

Curriculum Vitae

Michael T. Kenes, Pharm.D., FCCP, FCCM, BCPS, BCCCP

OFFICE ADDRESS:

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EDUCATION

2009 – 2013	Doctor of Pharmacy University of Illinois Chicago Chicago, IL
2013 – 2014	PGY-1 Pharmacy Practice Residency Cleveland Clinic Cleveland, OH Residency Director: Katie Greenlee, Pharm.D., BCPS (AQ-Cardiology)
2014 – 2015	PGY-2 Critical Care Pharmacy Residency Vanderbilt University Medical Center Nashville, TN Residency Director: Susan Hamblin, Pharm.D., FCCM, BCPS, BCCCP

LICENSURE

2020 – Present	Michigan Licensed Pharmacist, License Number 5302412351
2013 – Present	Ohio Licensed Pharmacist, License Number RPH.03232773-2

APPOINTMENTS

2024 – Present	Clinical Associate Professor Department of Clinical Pharmacy, College of Pharmacy University of Michigan, Ann Arbor, MI
2020 – Present	Clinical Pharmacy Specialist, Medical Intensive Care Unit (ICU) Michigan Medicine, Ann Arbor, MI
2020 – Present	Clinical Pharmacy Researcher Dr. Max Harry Weil Institute for Critical Care Research and Innovation
2020 – 2024	Clinical Assistant Professor Department of Clinical Pharmacy, College of Pharmacy University of Michigan, Ann Arbor, MI
2015 – 2020	Clinical Pharmacy Specialist, Medical ICU Wake Forest Baptist Health, Winston Salem, NC

2015 – 2020	ICU Recovery Clinic Pharmacist Wake Forest Baptist Health, Winston Salem, NC
2016 – 2020	Institutional Review Board (IRB) Voting Member (10% effort) Wake Forest Baptist Health, Winston Salem, NC
2016 – 2020	PGY2 Critical Care Pharmacy Residency Program Coordinator Wake Forest Baptist Health, Winston Salem, NC
2015 – 2020	Adjunct Clinical Faculty College of Pharmacy, Wingate University, Winston Salem, NC
2015 – 2020	Adjunct Clinical Faculty College of Pharmacy, Campbell University, Winston Salem, NC
2015 – 2017	Associate Instructor, Fundamentals of Critical Care Support Society of Critical Care Medicine
2014 – 2015	Adjunct Clinical Assistant Professor College of Pharmacy, Belmont University, Nashville, TN

SPECIALTY AND SUBSPECIALTY CERTIFICATIONS

2017 – Present	Board Certified Critical Care Pharmacy Specialist (BCCCP)
2015 – Present	Board Certified Pharmacotherapy Specialist (BCPS)

ELECTIVE CERTIFICATIONS

2014 – Present	Advanced Cardiac Life Support (ACLS), American Heart Society
2014	Fundamentals of Critical Care Support, Society of Critical Care Medicine
2014	Advanced Trauma Support (ATLS), American College of Surgeons, Audited
2014	Resident ICU Course, Society of Critical Care Medicine

HONORS

2025	Fellow, American College of Clinical Pharmacy
2023	Evan Newport HOPE Award, Michigan Medicine (as part of Medical ICU team)
2023	Fellow, American College of Critical Care Medicine
2023	Gold Snapshot Award, Society of Critical Care
2023	Scholarship Award, Research Section of the Society of Critical Care Medicine

2022	<i>Phi Delta Chi</i> Faculty Teaching Appreciation Award, P3 Class of 2023, College of Pharmacy, University of Michigan
2021	<i>Phi Delta Chi</i> Faculty Teaching Appreciation Award, P3 Class of 2022, College of Pharmacy, University of Michigan
2019	Star Research Award, Society of Critical Care Medicine
2018	Residency Preceptor of the Year, Pharmacy Department, Wake Forest Baptist Health
2016	Presidential Citation, Society of Critical Care Medicine
2009 – 2013	Chancellor’s Student Service and Leadership Award, University of Illinois Chicago
2012	Excellence in Public Health Pharmacy Practice Award, United States Public Health Service
2011	Citation Award, Commissioned Corps, United States Public Health Service
2011	<i>Phi Lambda Sigma</i> Pharmacy Leadership Society – Alpha Iota Chapter
2007	Eagle Scout Award, Boy Scouts of America

Service

CLINICAL SERVICES

New Clinical Services Established

2026	<i>Michigan Medicine</i> Assisted with expansion of Medical ICU from 20 beds to 30 with the addition of external nurse practitioner/physician assistants. Provided significant medication education to providers and nurses with external prior ICU experience.
2021	<i>Michigan Medicine</i> Assisted with expansion of Medical ICU from 20 beds to maximum of 25-30 with the addition of 1-2 internal nurse practitioner/physician assistants. Provided significant medication education to providers and nurses without prior ICU experience. Expansion removed after ~1 year due to staffing.
2020	<i>Michigan Medicine</i> Primary clinical pharmacist for newly opened Regional Infectious Containment Unit (RICU, or COVID ICU), which expanded to 50 ICU beds, staffed by critical care and anesthesia providers from multiple backgrounds. Assisted with medication shortage mitigation, operations and medication use system optimization, and development of clinical protocols and education.
2017	<i>Wake Forest Baptist Health</i> Established clinical pharmacy services for new 10 bed Medical Oncology ICU. Assisted with training of medical ICU nurse practitioners/physician assistants for new patient population. Collaborated with interdisciplinary groups to create clinical protocols. Optimized medication use systems for patient population in new physical ICU space.

