neurosurgery Instructor at OU Neurosurgery and is currently a PICU APP at The Children's Hospital of Oklahoma.
- 27) Sarah Welte, APRN-CNP (former OU Neurology Instructor) who went to become the Lead APP with OU Neurosurgery.
- 28) Mikel Chafin, APRN-CNP (former Neurology Instructor) at OU Department of Neurology.
- 29) Asheley Oakes, FNP-CNP (former Neurology Instructor) at OU Department of Neurology.
- 30) Eppie Bass FNP-CNP (former Neurology Instructor) at OU Department of Neurology.
- 31) Jennifer Harmon, PA-C (former Neurology Instructor) at OU Department of Neurology.
- 32) Elena Cutter, PA-C (former Neurology Instructor) at OU Department of Neurology.

Contributions to Continuing Education

- 1) Program Lead, "Neuroimaging Bootcamp", American Society of Neuroimaging Annual Meeting Committee, Scottsdale, AZ
- Co-moderator, 19th Neurocritical Care Society Annual Meeting, "TCD Workshop", Virtual Meeting (published electronically and for sale providing 4 AMA PRA Category 2 credits)
- Session Symposium Chair, 18th Neurocritical Care Society Annual Meeting, "Billing and Practice Management", Virtual Meeting (published electronically and for sale providing 1 AMA PRA Category 2 credits)
- 4) Session Symposium Chair, 18th Neurocritical Care Society Annual Meeting, "Multimodality Monitoring", Virtual Meeting (published electronically and for sale providing 1 AMA PRA Category 2 credits)
- 5) One of six contributors to American Academy of Neurology Neurology's Advance

- Practice Provider Neurology Education Series, "Neuroimaging", Zoom (published electronically and for sale by American Academy of Neurology providing 1 AMA PRA Category 1 credits)
- 6)Neurocritical Care On Call "Introduction to TCD in Neurocritical Care", Zoom (published electronically and for sale by Neurocritical Care Society providing 1 AMA PRA Category 1 credits)
- 7) Program Co-Chair for Symposium at American Society of Neuroimaging 2020 Annual Meeting, "Advanced Practice Providers Neuroimaging track", providing 6 AMA PRA Category 1 credits, Atlanta, GA.
- Program Chair for South Carolina Osteopathic Medical Society 2020 Winter Meeting, providing 22 AOA Category 1A credits, Columbia, SC.
- 9) Program Co-Chair for Symposium at American Society of Neuroimaging 2019 Annual Meeting, "Neuroimaging for Trainees to Advanced Practice Providers", providing 1.5 AMA PRA Category 1 credits, San Juan, PR
- 10) Moderator and faculty at 16th Annual Neurocritical Care Society Annual Meeting TCD Workshop (15 hours over 2 days), Boca Raton, FL
- 11) Faculty at Osler Institute Neurology Board Review, "Imaging of the Spine and Peripheral Nerves", "Diffusion and Perfusion Imaging", "Neuroimaging in Epilepsy", "Imaging of Cranial Nerves", Chicago, IL
- 12) Moderator for symposium at ASN 41st Annual Meeting, "Normal Pressure Hydrocephalus" (2/6/18) providing 1.5 AMA PRA Category 1 credits. Austin, TX.
- 13) Program Co-Chair for Symposium at ASN 41st Annual Meeting, "Neuroimaging In Clinical Practice 2018: From Training to Advanced Practice" (2/4/18) providing 3.5 AMA PRA Category 1 credits. Austin, TX.
- 14) Poster Professor, ASN 41st Annual Meeting (2018). Austin, TX.
- 15) Faculty for symposium at ASN 41st Annual Meeting, "Current Topics in Neurosonology" (2/6/18) providing 2 AMA PRA Category 1 credits. Austin, TX.
- 16) Program Co-Chair for Symposium at ASN 39th Annual Meeting, "Neuroimaging Bootcamp for Advanced Practice Providers and Junior Physicians" providing 5 AMA PRA Category 1 credits. Los Angeles, CA.
- 17) Co-Director, Neurocritical Care Society TCD Course, Neurocritical Care Society 14th Annual Meeting (9/14/16-9/16/16) providing 12 AMA PRA Category 1 credits. Washington, DC.
- 18) Poster Professor, 14th Annual Neurocritical Care Society Meeting (2016). Washington, DC.
- 19) Program Chair, Neurology Track, Oklahoma Osteopathic Association 116thAnnual Convention (4/28/16-5/1/16) providing 8 Category 1-A Neurology CME Credits for the American Osteopathic Association and 27.5 prescribed credits from the American Association of Family Practitioners. Norman, OK.
- 20) Program Chair for Symposium at ASN 38th Annual Meeting, "Neuroimaging Bootcamp for Advanced Practice Providers and Junior Physicians" (1/14/16) providing 5 AMA PRA Category 1 credits. Orlando, FL.
- 21) Co-Director, Eight Breakfast Meetings, Neurocritical Care Society 13th Annual

- Meeting (10/7/15-10/9/15). Scottsdale, AZ.
- 22) Poster Professor, 13th Annual Neurocritical Care Society Meeting (2015). Scottsdale, AZ.
- 23) Program Chair, Neurology Track, Oklahoma Osteopathic Association 115th Annual Convention (4/30/15-5/3/15) providing 19 Category 1-A Neurology CME Credits for the American Osteopathic Association and 19 prescribed credits from the American Association of Family Practitioners. Norman, OK.
- 24) Program Chair for Symposium at ASN 38th Annual Meeting, Neuroimaging for Clinicians, by Clinicians, "Neuroimaging for Medical Students, Residents, and Advanced Practice Providers" (1/16/15) providing 3 AMA PRA Category 1 credits. Scottsdale, AZ.
- 25) Poster Professor, 12th Annual Neurocritical Care Society Meeting (2014). Seattle, WA.
- 26) Program Chair, Neurology Track, Oklahoma Osteopathic Association 114th Annual Convention (4/25/14-4/26/14) providing 12 Category 1-A Neurology CME Credits for the American Osteopathic Association and 12 prescribed credits from the American Association of Family Practitioners. Norman, OK.
- 27) Program Chair, Oklahoma Osteopathic Association Summer CME Meeting, "Acute Care and Management" (8/12/11-8/14/11) providing 17 Category1-A CME credits for the American Osteopathic Association and 17 prescribed credits from the American Association of Family Practitioners. Oklahoma City, OK.

PROFESSIONAL SERVICE

Clinical/Patient Care

Neurosciences Intensive Care Unit attending on service. Rounding on patients 7 days a week during service weeks and taking call 24 hours/day)

*From 2009-2013 the NSICU service attending also took all stroke calls, stroke admissions, neurology consults on all ICU patients, and first call for Neurosurgery ^From 2013-2016 also took first call for Neurosurgery

TFrom 2017-2018 the Neuro ICU service attending also took all neurology referral center calls for the system, Neuro ICU admissions, and neurology consults on all ICU patients

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2009-2010
             26 weeks*
             33 weeks*
2010-2011
             26 weeks*
2011-2012
2012-2013
             24 weeks*
2013-2014
             19 weeks^
2014-2015
             15 weeks^
2015-2016
             17 weeks^
2016-2017
            Transition between OU and GHS
2017-2018
             23 weeksT
2018-2019
             23 weeks
2019-2020
             23 weeks
2020-2021
             23 weeks
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2021-2022 21 weeks 2022-2023 17 weeks

Clinical Leadership

Performance/Quality Improvement Service

2022 Service-Related Accomplishments

- 1) Recruited 1 neurointensivist and 2 Neuro ICU APPs
- 2) Zero CLABSIs since 2018
- 3) Lowest Foley catheter utilization and CAUTI rate of any ICU at Prisma Health-Upstate
- 4) Neuroscience physician champion of Closed ICU project
- 5) Grew TCD services at Greenville Memorial Hospital to perform over 800 studies in first year of the program
- 6) Applied for IAC Accreditation of TCD Lab to become one of three accredited labs in South Carolina
- 7) Lowest LOS of any ICU at Prisma Health-Upstate

2021 Service-Related Accomplishments

- 1) Appointed System Co-Chair of Pharmacy and Therapeutics
- 2) Physician champion, Prisma Health ICP Management Order Set
- 3) Physician champion for bringing CRRT to Prisma Health-Upstate
- 4) Zero CLABSIs since 2018
- 5) Lowest LOS of any ICU at Prisma Health-Upstate
- Lowest Foley catheter utilization and CAUTI rate of any ICU at Prisma Health-Upstate
- 7) Physician champion, Prisma Health Normothermia Protocol

2020 Service-Related Accomplishments

- 1) Featured Neuro ICU, 2020 American Heart Association Southeast Virtual Quality Awards Celebration for South Carolina Hospitals
- 2020 Recipient of the South Carolina Hospital Association's Zero Harm Award for zero CLABSIs in the Neuro ICU for over 18 consecutive months
- 3) Grew TCD services at Greenville Memorial Hospital to perform over 600 studies in first year of the program
- 4) Recruited one additional Neuro ICU physician and two additional Neuro ICU APPs to bring the physician team up to five and APP team up to seven.
- 5) Led the change in medication route of entry orders which were implemented across more than 30,000 medications across all of Prisma Health
- 6) Worked with radiology and cardiology colleagues as part of the Prisma Health-Upstate MRI and Pacemaker Safety Committee to establish policy and procedures for obtaining MRIs in patients with pacemakers.

- 1) Successfully recruited two Neuro ICU physicians and four Neuro ICU APPs to bring the team to 11.
- Personally trained six vascular ultrasound sonographers to perform TCD thereby meeting TJC mandate for TCD services at a Comprehensive Stroke Center
- 3) Grew the Neuro ICU census to become the busiest ICU service in Prisma Health
- 4) Credentialed 4 Neuro ICU APPs to perform critical care procedures independently

2018 Service-Related Accomplishments

- Partnered with the Vascular Lab to work towards bringing TCD service line to Greenville Memorial Hospital in pursuit of becoming the first IAC Accredited TCD Lab in the State of South Carolina
- 2) Trained an additional Neuro ICU NP to add to the team
- Partnered with Neuroendovascular Service to develop a single unified Neuro ICU Service increasing the census by 100%
- 4) Worked to reduce Neuro ICU Line Days going 2 years without a CLABSI

2017 Service-Related Accomplishments

- 1) Established a Neurocritical Care Service with 24/7 physician coverage at Greenville Memorial and its referring hospitals both as a primary and consultative service
- 2) Completed the training of 5 GHS Nurse Practitioners to function independently with physician backup from home to provide in-house neurology nighttime coverage for all neurological services at Greenville Memorial Hospital
- 3) Continued supervised procedural training for 5 GHS Nurse Practitioners in pursuit of obtaining procedural competency with endotracheal intubation, central venous catheter placement, arterial line placement, bronchoscopy, and lumbar punctures. To date nearly all of NPs have been credentialed for every procedure.
- 4) By creating a Neuro ICU service, Greenville Memorial Hospital became eligible for application for The Joint Commissions highest designation of stroke care, namely a Comprehensive Stroke Center. CSC status granted with only 3 RFIs.
- 5) Physician Champion for getting amyl barbital on formulary for WADA testing
- 6) Physician Champion for getting parampanel on formulary for epilepsy patients