COMMITTEE ACTIVITIES

University

College of Pharmacy, University of Michigan

2024 – Present	Doctor of Pharmacy Curriculum Revision <i>Ad Hoc</i> Committee
2023 – Present	Admissions Committee
2021 – Present	Therapeutics Subcommittee, Curriculum and Assessment Committee
2020 – 2023	Faculty Development Committee

Hospital

Michigan Medicine

2021 – Present	Sepsis Metrics Compliance (SEP-1) Committee
2021 – Present	Post-Arrest Management Committee
2020 – Present	Critical Care Steering Committee
2020 – Present	Critical Care Medicine Unit Interdisciplinary Committee
2020 – Present	Interdisciplinary Delirium Committee
2020 – 2021	Sepsis Transitions of Care Committee
2020	Regional Infectious Containment Unit Interdisciplinary Committee

Wake Forest Baptist Health

2018 – 2019	Institutional Sepsis Prevention and Treatment Committee
2018 – 2019	Pharmacy Patient Care Needs Assessment Steering Committee
2016 – 2019	Pharmacy-to-Dose Medication Committee
2016 – 2019	Multidisciplinary Medical ICU Research Committee
2015 – 2019	Pharmacy Research Committee
	2018 – 2019 Chair
2015 – 2019	PGY-2 Critical Care Residency Advisory Committee
2015 – 2019	Code Response Education Workshop Committee
2015 – 2019	Anticoagulation Management Pharmacy and Therapeutics Committee
2015 – 2019	Anticoagulant Reversal Sub-Committee

Vanderbilt University Medical Center

2014 – 2015	Institutional Critical Care Committee
2014 – 2015	Surgical Critical Care Quality Improvement Committee

CLINICAL PERFORMANCE IMPROVEMENT PROJECTS

Medication Use Evaluations

Michigan Medicine

2024	Antibiotic Dose Adjustments during Initiation and Discontinuation of CRRT (student advisor)
2023	Sedation Adjustments during Continuous Paralysis (student advisor)
2022	Continuation of Medications for New-Onset Atrial Fibrillation in ICU Survivors (student advisor)
2021	New Requirement of Insulin Use Post-Discharge in Critically Ill COVID-19 Survivors (student advisor)
2021	Compliance with Medication Treatment Recommendations for Decompensated Cirrhotic Patients (student advisor)
2020	Cisatracurium Dosing Requirements in COVID-19 Compared to non-COVID-19 Patients (resident advisor)

Wake Forest Baptist Health

2018	Vasopressin Utilization in the Medical ICU (resident advisor)
2018	Obtainment of Respiratory Cultures in Patients Treated for Pneumonia (resident advisor)
2017	Diagnosis and Treatment of Heparin-Induced Thrombocytopenia (student advisor)
2017	Dexamethasone Use in Bacterial Meningitis (student advisor)

Vanderbilt University Medical Center

2014 Effect of Scheduled Acetaminophen on Intravenous Opioid Use in Trauma Patients

Protocol and Orderset Development

Michigan Medicine

2026 DKA Protocol and Orderset
2025 23.4% NaCl Policy
2024 Insulin Infusion for Hypertriglyceridemia
2024 Continuous Calcium Infusion Orders
2024 N-Acetylcysteine (NAC) Protocol for Acetaminophen Overdose
2023 Phenobarbital for Alcohol Withdrawal in the Medical ICU
2021 Corticosteroids for Septic Shock
2021 ICU Electrolyte Replacement Protocol Update
2020 Care of the Critically Ill COVID-19 Patient Treatment Protocol
2020 Albumin Treatment Protocol

Wake Forest Baptist Health

2018 Pharmacy Department Residency Research Protocol
2018 Peripheral Vasopressor Administration Protocol
2017 ICU Pain, Agitation and Delirium Orderset
2017 ICU Deep Sedation and Paralysis Orderset
2017 Calcium Channel Blocker Overdose Orderset
2017 Diabetic Ketoacidosis Treatment Orderset
2017 Heparin-Induced Thrombocytopenia Orderset and Guideline
2016 Citrate Anticoagulation for Renal Replacement Therapies Guideline and Protocol
2016 Anticoagulant Reversal Orderset and Guideline

Vanderbilt University Medical Center

2015 Burn ICU High Dose Vitamin C for Resuscitation Protocol
2015 Surgical ICU Insulin Transition Protocol

Drug Monograph Preparation and Review

Michigan Medicine

2023 Terlipressin

Wake Forest Baptist Health

2019 Revefenacin
2017 Clevidipine
2017 Andexanet Alpha
2016 Angiotensin II

Vanderbilt University Medical Center

2015 Peramivir

Cleveland Clinic

2014 Melatonin

PROFESSIONAL SOCIETY COMMITTEES

2019 – Present	<i>Board of Pharmacy Specialties</i> , Critical Care Specialty
	2024 – 2029 Appointed Specialty Council Member
	2019 – 2022 Member, Role Delineation Study
	2019 Member, Standard Setting Committee

2014 – Present	<i>Society of Critical Care Medicine,</i>	
2014 – Present	Clinical Pharmacy and Pharmacology Section	
2016 – Present	Research Section	
	2018 – 2021	Member, Simulation Education Subcommittee
2013 – Present	<i>American College of Clinical Pharmacy,</i>	
2013 – Present	Critical Care Practice Related Network	
	2020 – Present	Member, Scholarship Review Committee
	2019 – Present	Member, Recognition Committee
	2025 – 2026	ACCP Foundation Liaison and Steering Committee Member
	2023 – 2024	Past-Chair, Recognition Committee
	2022 – 2023	Chair, Recognition Committee
	2021 – 2022	Vice-Chair, Recognition Committee
	2018 – 2019	Member, Standard Setting Committee, Critical Care Self-Assessment Program
2018 – 2020	THRIVE Initiative (Optimizing Post-ICU Care)	
2013 – 2016	American Society of Health-System Pharmacists	
2009 – 2013	<i>Phi Delta Chi</i> Professional Pharmacy Fraternity – Alpha Sigma Chapter	