- 1) Initiated the training of 5 GHS Nurse Practitioners to function independently with physician backup from home to provide in-house neurology nighttime coverage at Greenville Memorial Hospital
- Initiated supervised procedural training for 5 GHS Nurse Practitioners in pursuit of obtaining procedural competency with endotracheal intubation, central venous catheter placement, arterial line placement, bronchoscopy, and lumbar punctures
- 3) Partnered with the Radiology Department to establish a variant of the MRI protocol published in *Continuum* reducing the time to MRI imaging by over 24 hours at GMH
- 4) Partnered with the Cardiology Division to increase access to transesophageal

- echocardiograms for neurological patients at GMH
- 5) Created the staffing plan for the Neurology Service at GHS

2015 Service-Related Accomplishments

- Created a nursing award for the NSICU and OU Admit Service, wherein the medical directors nominate a nurse every month for outstanding service who will have their name placed on a plaque and receive public acknowledgment from their peers as well as a small gift
- 2) Coordinated radiology and neurosurgery services such that post-op brain tumor patients could obtain MRI imaging following PACU stay reducing length of stay by 1 day and increasing hospital throughput
- 3) Reduced length of stay by 77% to 4.8 days as compared to 2009 through various measures
- 4) Provided leadership support to allow non-invasive vascular lab to upload echocardiogram, carotid ultrasound, and TCD studies to the reader server through the NSICU substantially reducing interpretation time and increasing the number of studies that each technologist could complete per day
- 5) Gained the administrative support to ensure that the Neurology Service was given top priority in the NSICU for bed management
- 6) Worked as a physician leader to craft a policy regarding the appropriate use of IV acetaminophen with a projected annual cost saving of greater than \$600,000 for OUMC
- 7) Physician champion for OUMC Pentobarbital Order Set
- 8) Successfully introduced clevedipine to OUMC formulary

2014 Service-Related Accomplishments

- 1) Integral team member for reaccreditation of OUMC Comprehensive Stroke Center by The Joint Commission.
- 2) Co-physician leader of the OUMC Stroke Quality Committee
- 3) Co-physician leader for OUMC Stroke Case Review Committee
- 3) Subarachnoid hemorrhage mortality rate of less than 10%
- 4) Helped develop the OUMC Palliative Care Order Set
- 5) Physician leader for safety protocol development utilizing AvaSys Telesitter Patient Monitoring System at OUMC
- 6) Co-physician leader for CAUTI Prevention Team
- 7) Co-physician leader for CEFIT (Clinical Excellence Facility Interface Team) visit targeting sepsis management

- 1) Reduced length of stay by greater than 50% (from 17.8 days to 7.3 days) through various system improvements
- 2) Integral team member for accreditation of OUMC Comprehensive Stroke Center by

- The Joint Commission
- 3) Physician champion for approved OUMC Hypothermia Maintenance Protocol
- 4) Physician champion for approved OUMC Hypothermia Re-warming Protocol
- 5) Physician champion for approved OUMC Neurosciences Subarachnoid Hemorrhage Protocol
- 6) Physician champion for approved OUMC Normothermia with Neurological Injury Protocol for neuroscience patients
- 7) Physician champion for OUMC approved Warfarin Reversal with Intracranial Hemorrhage Protocol
- 8) Physician champion for OUMC approved NSICU Intracranial Hemorrhage Protocol
- 9) Physician champion for OUMC approved Status Epilepticus Protocol
- 10) Physician champion for OUMC Medication and Usage Criteria for Haloperidol
- 11) Established bed management priority protocol for ICU East, making Neurology the #1 priority
- 12) OU Neurology service line RAMI reduction to 0.53 (National benchmark 1.27)
- 13) Transcranial Doppler ultrasound availability 7 days a week, using 2 technologists when there are more than 4 studies, allowing all studies to be completed by noon on the same day
- 14) Carotid ultrasound availability 7 days a week, with study completion within 24 hours of order placement
- 15) Transthoracic echocardiogram availability 7 days a week, with study completion within 24 hours of order placement and report available within 2 hours of study completion

- 1) Shortest length of stay by any service line at OUMC from 2011-present
- 2) Reduced the RAMI (Risk Adjusted Mortality Index) by 90% increasing survival outcome to 50% better than the national index
- 3) Physician champion for OUMC Initiation and Maintenance Protocols for Post-cardiac Arrest Therapeutic Hypothermia
- 4) Initiated changes to EMSA policy on inclusion and exclusion criteria for post-cardiac arrest therapeutic hypothermia, now implemented throughout Oklahoma leading to increased utilization
- 5) Physician leader for OUMC Sepsis ISI Project leading to formulation of OUMC Adult Sepsis Algorithm aimed at reducing sepsis mortality
- 6) Established OUMC Hemicraniectomy Protocol for Malignant Middle Cerebral Artery Ischemic Strokes
- 7) Changed OUMC policy on organ donation after cardiac death to allow resident physicians to declare cardiac death increasing organ procurement
- 8) Initiated policy through the LifeShare Advisory Board to allow use of transcranial Doppler ultrasound as a confirmatory test for brain death in Oklahoma
- 9) The only ICU at OU Medical Center without a case of central line associated bacteremia for greater than three years (2010-present)

10) One of the lowest rates for Foley catheter infection rates at OUMC

Previous Service-Related Accomplishments (2009-2011)

- 1) Reduction of 2011 Neurology Service Line RAMI (risk adjusted mortality index) by greater than 50% to 13% below the national average
- 2) Establishment of protocol for immediate availability and use of 23.4% NaCl
- 3) Development of safety and handling protocol for use of stock Versed for status epilepticus and deep sedation
- 4) Author of Neurology Initial Mechanical Ventilation Protocol
- 5) Physician champion of OUMC post-cardiac arrest therapeutic hypothermia protocol, with establishment of Hypothermia Alert paging system for induction of post-cardiac arrest therapeutic hypothermia
- 6) Physician champion for collaborative project with Infectious Diseases and Infection Control to reduce of ventriculitis rates in patients with external ventricular drains at OUMC
- 7) Increased the use of post-cardiac arrest therapeutic hypothermia several fold at OUMC from essentially zero to several cases per month by three service lines
- 8) First service line at OU Medical Center to have a completely electronic medical record system
- 9) Recipient of grant from HCA to fund four current OUMC Nurses to obtain their nurse practitioner degrees and join the OU Department of Neurology as Clinical Instructors in the Neurosciences Intensive Care Unit

Committee Service

2022-Pres 2022-2023 2021-Pres 2021-Pres 2021-Pres	Member, Prisma Health-Upstate Donor Council Member, Prisma Health-Upstate Central Intensivist Physician Project Member, USC SOM-Greenville Faculty Awards Selection Committee Chair, Prisma Health-Upstate Pharmacy and Therapeutics Committee Member, University of South Carolina School of Medicine Curriculum Refresh Committee
2021-2023	Member, GMH Medical Care Committee
2021-2023	Member, Prisma Health-Upstate Telemetry Optimization Committee
2021-2023	Physician Champion, Prisma Health Neuro ICU CAUTI Prevention Team
2021	Member, Medical Directors LOS Engagement Committee
2020-2023	Neuroscience Representative, Prisma Health-Upstate Pacemaker MRI Safety Committee
2020-2023	Physician Champion, Prisma Health Neurocritical Care Vent Wean Protocol
2020-2023	Member, Prisma Health-Upstate Stroke Executive Committee
2020-2023	Physician Champion, ICP Management Order Set for Prisma Health
2020-2023	Member, MRI Safety and Optimization Committee
2019-2023	Subject Matter Expert, Prisma Health Neurology Medication Order Sets
2019-2023	Member, Prisma Health Mortality Review Committee

2019-2023	Physician champion, Prisma Health Stroke Advisory Team-Palliative Care Clinical Practice Guideline
2019-2023	Physician champion, Prisma Health Stroke Advisory Team-Normothermia Clinical Practice Guideline
2019-2023	Member, Prisma Health Anticoagulation Safety Committee
2019-2023	Member, Prisma Health VTE Prevention Committee
2019-2021	Member, Prisma Health IV Ig Shortage Taskforce
2019-2021	Periodic Interim Chair, Prisma Health Pharmacy and Therapeutics Committee
2018-2023	Member, GMH CCU MDOT Committee
2018-2020	Member, Surgical Patient Satisfaction Team
2018	One of two ICU physician partners on GHS Magnet Application Team
2017-2023	Member, Prisma Health Stroke Advisory Team
2017-Pres	Member, Prisma Health Pharmacy and Therapeutics Committee
2016-2023	Member, Prisma Health ICU Medical Directors Committee
2016-2023	Member, Prisma Health Neuro ICU MDOT Committee
2016-2023	Member, Prisma Health Neurology Case Reviewer for Risk Management
2016-2019	Member, GMH Neuroscience Center Nursing Collaborative
2016-2019	Member, Prisma Health ICU Transfer Committee
2014-2016	Periodic Interim Chair, OUMC Pharmacy and Therapeutics Committee
2014-2016	Co-chair, OUMC Stroke Quality Committee
2014-2016	Co-chair, OUMC Stroke Case Review Committee
2014	Core team member, OUMC Comprehensive Stroke Center Certification
	Committee by The Joint Commission
2014	Member, University of Oklahoma Health Sciences Center Peer Review Committee
2014	Co-physician leader for CEFIT (Clinical Excellence Facility Interface Team) visit targeting sepsis management
2014	Co-physician leader for OUMC CAUTI Reduction Team
2013-2016	Physician leader, University of Oklahoma Health Sciences Center Clinical Pathway Coordination Committee
2011-2016	Neuroscience Representative, OUMC Pharmacy and Therapeutics Committee
2010-2016	Neuroscience Chair, OUMC EMSA Liaison Committee
2010-2016	Member, OUMC Quality Committee
2010-2016	Member, OUMC RAMI Reduction Team
2010-2016	Member, OUMC Special Care (Critical Care) Committee
2010-2012	Member, OUMC Hypothermia Committee
2010-2012	Member, OUMC Code Blue Committee
2010-2012	Physician leader, OUMC Emergency Department and ICU Relations Committee
2009-2016	Neurosciences Intensive Care Unit representative, OUMC Critical Care Service Line Committee