PROFESSIONAL SERVICE

2020 – 2022	COVID-19 Colleague Connect (24/7 line for COVID-19 ICU care in state of Michigan) Pharmacist Team Lead, Funded by Blue Cross Blue Shield – Michigan
2019	Item writer, Board Certified Critical Care Pharmacist Exam, Board of Pharmacy Specialties
2015 – 2019	Item writer, North American Pharmacist Licensure Examination (NAPLEX) National Association of Boards of Pharmacy

EDITORIAL AND REVIEW ACTIVITIES

PERIODICALS

American Journal of Health-System Pharmacy

Anesthesia & Analgesia

Critical Care Medicine

Hospital Pharmacy

Journal of Critical Care

Journal of Hospital Medicine

Journal of Pharmacy Practice

Pharmacotherapy

PROFESSIONAL ORGANIZATION MEETINGS

2015 – Present Annual Congress Abstract Reviewer, Society of Critical Care Medicine

PROFESSIONAL INVITATIONS

INVITED PLATFORM AND CONTINUING EDUCATION PRESENTATIONS

International/National

May 2026	Role of the Pharmacist: Survive, Then Thrive: Innovations in Post-ICU Recovery American Thoracic Society 2026 International Conference Orlando, FL
May 2026	Medication Complications of Continuous Renal Replacement Therapy Dialysis Core Curriculum 2026, American Society of Nephrology Virtual
March 2026	Medication Dosing in Continuous Renal Replacement Therapy Dialysis Core Curriculum 2026, American Society of Nephrology Virtual
September 2024	Adjunctive Vasopressor Agents for the treatment of Shock 36th Annual CME Update in Pulmonary & Critical Care Medicine, University of Michigan Ann Arbor, MI
November 2023	Phenobarbital for Alcohol Withdrawal in the Intensive Care Unit 35th Annual CME Update in Pulmonary & Critical Care Medicine, University of Michigan Ann Arbor, MI
November 2022	Optimizing Sedation in the Intensive Care Unit 34th Annual CME Update in Pulmonary & Critical Care Medicine, University of Michigan Plymouth, MI
Spring 2022	Insights into Clinical Pharmacy Career 3 rd Annual Great Lakes Pharmacy Conference Ann Arbor, MI
August 2022	Reducing Delirium through Transitions of Care in the Geriatric Critically Ill Central Nervous System, Critical Care, and Geriatric Practice Related Network American College of Clinical Pharmacy Virtual
February 2022	The METRICS Framework in Critical Care Simulation as a Guide to Career Advancement 51st Critical Care Conference, Society of Critical Care Medicine Virtual
November 2020	Role of the Pharmacist in ICU Follow-up Clinics 9th Annual Johns Hopkins Critical Care Rehabilitation Conference Baltimore, MD
March 2015	“Life-Threatening Infections – Diagnosis and Antimicrobial Therapy Selection” Fundamentals of Critical Care Support, Society of Critical Care Medicine Nashville, TN

March 2015	“Special Considerations in Critically Ill Patients” Fundamentals of Critical Care Support, Society of Critical Care Medicine Nashville, TN
March 2013	Post-Market Adverse Event Reporting at the Food and Drug Administration Office of the Commissioner and FDA Center Directors Silver Spring, MD
January 2013	Correlation between Ketamine and Posttraumatic Stress Disorder in Burned Service Members American Burn Association: Pharmacy Interest Group Virtual
<i><u>Local/Regional</u></i>	
November 2024	Is the Juice Worth the Squeeze? Adjunct Vasoactive Agents in Septic Shock Joint Scientific Session – Michigan Chapters of the American Thoracic Society and Society of Critical Care Medicine; Novi, Michigan
April 2023	Sedation in the Medical Intensive Care Unit Pulmonary Grand Rounds, College of Medicine, University of Michigan Ann Arbor, MI
May 2023	Day-to-Day ICU Management of Patients Receiving Renal Replacement Therapy Grand Rounds, Pharmacy Department, Michigan Medicine Ann Arbor, MI
April 2021	Sedation for the Bedside ICU Nurse Continuing Nursing Education presentation to Critical Care Nursing Section and Greater Detroit Chapter of AACN Michigan Medicine, University of Michigan, Ann Arbor, MI
May 2018	Drug-Induced Hyperthermia Internal Medicine Grand Rounds, Wake Forest Baptist Health Winston Salem, NC
September 2016	Vasopressor Use in Shock Internal Medicine Grand Rounds, Wake Forest Baptist Health Winston Salem, NC
April 2015	Practical Approach to Antifungal Therapy Utilization in the Surgical ICU ACCME Presentation, Division of Trauma and Surgical Critical Care Department of Surgery, Vanderbilt University Medical Center Nashville, TN
January 2015	Progesterone for Traumatic Brain Injury ACCME Presentation, Division of Anesthesia Critical Care Department of Anesthesia, Vanderbilt University Medical Center Nashville, TN
October 2014	Antifungal Therapy: Where Are We Now in Critically Ill Patients? ACPE Presentation, Department of Pharmacy Vanderbilt University Medical Center Nashville, TN
February 2014	Thrombolytics for the Treatment of Submassive Pulmonary Embolism

LOCAL AND IN-SERVICE PRESENTATIONS

January 2015	Vasoactive Medications Nursing Intensive Care Education Course Lecture Nursing Education, Vanderbilt University Medical Center Nashville, TN
November 2014	Myxedema Coma Department of Pharmacy, Vanderbilt University Medical Center Nashville, TN
November 2014	Influenza Vaccination Policies and Procedures Presented to Trauma Nursing Unit Board, Vanderbilt University Medical Center Nashville, TN
June 2014	Treatment of Calcium Channel Blocker Overdose Department of Pharmacy, Education Conference Presentation, Cleveland Clinic Cleveland, OH
June 2014	Controlled Substance Prescribing Policies and Procedures Medical Resident Orientation, Cleveland Clinic Cleveland, OH
June 2014	Treatment of Diabetic Ketoacidosis and Electrolyte Abnormalities Department of Pharmacy, Advanced Pharmacy Practice Experience Student Lecture Cleveland Clinic, Cleveland, OH
November 2013	Treatment of Disseminated Mycobacterium avium Complex Infections Department of Pharmacy, Education Conference Presentation, Cleveland Clinic Cleveland, OH
September 2013	Treatment of Hyperglycemic Crisis: Diabetic Ketoacidosis Department of Pharmacy, Education Conference Presentation, Cleveland Clinic Cleveland, OH
May 2015	Ceftolozane/Tazobactam for Complicated Intra-abdominal Infections Critical Care Journal Club Presentation, Vanderbilt University Medical Center Nashville, TN
April 2015	Effects of Statin Use During Hospitalization for Intracerebral Hemorrhage Critical Care Journal Club Presentation, Vanderbilt University Medical Center Nashville, TN
April 2015	Impact of Clostridium difficile Infection in a Neutropenic Patient Population Clostridium Research Group Division of Infectious Disease, Vanderbilt University Medical Center Nashville, TN
March 2015	Dysglycemia in the Critically Ill Patient Population Multidisciplinary Adult Nutrition Service Rounds Center for Human Nutrition, Vanderbilt University Medical Center Nashville, TN

TEACHING

DIDACTIC

2020 – Present	University of Michigan College of Pharmacy, Ann Arbor, MI <i>Course Coordinator</i> 2021 – Present PHARMACY 702 (P3 Therapeutics), approximately 80 students per year <i>Lecturer</i> 2020 – Present PHARMACY 702 (P3 Therapeutics), approximately 80 students per year Quantification of Renal Function Renal Replacement Therapy Chronic Kidney Disease Acute Kidney Injury and Drug-Induced Nephropathies Lab, Renal Cases Fluid Therapies Acid-Base Sodium and Potassium Disorders Calcium, Magnesium, and Phosphorus Disorders Lab, Acid-Base Lab, Electrolytes Diagnosis of Anemia Treatment of Anemia <i>Course Coordinator and Lecturer</i> PHARMACY 702 (P3 Therapeutics) Summer Remediation Course 2024 – Present <i>Instructor</i> 2020 – Present PharmD Investigations, PHARMACY 614/719/739 2 pharmacy students per class year <i>Instructor</i> 2020 – Present PHARMACY 730 Pharmacy Student Seminar 2 P4 students per year
2017 – 2019	Wake Forest University College of Medicine, Winston Salem, NC <i>Lecturer</i> M4 Seminar, approximately 140 students per year Preparing for Residency Intern Year, Medication Clinical Pearls
2014	Belmont University College of Pharmacy, Nashville, TN <i>Course Coordinator</i> Special Topics in Pharmacotherapy: Critical Care Elective; 2 credit hours, 30 students <i>Lecturer</i> Agitation and Delirium Shock States and Hemodynamic Support Septic Shock Anemia of Critical Illness and Blood Conservation
Additional didactic mentee not included in above coursework:	
2022 – Present	Secondary Mentor, PhD Dissertation Committee Member Levi Hooper, Clinical Pharmacy and Translational Sciences PharmD/PhD Candidate

EXPERIENTIAL

Experiential Rotations Precepted:

2020 – Present	Medical ICU, Michigan Medicine, University of Michigan, Ann Arbor, MI
2020	COVID ICU, Virtual APPE rotation for entire PharmD Class of 2020, University of Michigan
2015 – 2020	Medical ICU, Wake Forest Baptist Health, Winston Salem, NC
2013 – 2014	Primary Preceptor while PGY-2 Critical Care Resident at Vanderbilt University Medical Center, Nashville, TN

Number of post-graduate pharmacy residents and PharmD students precepted on rotation in the ICU

Year	PGY-2 Critical Care	PGY-2 Infectious Diseases	PGY-2 Emergency Medicine	PGY-1	PharmD APPE	PharmD IPPE
2020-Present	5	3	1	11	32	2
2015-2020	8	4		19	15	
2013-2014					4	
Total	13	7	1	30	51	2
Total Learners	104					

PGY2 Critical Care Residents Trained while Program Coordinator and Current Position/Institution

2019 – 2020	Kara Kubbs, Cardiac ICU, OU Health
2018 – 2019	Kate Summers, Medical ICU Pharmacist, OU Health
2017 – 2018	Liz Kowalik, Medical ICU Pharmacist, UMass Memorial Hospital
2016 – 2017	Josh Arnold, Medical Oncology ICU Pharmacist, Ohio State University
2015 – 2016	Matt Watson, Medical ICU/Clinical Coordinator, Emory University

SCHOLARSHIP

PUBLICATIONS

BOOK CHAPTERS

1. **Kenes MT**, Farina N. Fluid Therapy in the Intensive Care Unit. In Yasir AA, Gebily MA, eds. The Pharmacist's Expanded Role in Critical Care Medicine. Springer Nature. 2025.
2. **Kenes MT**, Farina N. Fungal Infections in the Intensive Care Unit. In Flannery AH, Hall Zimmerman L, eds. Critical Care Self-Assessment Program, 2022 Book II. Infectious Diseases in the ICU. Lenexa, KS: American College of Clinical Pharmacy, 2022.
3. Bliss S, **Kenes MT**. Nutrition Support Services. In Boucher BA, Haas CE, eds. Critical Care Self-Assessment Program, 2018 Book III. Fluids and Nutrition/GI and Liver Disorders. Lenexa, KS: American College of Clinical Pharmacy, 2018.