Local/Regional Service

Local, Regions	ii Sei vice
2022-2023	Immediate Past President, South Carolina Osteopathic Medical Society
2021-2022	President, South Carolina Osteopathic Medical Society
2020-2021	President-Elect, South Carolina Osteopathic Medical Society
2019-Present	Member, Conference Planning Committee, South Carolina Osteopathic Medical Society
2019-Present	Board of Trustee Member, South Carolina Osteopathic Medical Society (elected position)
2018-Present	Expert Medical Reviewer for Office of Disciplinary Counsel SC Department of Labor, Licensing and Regulation
2017-Present	Member, Sharing Hope SC Organ Procurement Advisory Board for state of South Carolina
2015-2016	Member, Oklahoma Osteopathic Association Bureau on Legislation
2015	Neurology Track Program Committee Chairman, Oklahoma Osteopathic Association Annual Convention
2014	Neurology Track Program Committee Chairman, Oklahoma Osteopathic Association Annual Convention
2013-2016	Member, LifeShare Organ Transplantation Advisory Board for state of Oklahoma
2011-2013	Team leader, Neurology Curriculum Development Committee, Oklahoma State University College of Osteopathic Medicine
2010-2013	Vice Chair, LifeShare Organ Transplantation Advisory Board for state of Oklahoma
2010-2012	Member, Committee on Continued Medical Education, Oklahoma Osteopathic Association
2004-2006	Chair, Education Sub-committee, Michigan Osteopathic Association Intern-Resident Committee

Editor, Editorial Board, Journal Reviewer

2022-Pres	Member, Editorial Reviewer, Frontiers in Neurology
2021-Pres	Member, Editorial Board for Currents (Journal of Neurocritical Care
	Society)
2021-Pres	Member, Editorial Board for Neurocritical Care On Call
2020-Pres	Ad Hoc Reviewer for Journal of Pediatric Intensive Care
2019-Pres	Ad Hoc Reviewer for Clinical Neuroradiology
2019-Pres	Member, Editorial Board, Journal of Nuclear Medicine and Radiation
	Sciences
2019-Pres	Ad Hoc Reviewer, The Ultrasound Journal
2019-Pres	Member, Editorial Board for Journal of Neuroimaging
2018-Pres	Ad Hoc Reviewer, Journal of Neurocritical Care
2014-Pres	Member, Editorial Board for International Journal of Neural Science and
	Brain Research

2014-Pres	Member, Editorial Board for International Journal of Neurology and
	Neurotherapy
2011-2019	Ad Hoc Reviewer, Journal of Neuroimaging
2012-Pres	Reviewer for Journal of International Neuroscience
2012	Ad Hoc Reviewer for Journal of Critical Care Medicine

National/International Service

2023-Pres	Neuroimaging Section Chair, American Academy of Neurology
2022-Pres	Member, AAN-ASN CPT Committee on coding for TCD and Carotid
2022 1163	Ultrasound
2022-Pres	Co-Chair Joint Neuroimaging Workshop between American Society of
2022 1163	Neuroimaging and Neurocritical Care Society to be held August 2023 in
	Phoenix, AZ
2022-Pres	Member, RUC Research Subcommittee
2022-Pres	Member, Advanced Practice Provider Committee, Society of Critical Care
2022	Medicine
2022-2023	Immediate Past Chair, Society of Critical Care Medicine Drug Shortages
	and Medication Safety Committee
2021-Pres	Member, Tele-critical Care Committee, Society of Critical Care Medicine
2021-Pres	Member, Neurocritical Care Society Ultrasound Section
2021-2023	Immediate Past Chair, Society of Critical Care Osteopathy Section
2021-2022	Member, United Council for Neurological Subspecialties Neuroimaging
	Milestones Task Force
2021-Pres	Member, Multi-Specialty Points of Comparison (MPC) Workgroup
	Meeting
2021-2022	Chair, Society of Critical Care Medicine Drug Shortages and Medication
	Safety Committee
2021	Representative, American Osteopathic Association Constitution and
	Bylaws HOS Reference Committee
2020-Pres	Member, Society of Critical Care Medicine Standing Research Section
	Steering Committee
2020-Pres	Member, Society of Critical Care Medicine Billing and Documentation
	Knowledge Education Group
2020-2021	Vice Chair, Society of Critical Care Medicine Drug Shortages and
	Medication Safety Committee
2019-Pres	Member, AMA/Specialty Society RVS Update Committee Professional
	Liability Insurance (PLI) Workgroup
2019-Pres	Member, Society of Critical Care Medicine Abstract Reviewers
2019-Pres	Delegate, United Federation of Osteopathic Societies (representing South Carolina)
2019-Pres	Delegate, American Osteopathic Association (representing South
	Carolina)
2019-Pres	Member, American Medical Association CPT Advisory Committee

2019-Pres 2019-2022	Co-Chair, American Society of Neuroimaging Certification Committee Member, United Council for Neurological Subspecialties (UCNS)
2013 2022	Neuroimaging Program Requirements Task Force
2019-2022	Member, Neurocritical Care Society Fundraising Taskforce
2019-2021	Chair, Society of Critical Care Osteopathy Section
2018-Pres	Member, American Academy of Neurology TCD Guideline Revision
	Committee
2018-Pres	Member, E/M Workgroup of CPT Editorial Panel and AMA/Specialty Society RVS Update Committee (RUC)
2018-2019	One of three American members of the Brain Ultrasound Consensus Committee
2018-Pres	Member, Neurology Section Council, American Medical Association House of Delegates
2018-Pres	American Medical Association Delegate for the American Society of Neuroimaging
2018-Pres	Member, American Society of Neuroimaging Nominating Committee
2018-Pres	Member, American Society of Neuroimaging Strategic Planning
	Committee Member
2018	Invited to be Poster Professor at Annual Neurocritical Care Society
	Annual Meeting, Boca Raton, FL
2018	Responsible for bringing the ASN Neurosonology Certification
	Examination to the Neurocritical Care Society Meeting in Boca Raton, FL
2018	Invited reviewer, "Standards for Neurologic Critical Care Units: A
	Neurocritical Care Society Statement".
2019-Pres	Member, Abstract Review Committee, American Society of Neuroimaging
2017-2019	Invited reviewer for travel grant applicants for the Neurocritical Care
	Society
2017-2019	Chair, Development Committee, Neurocritical Care Society
2017-2019	Member, American Society of Neuroimaging Certification Committee
2017-2021	Treasurer, American Society of Neuroimaging
2017-2019	Chair-elect, Society of Critical Care Osteopathic Section
2017-2018	Exam question writer for creation of ASN Neurovascular Specialist (NVS)
	Exam and creation of NVS credential
2017-2018	Exam question writer for ASN Neurosonology Examination
2016-Pres	Board member, American Society of Neuroimaging
2016-Pres	SCCM Drug Shortages and Medication Safety Committee
2016-2017	Neurocritical Care Society Funding Taskforce
2015-2017	Co-chair, Development Committee, Neurocritical Care Society
2014-Pres	Appointed to Annual Program Committee for the Neurocritical Care Society
2014-2016	Invited to be Poster Professor at Annual Neurocritical Care Society Annual Meeting, Seattle, WA, Scottsdale, AZ, Washington, DC

2014-2016	Member, American Heart Association Comprehensive Stroke Center EMS
	Routing Practices Taskforce
2014-2015	Appointed to Communication Committee Liaison for the Neurocritical
	Care Society Fundraising Committee
2014-2015	American Society of Neuroimaging 5-year Vision Task Force Member
2012-Pres	Program Committee Member, American Society of Neuroimaging
2012-2015	Fundraising Committee Member, Neurocritical Care Society
2011-2012	American Society of Neuroimaging Strategic Planning Committee
2004-2005	Delegate, American Osteopathic Association House of Delegates

Service to Other Health Organizations

2010-2016 Curriculum development advisor to Oklahoma State University College of Osteopathic Medicine, Tulsa, OK.

HONORS AND AWARDS

2023	Elected Neuroimaging Section Chair for the American Academy of Neurology
2023	Nominee, Neurocritical Care Society Board of Directors
2023	Nominee, Society of Critical Care Medicine Council
2023	Nominee, Society of Critical Care Medicine, Neuroscience Committee Chair
2022	Recipient of the South Carolina Hospital Association's Zero Harm Award for zero CLABSIs in the Neuro ICU for over 18 consecutive months
2022	Nominee, Neurocritical Care Society Board of Directors
2022	Invited Graduation participant, Edward Via College of Osteopathic Medicine Class of 2022
2021	Awarded the Fellow of Critical Care Medicine (FCCM) designation by the American College of Critical Care Medicine
2021	Invited Graduation Speaker, Edward Via College of Osteopathic Medicine Class of 2021
2021	Invited White Coat Ceremony Speaker, Edward Via College of Osteopathic Medicine Class of 2025
2021	Invited White Coat Ceremony Speaker, Edward Via College of Osteopathic Medicine Class of 2024
2021	Representative at South Carolina DO Day on the Hill
2020	Osler Institute Teaching Award
2020	Neurocritical Care Presidential Citation recipient for service to the Neurocritical Care Society
2020	Neurocritical Care Journal Top 25 Reviewer Award
2020	Featured Neuro ICU, 2020 American Heart Association Southeast Virtual Quality Awards Celebration for South Carolina Hospitals
2020	Nominee, University of South Carolina School of Medicine-Greenville Outstanding Service Award

2020-Pres	President-Elect of South Carolina Osteopathic Medical Society
2020	Nominee, Neurocritical Care Society Board of Directors
2020	Recipient of the South Carolina Hospital Association's Zero Harm Award
	for zero CLABSIs in the Neuro ICU for over 18 consecutive months
2019	Neurocritical Care Journal Top Reviewer Award
2019	Nominee, Society of Critical Care Medicine Council
2019	Health Sciences Center Research Showcase recipient of Best Overall
	Research Poster Competition Award (75 posters submitted by Prisma
	Health, Clemson School of Nursing, Furman University, and University of
	South Carolina School of Medicine)
2019	Health Sciences Center Research Showcase recipient of Outstanding
	Medical Student Research Poster Competition Award (75 posters
	submitted by Prisma Health, Clemson School of Nursing, Furman
	University, and University of South Carolina School of Medicine)
2018	Neurocritical Care Presidential Citation recipient for service to the
	Neurocritical Care Society
2018	First Osteopathic physician to be named Fellow of Neurocritical Care
	Society (FNCS)
2017	Neurocritical Care Presidential Citation recipient for service to the
	Neurocritical Care Society
2017	Society of Critical Care Medicine Presidential Citation recipient for service
	contributions to the Society of Critical Care Medicine
2017	American Society of Neuroimaging Volunteer Member Award
2017	American Society of Neuroimaging Oldendorf Award for best abstract for
	research in the area of CT, MRI, PET, or SPECT
2015	Recipient of the Oklahoma Hospital Association's Zero Harm Award for
	zero CLABSIs in the Neuro ICU for over 18 consecutive months
2014	Neurocritical Care Presidential Citation recipient for service to the
	Neurocritical Care Society
2013-2015	American Osteopathic Association Certificate of Excellence recipient
2010-2012	American Osteopathic Association Certificate of Excellence recipient
2012	Best Clinical Skills Teacher as voted by medical school students at
	Oklahoma State University College of Osteopathic Medicine
2002	John R. Socey General Surgery Award, given to Michigan State medical
	student with most promising future as a surgeon
1997-1999	U.S. Department of Energy (USDOE) Applied Health Physics Fellow (one of
	approximately 20 students nationally to receive full scholarship and
	guaranteed acceptance to graduate school of choice to enter the field of
	radiation physics with funding and access to USDOE site of choice for
	performing master's research)
1997-1999	University of Michigan School of Public Health Scholarship Award (one of
	3 students to have all fees, books, and living expenses beyond
	government scholarship paid by the School of Public Health)