ORIGINAL CONTRIBUTIONS

**Indicates direct trainee*

1. Munroe ES, Walzl E, Seelye S, Cahill M, Czilok T, Jones J, **Kenes MT**, Posa PJ, Parks Taylor S, Prescott HC. Comorbidities, Weight-Based Initial Fluid Resuscitation, and Mortality in Patients With Sepsis. JAMA Netw Open. 2026 Jun 1;9(6):e2618232.
2. *Rosewarne RE, *Perez S, Ingebrigtsen M, Co I, McSparron JI, **Kenes MT**. SGLT2 inhibitor-associated diabetic ketoacidosis in the intensive care unit. JAPhA Pharmacotherapy. 2026. (online ahead of print).

3. *Govalan R, Hao S, **Kenes MT**, McSparron JI, Tapper EB. Safety and effectiveness of phenobarbital vs. benzodiazepines for severe alcohol withdrawal in alcohol-associated liver disease in the ICU. *JHEP Rep.* 2026 Apr;8(4):101769.
4. *Hooper L, Heung M, Wang L, Matvekas A, *Alikhani R, **Kenes MT**, Stringer KA, Mueller BA, Pai MP. Pharmacokinetic Characterization of Iopamidol and Iohexol for Optimizing Measured Glomerular Filtration Rate Assessment in Clinical Practice and Drug Development. *J Clin Pharmacol.* 2025 Nov;65(11):1350-1361.
5. Buckley MS, Smith SE, Birriel B, Radosevich JJ, Dzierba AL, Roberts RJ, Barletta JF, Gershengorn HB, Sikora A, Peterson LK, Bodkin R, Kaufman D, Ardiles T, Uppalapu S, Tompeck AJ, Dabrowski P, Close L, Brewer H, Jontz A, Downs B, Cox LA, Alexander SA, Harrison K, MacLaren R; **Society of Critical Care Medicine Clinical Pharmacy and Pharmacology Practice Advancement Committee**. ICU Patient-to-Pharmacist Ratios: A Prospective, Multicenter Time-Motion Study. *Crit Care Med.* 2025. (online ahead of print).
6. Hooper L, Heung M, **Kenes MT**, Stringer KA, Mueller BA, Pai MP. The Kinetics of Cystatin C and Serum Creatinine in AKI. *Clin J Am Soc Nephrol.* 2025;20(4):477-84.
7. Beaudrie-Nunn AN, Poyant JO, Groth CM, Rappaport SH, Kruer RM, Miller E, Whitten JA, McIntire AM, McDaniel CM, Betthauer KD, Mohammad RA, **Kenes MT**, Korona RB, Barber AE, MacTavish P, Dixit D, Yeung SYA, Stollings JL. An International, Multicenter Evaluation of Comprehensive Medication Management by Pharmacists in ICU Recovery Centers. *Am J Health Syst Pharm.* 2024. (online ahead of print).
8. Ingebrigtsen, M, *Schang S, Hyzy RC, McSparron JI, Chen X, Tapper EB, **Kenes MT**. Phenobarbital Versus Benzodiazepines for Alcohol Withdrawal in the Medical Intensive Care Unit (ICU): A Retrospective Cohort Study. *J Pharm Practice.* 2024. (online ahead of print).
9. Singer SK, Betthauer KD, Barber AE, Korona RB, Dixit D, Groth CM, **Kenes MT**, MacTavish P, Kruer RM, McDaniel CM, McIntire AM, Miller E, Mohammad RA, Poyant JO, Rappaport SH, Whitten JA, Yeung SYA, Stollings JL. Effect of Inpatient Pharmacist-Led Medication Reconciliations on Medication-Related Interventions in Intensive Care Unit Recovery Centers. *Hosp Pharm.* 2024 Dec;59(6):650-659.
10. *Barker AK, Valley TS, **Kenes MT**, Sjoding MW. Sedation Practices for Intubated Non-COVID Patients Have Worsened in the Post-COVID Era. *Chest.* 2024. (online ahead of print).
11. Eaton TL, Danesh V, Sevin CM, Potter K, Su H, Iwashyna TJ, Boehm L, McPeake J, the Critical and Acute Illness Recovery Organization (**CAIRO**) **Post-ICU Clinic Collaborative**. Importance of Reconnection With ICU Survivors to ICU Recovery Program Clinics. *Chest Critical Care.* September 2023. (online ahead of print).
12. Bolesta S, Burry L, Perreault MM, Gelinas C, Smith KE, Eadie R, Carini FC, Saltarelli K, Mitchell J, Harpel J, Stewart R, Riker RR, Fraser GL, Erstad BL; AduLt iatrogenic withdrawal sTudy in the ICU (**ALERT-ICU**) **Study Investigators**. International Analgesia and Sedation Weaning and Withdrawal Practices in Critically Ill Adults: The Adult Iatrogenic Withdrawal Study in the ICU. *Crit Care Med.* 2023. (online ahead of print).
13. Stollings JL, Poyant JO, Groth CM, Rappaport SH, Kruer RM, Miller E, Whitten JA, McIntire AM, McDaniel CM, Betthauer KD, Mohammad RA, **Kenes MT**, Korona RB, Barber AE, MacTavish P, Dixit D, Yeung SYA. An International, Multicenter Evaluation of Comprehensive Medication Management by Pharmacists in ICU Recovery Centers. *J Intensive Care Med.* 2023. (online ahead of print).
14. Ankravs MJ, McKenzie CA, **Kenes MT**. Precision-Based Approaches to Delirium in Critical Illness: A Narrative Review. *Pharmacotherapy.* 2023. (online ahead of print).
15. King J, Chenoweth CE, England PC, Heiler A, **Kenes MT**, Raghavendran K, Wood W, Zhou S, Mack M, Wesorick D, Proudlock A. Early Recognition and Initial Management of Sepsis in Adult Patients Guideline. *Michigan Medicine Clinical Care Guidelines.* University of Michigan. 2023.
16. Mohammad RA, Nguyen CT, Costello, Poyant JO, Yeung YA, Landolf K, Artman KL, Taylor DC, **Kenes MT**, Alkhateeb T, Stollings JL. Medication Changes and Diagnosis of New Chronic Illnesses in COVID-19 Intensive Care Unit Survivors. *Ann Pharmacother.* 2022;56(9):973-80.
17. Parker AM, Brigham E, Connolly B, McPeake J, Agranovich AV, **Kenes MT**, Casey K, Reynolds S, Schmidt KFR, Kim SY, Kaplin A, Sevin CM, Brodsky MB, Turnbull AE. Addressing the Post-Acute Sequelae of SARS-CoV-2 Infections: A Multidisciplinary Model of Care. *Lancet Respir Med.* 2021;9(11):1328-41.