MEMBERSHIPS

2019-Pres	Member, American Academy of Professional Coders
2018-Pres	Member, South Carolina Osteopathic Medical Society
2017-Pres	Member, American Medical Association
2014-2016	Member, American Heart Association Comprehensive Stroke Center
	Emergency Medical Services Routing Practices Committee
2014-2015	Member, American Society of Neuroimaging 5 Year Vision Task Force
2013-Pres	Member, Neurocritical Care Society Development Committee
2011	Member, American Society of Neuroimaging Strategic Planning
	Committee Member
2010-Pres	Program Committee Member, American Society of Neuroimaging
2010-2012	Member, Committee on Continued Medical Education, Oklahoma
	Osteopathic Association
2009-Pres	Member, American Society of Neuroimaging
2009-2016	Member, Oklahoma Osteopathic Association
2007-Pres	Member, Society of Critical Care Medicine
2005-Pres	Member, Neurocritical Care Society
2005-Pres	Member, American Academy of Neurology
2006	Delegate on behalf of the Michigan Osteopathic Association at the
	American Osteopathic Association House of Delegates
2004-2006	Chair, Education Committee, Michigan Osteopathic Association Intern-
	Resident Committee
2004-2006	Member, Michigan State University College of Osteopathic Medicine
	Education Standards Committee
1999-Pres	Member, American Osteopathic Association

Professional Growth and Development

Continuing Education

- 2/23 South Carolina Osteopathic Medical Society Winter Conference, Hilton Head, SC
- 1/23 American Society of Neuroimaging/Neuro Net Pro Winter Conference, Orlando, FL
- 10/22 American Academy of Neurology Fall Conference, Las Vegas, NV
- 10/22 20 th Neurocritical Care Society Meeting, San Antonio, TX
- 10/22 American Osteopathic Association Annual Educational Meeting (OMED) 2022, Boston, MA, Virtual
- 9/22 American Medical Association CPT Advisor Meeting, Seattle, WA, Virtual
- 8/22 Institute for Safe Medication Practice (ISMP) Medication Safety Intensive 2-day Workshop
- 7/22 South Carolina Osteopathic Medical Society Annual Conference, Spartanburg, SC
- 7/22 American Osteopathic Association House of Delegates, Chicago, IL
- 6/22 American Medical Association House of Delegates Special Meeting, Chicago, IL
- 6/22 Houston Methodist TCD Master Class, virtual

- 4/22 51st Critical Care Congress, Society of Critical Care Medicine, Virtual Meeting
- 4/22 American Academy of Neurology Annual Meeting, Seattle, Washington
- 1/22 Neurocritical Care Society: Trainee Webinar Series: Working with Challenging Patients
- 1/22 American Society of Neuroimaging Annual Meeting, Scottsdale, AZ
- 11/21 2021 William Schmidt Faculty Development Conference, Virtual
- 11/21 Special Meeting of the American Medical Association House of Delegates, Virtual Meeting
- 10/21 19th Neurocritical Care Society Meeting, Chicago, IL
- 10/21 Annual Meeting of the South Carolina Chapter of the American College of Physicians, Charleston, SC
- 10/21 American Osteopathic Association Annual Educational Meeting (OMED) 2021
- 7/21 American Osteopathic Association House of Delegates, Virtual
- 7/21 American Osteopathic Association United Federation of Osteopathic Societies Annual Meeting, Virtual
- 6/21 CMS Town Hall: Physician Fee Schedule: Improving Practice Expense Data & Methods
- 6/21 American Medical Association House of Delegates Special Meeting, Virtual
- 5/21 American Medical Association: The 2021 E/M Office Visit Technical Corrections, Virtual
- 5/21 American Medical Association: 2021 CPT Editorial Panel Meeting, Virtual
- 4/21 American Medical Association: 2021 RUC Meeting, Virtual
- 4/21 American Academy of Neurology Annual Meeting, Virtual
- 3/21 DO Day on the Hill
- 2/21 South Carolina Osteopathic Medical Society Winter Meeting, Virtual
- 2/21 50th Critical Care Congress, Society of Critical Care Medicine, Virtual Meeting
- 1/21 American Society of Neuroimaging Annual Meeting, Virtual Meeting
- 9/20 18th Neurocritical Care Society Annual Meeting, Virtual Meeting
- 8/20 American Osteopathic Association House of Delegates, Virtual Meeting
- 7/20 American Academy of Neurology Advance Practice Provider Neurology Education Series, Virtual Meeting
- 6/20 American Medical Association House of Delegates, Virtual Meeting
- 3/20 American Society of Neuroimaging Annual Meeting, Atlanta, GA
- 2/20 South Carolina Osteopathic Medical Society Winter CME Conference, Columbia, SC
- 2/20 49th Critical Care Congress, Society of Critical Care Medicine, Orlando, FL
- 10/19 17th Neurocritical Care Society Annual Meeting, Vancouver, British Columbia
- 7/19 American Osteopathic Association House of Delegates, Chicago, IL
- 7/19 American Osteopathic Association United Federation of Osteopathic Societies Annual Meeting, Chicago, IL
- 6/19 American Medical Association House of Delegates, Chicago, IL
- 4/19 American Academy of Neurology Annual Meeting, Philadelphia, PA