18. *Ingebrigtsen M, Farina N, Miller J, Renius K, McSparron JI, **Kenes MT**. Cisatracurium Dosing Requirements in COVID-19 Compared to Non-COVID-19 Patients. *J Pharm Pract*. 2023;36(3):485-6.
19. Harwayne-Gidansky I, Zurca A, Maa T, Bhalala US, Malaiyandi D, Nawathe P, Sarwal A, Waseem M, **Kenes MT**, Vennero M, Emler L. Defining Priority Areas for Critical Care Simulation: A Modified Delphi Consensus Project. *Cureus*. 2021;13(6):e15844.
20. Pun BT, Badenes R, Heras La Calle G, Orun OM, Chen W, Raman R, Simpson BK, Wilson-Linville S, Hinojal Olmedillo B, Vallejo de la Cueva A, van der Jagt M, Navarro Casado R, Leal Sanz P, Orhun G, Ferrer Gómez C, Núñez Vázquez K, Piñeiro Otero P, Taccone FS, Gallego Curto E, Caricato A, Woien H, Lacave G, O'Neal HR Jr, Peterson SJ, Brummel NE, Girard TD, Ely EW, Pandharipande PP; **COVID-19 Intensive Care International Study Group**. Prevalence and Risk Factors for Delirium in Critically Ill Patients with COVID-19 (COVID-D): A Multicenter Cohort Study. *Lancet Respir Med*. 2020;9(3):239-50.
21. **Kenes MT**, McSparron JI, Marshall VD, Renius K, Hyzy RC. Propofol-Associated Hypertriglyceridemia in Coronavirus Disease 2019 Versus Noncoronavirus Disease 2019 Acute Respiratory Distress Syndrome. *Crit Care Explor*. 2020;2(12):e0303.
22. Cagino LM, Kercheval JB, **Kenes MT**, McSparron JL, Blank R, Chinn SB, Claar DD, Iwashyna TJ, DeCardenas J. Association of Tracheostomy with Changes in Sedation During COVID-19: A Quality Improvement Evaluation at the University of Michigan. *Ann Am Thorac Soc*. 2020;18(5):907-9.
23. *Goad NT, Bakhru RN, Pirkle JL, **Kenes MT**. Association of Hyperchloremia with Unfavorable Clinical Outcomes in Adults with Diabetic Ketoacidosis. *J Intensive Care Med*. 2020;35(11):1307-13.
24. Roberts RJ, Miano TA, Hammond DA, Patel GP, Chen JT, Phillips KM, Lopez N, Kashani K, Qadir N, Cairns CB, Mathews K, Park P, Khan A, Gilmore JF, Brown ART, Tsuei B, Handzel M, Chang AL, Duggal A, Lanspa M, Herbert JT, Martinez A, Tonna J, Ammar MA, Nazer LH, Heavner M, Pender E, Chambers L, **Kenes MT**, Kaufman D, Downey A, Brown B, Chaykosky D, Wolff A, Smith M, Nault K, Gong MN, Sevransky JE, Lat I; Observation of VariatiOn in fLUids adMinistEred in shock-CHaracterizAtion of vaSoprEссор Requirements in Shock (VOLUME-CHASERS) Study Group and SCCM Discovery Network.. Evaluation of Vasopressor Exposure and Mortality in Patients with Septic Shock. *Crit Care Med*. 2020;48(10):1445-53.
25. Chen JT, Roberts R, Fazzari MJ, Kashani K, Qadir N, Cairns CB, Mathews K, Park P, Khan A, Gilmore JF, Brown ART, Tsuei B, Handzel M, Lee Chang A, Duggal A, Lanspa M, Herbert JT, Martinez A, Tonna J, Ammar MA, Hammond D, Nazer LH, Heavner M, Pender E, Chambers L, **Kenes MT**, Kaufman D, Downey A, Brown B, Chaykosky D, Wolff A, Smith M, Nault K, Sevransky J, Gong MN; VOLUME-CHASERS Study Group and Society of Critical Care Medicine Discovery Network.. Variation in Fluid and Vasopressor Use in Shock With and Without Physiologic Assessment: A Multicenter Observational Study. *Crit Care Med*. 2020;48(10):1436-44.
26. Mohammad RM, Betthausen KD, *Boostaver KR, Coe AB, Kolpek JH, Fritschle AC, Jagow B, **Kenes MT**, MacTavish P, Slampak-Cindric AA, Whitten JA, Jones C, Simonelli R, Rowlands I, Stollings JL Clinical Pharmacist Services within Intensive Care Unit Recovery Clinics: An Opinion of the Critical Care Practice and Research Network of the American College of Clinical Pharmacy. *J Am Coll Clin Pharm*. 2020;3:1369-79.
27. Stringer KA, Puskarich MA, **Kenes MT**, Dickson RP. COVID-19: The Uninvited Guest in the Intensive Care Unit - Implications for Pharmacotherapy. *Pharmacotherapy*. 2020;40(5):382-6.
28. Coe AB, *Bookstaver RE, Fritschle AC, **Kenes MT**, MacTavish P, Mohammad RA, Simonelli RJ, Whitten JA, Stollings JL. Pharmacists' Perceptions on their Roles, Activities, Facilitators, and Barriers to Practicing in a Post-Intensive Care Recovery Clinic. *Hospital Pharmacy*. 2020;55(2):119-25.
29. Bakhru RN, Davidson JF, *Bookstaver RE, **Kenes MT**, Peters SP, Welborn KG, Creech OR, Morris PE, Files DC. Implementation of an ICU Recovery Clinic at a Tertiary Care Academic Center. *Crit Care Expl*. 2019;1(8):e0034.
30. Haines KJ, Sevin CM, Hibbert E, Boehm LM, Aparanji K, Bakhru RN, Bastin AJ, Beesley SJ, Butcher BW, Drumright K, Eaton TL, Farley T, Firshman P, Fritschle A, Holdsworth C, Hope AA, Johnson A, **Kenes MT**, Khan BA, Kloos JA, Kross EK, MacLeod-Smith BJ, Mactavish P, Meyer J, Montgomery-Yates A, Quasim T, Saft HL, Slack A, Stollings J, Weinhouse G, Whitten J, Netzer G, Hopkins RO, Mikkelsen ME, Iwashyna TJ, McPeake J. Key Mechanisms by which Post-ICU Activities can Improve In-ICU Care: Results of the International THRIVE Collaboratives. *Intensive Care Medicine*. 2019;47(9):1194-200.