- 2/19 South Carolina Osteopathic Medical Society Winter CME Conference, Greenville, SC
- 2/19 48th Critical Care Congress, Society of Critical Care Medicine, San Diego, CA
- 1/19 American Society of Neuroimaging Annual Meeting, San Juan, PR
- 9/18 16th Neurocritical Care Society Annual Meeting, Boca Raton, FL
- 6/18 American Medical Association House of Delegates, Chicago, IL
- 4/18 American Academy of Neurology Annual Meeting, Los Angeles, CA
- 2/18 47th Critical Care Congress, Society of Critical Care Medicine, San Antonio, TX
- 2/18 American Society of Neuroimaging Annual Meeting, Austin, TX
- 10/17 15th Neurocritical Care Society Annual Meeting, Kona, HI
- 4/17 American Academy of Neurology Annual Meeting, Boston, MA
- 1/17 Critical Care Ultrasound Course, Society of Critical Care Medicine, Honolulu, HI
- 1/17 46th Critical Care Congress, Society of Critical Care Medicine, Honolulu, HI
- 1/17 American Society of Neuroimaging Annual Meeting, Los Angeles, CA
- 9/16 14th Neurocritical Care Society Annual Meeting, Washington, DC
- 5/16 10th Annual Anchorage Resuscitation and Critical Interventions Conference, Anchorage, AK
- 4/16 Oklahoma Osteopathic Association Annual Convention, Norman, OK
- 1/16 American Society of Neuroimaging Annual Meeting, Orlando, FL
- 10/15 13th Neurocritical Care Society Annual Meeting, Scottsdale, AZ
- 4/15 Oklahoma Osteopathic Association Annual Convention, Norman, OK
- 4/15 Oklahoma Resuscitation Academy, Oklahoma City, OK
- 1/15 American Society of Neuroimaging Annual Meeting, Carefree, AZ
- 9/14 12th Neurocritical Care Society Annual Meeting, Seattle, WA
- 6/14 Oklahoma Osteopathic Association Statewide Trauma Conference, Lawton, OK
- 4/14 Oklahoma Osteopathic Association Annual Convention, Norman, OK
- 4/14 Oklahoma Resuscitation Academy, Oklahoma City, OK
- 1/14 American Society of Neuroimaging Annual Meeting, Sarasota, FL
- 9/13 11th Neurocritical Care Society Annual Meeting, Philadelphia, PA
- 8/13 Oklahoma Osteopathic Association Summer CME Meeting, Midwest City, OK
- 1/13 American Society of Neuroimaging Annual Meeting, Las Vegas, NV
- 10/12 10th Neurocritical Care Society Annual Meeting, Denver, CO
- 8/12 Oklahoma Osteopathic Association Summer CME Meeting, Oklahoma City, OK
- 5/12 114th Missouri Osteopathic Annual Convention, Lake of the Ozarks, MO
- 9/11 9th Neurocritical Care Society Annual Meeting, Montreal, Quebec
- 8/11 Oklahoma Osteopathic Association Summer CME Meeting, Oklahoma City, OK
- 1/11 Oklahoma Osteopathic Association Winter CME Meeting, Tulsa, OK
- 1/11 American Society of Neuroimaging Annual Meeting, Sanibel Island, FL
- 9/10 8th Neurocritical Care Society Annual Meeting, San Francisco, CA
- 5/10 Oklahoma Osteopathic Association Annual Convention, Oklahoma City, OK
- 1/10 Oklahoma Osteopathic Association Neurology Update, Tulsa, OK
- 1/10 American Society of Neuroimaging Annual Meeting, San Francisco, CA
- 12/09 Wake Forest Neurovascular Interpretation Course, Winston-Salem, NC

- 12/08 Wake Forest Neurovascular Interpretation Course, Winston-Salem, NC
- 11/08 Wake Forest Neurovascular Ultrasound Course, Winston-Salem, NC
- 10/08 American Osteopathic Association Annual Convention, Las Vegas, NV
- 10/08 6th Neurocritical Care Society Annual Meeting, Miami, FL
- 2/08 International Stroke Conference, New Orleans, LA
- 12/07 American Epilepsy Society Annual Meeting, Philadelphia, PA
- 11/07 5th Neurocritical Care Society Annual Meeting, Las Vegas, NV
- 5/07 Columbia Neurocritical Care Symposium, New York, NY
- 12/06 American Epilepsy Society Annual Meeting, San Diego, CA
- 2/06 International Stroke Conference, Kissimmee, FL
- 12/05 American Epilepsy Society Annual Meeting, Washington, D.C.
- 1/05 AAN Annual Mid-winter Meeting, San Diego, CA
- 2/04 International Stroke Conference, San Diego, CA

Last updated 3/29/23