31. Haines KJ, McPeake J, Hibbert E, Boehm LM, Aparanji K, Bakhru RN, Bastin AJ, Beesley SJ, Beveridge L, Butcher BW, Drumright K, Eaton TL, Farley T, Firshman P, Fritschle A, Holdsworth C, Hope AA, Johnson A, **Kenes MT**, Khan BA, Kloos JA, Kross EK, Mactavish P, Meyer J, Montgomery-Yates A, Quasim T, Saft HL, Slack A, Stollings J, Weinhouse G, Whitten J, Netzer G, Hopkins RO, Mikkelsen ME, Iwashyna TJ, Sevin CM. Enablers and Barriers to Implementing ICU Follow-up Clinics and Peer Support Groups Following Critical Illness: The Thrive Collaboratives. *Crit Care Med*. 2019;45(7):939-47.
32. Lat I, Daley MJ, Shewale A, Pangrazzi MH, Hammond D, Olsen KM; **DEFINE study group and the Discovery Research Network**. A Multicenter, Prospective, Observational Study to Determine Predictive Factors for Multidrug Resistant Pneumonia in Critically Ill Adults: The DEFINE Study. *Pharmacotherapy*. 2018;39(3):253-60.
33. Bakhru RN, Davidson JF, *Bookstaver RE, **Kenes MT**, Welborn KG, Morris PE, Clark Files D. Physical Function Impairment in Survivors of Critical Illness in an ICU Recovery Clinic. *J Crit Care*. 2018;45:163-9.
34. **Kenes MT**, Stollings JL, Wang L, Ely EW, Girard TD, Pandharipande PP. Persistence of Delirium after Cessation of Sedative and Analgesics and Impact on Clinical Outcomes in Critically Ill Patients. *Pharmacotherapy*. 2017;37(11):1357-65.
35. **Kenes MT**, Leonard MC, Bauer SR, Wyman MJ. Comparison of Liposomal Bupivacaine and Elastomeric Continuous Infusion Bupivacaine Pump for the Treatment of Post-Operative Pain. *Am J Health Syst Pharm*. 2015;72:S127-32.

LETTERS TO THE EDITOR

36. *Summers KL, Mihm AE, **Kenes MT**. Direct Oral Factor Xa Inhibitors in Patients with Morbid Obesity. *Lancet Haematology* 2019;6(9):e446.

PEER-REVIEWED CASE REPORTS

37. **Kenes MT**, Hamblin S, Tumuluri S, Guillaumondegui O. Syndrome of Inappropriate Antidiuretic Hormone in a Patient Receiving High-Dose Haloperidol and Quetiapine therapy. *J Neuropsychiatry Clin Neurosci*. 2016;28(2):e29-30.

PERIODICALS and NON-PEER-REVIEWED PUBLICATIONS

38. *Goad N, **Kenes MT**. Euglycemic Diabetic Ketoacidosis and SGLT-2 Inhibitors. *Wake Forest Quarterly*. 2017;3(7)2.
39. **Kenes MT**. The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *Wake Forest QMonthly*. 2016;2(10):2-3.
40. Welch PR, **Kenes MT**. Systemic Corticosteroids for Acute Exacerbations of Chronic Obstructive Pulmonary Disease. *Clinical Pharmacy and Pharmacology Section Newsletter: SCCM*. 2015;15(3):5-8.
41. **Kenes MT**. Risk Factors for Falls in Hospitalized Patients. *Wake Forest InPharmation*. 2015;7(4):4-5.
42. **Kenes MT**. Liposomal Bupivacaine. *Cleveland Clinic Clinical Rx Forum*. 2014;2(3):1-2.
43. **Kenes MT**. Recent Erythropoietin Stimulating Agent Use. *Illinois Pharmacist*. 2012;74(2):18-20

ABSTRACTS

**Indicates direct student or resident mentee*

1. Ismail M, Wells T, Kenes M, Park J, Phan H, Manzor B. Assessment of Knowledge, Attitude, and Practice toward Social Drivers of Health Among Doctor of Pharmacy Students. *American Association of Colleges of Pharmacy's Pharmacy Education* 2026. Grapevine, TX. July 2026.
 - Trainee Poster Competition Award, Graduate Student category
2. Hechtman RK, Barker AK, Kenes MT, Mcsparron JJ, Sjoding MW, Prescott HC. High Dose Fentanyl Infusions More Common Among Patients With Prolonged Mechanical Ventilation. *American Thoracic Society* 2026. Orlando, FL. May 2026.
3. *Maysun A, *Noble E, Ingebrigtsen M, Kenes MT. Hemodynamic Response to Stress Dose Steroids in Septic Shock

- by Chronic Steroid Use. American College of Clinical Pharmacy 2026 Virtual Poster Symposium. May 2026.
4. *Noble E, *Maysun A, Ingebrigtsen M, Kenes MT. The Impact of Early Stress Dose Steroids on Shock Recovery: A Race Against Time. American College of Clinical Pharmacy 2026 Virtual Poster Symposium. May 2026.
 5. *Rosewarne R, *Perez S, Ingebrigtsen M, Co I, McSparron JI, Kenes MT. SGLT2 Inhibitor-Associated Diabetic Ketoacidosis in the Intensive Care Unit. Society of Critical Care Medicine's 2026 Critical Care Congress. Chicago, IL. March 2026.
 6. Farina N, Kenes MT, Barker A, Adie S. Effect of Vasopressin in Patients with Left Heart Dysfunction and Pulmonary Artery Catheter Monitors. Society of Critical Care Medicine's 2026 Critical Care Congress. Chicago, IL. March 2026.
 7. *Castiglione CL, *Zivkovic M, Barker A, Adie S, Kenes MT. Hemodynamic Changes During Vasopressin Initiation in Septic Versus Non-Septic Patients. American College of Clinical Pharmacy 2025 Virtual Poster Symposium. May 2025.
 8. *Zivkovic M, *Castiglione CL, Barker A, Adie S, Kenes MT. Comparison of Invasive Hemodynamics During Vasopressin Initiation in Hemodynamic Responders versus Non-Responders. American College of Clinical Pharmacy 2025 Virtual Poster Symposium. May 2025.
 9. *Shepard G, *Chong M, Ingebrigtsen M, McSparron JI, Mueller BA, Yessayan LT, Kenes MT. Evaluating the Frequency of Cefepime and Meropenem Dosing Errors in CRRT Patients. American College of Clinical Pharmacy 2024 Virtual Poster Symposium. May 2024.
 10. *Chong M, *Shepard G, Ingebrigtsen M, McSparron JI, Mueller BA, Yessayan LT, Kenes MT. Evaluating the Frequency of Antibiotic Dosing Errors During Transition from CRRT. American College of Clinical Pharmacy 2024 Virtual Poster Symposium. May 2024.
 11. Farina N, Kenes MT, Yessayan L, Ingebrigtsen M. A Real-World Description of Medication Dose Adjustment Using Cystatin C in Critically Ill Adults. Society of Critical Care Medicine's 2024 Critical Care Congress. Phoenix, AZ. January 2024.
 12. Singer SK, Betthausen KD, Barber AE, Korona RB, Dixit D, Growth CM, Kenes MT, MacTavish P, Kruer RM, McDaniel CM, McIntire AM, Miller E, Mohammad RA, Poyant JO, Rappaport SH, Whitten JA, Yeung SY, Stollings JL. Effect of Pharmacist-Led Medication Reconciliations on Medication Interventions in PICS Clinics. Society of Critical Care Medicine's 2024 Critical Care Congress. Phoenix, AZ. January 2024.
 13. Beaudrie-Nunn A, Poyant J, Growth C, Rappaport S, Kruer R, Miller E, Whitten J, McIntire A, McDaniel C, Betthausen K, Mohammad R, Kenes M, Bookstaver-Korona R, Barber A, MacTavish P, Dixit D, Amy Yeung S, Stollings J. An International, Multicenter Post-Hoc Analysis of Medication Management in ICU Recovery Clinics. Society of Critical Care Medicine's 2024 Critical Care Congress. Phoenix, AZ. January 2024.
 14. *Schang S, Coe AB, Adie SK, Hyzy RC, McSparron JI, Valley TS, Kenes MT. Continuation of ICU-Initiated Digoxin in Survivors of Critical Illness. American College of Clinical Pharmacy 2023 Virtual Poster Symposium. May 2023.
 15. *Lin K, Coe AB, Adie SK, Hyzy RC, McSparron JI, Valley TS, Kenes MT. Continuation of ICU-Initiated Diltiazem in Survivors of Critical Illness. American College of Clinical Pharmacy 2023 Virtual Poster Symposium. May 2023.
 16. *Barker AK, Valley TS, Kenes MT, Sjoding MW. Sedation Practices for Intubated Non-COVID Patients Have Worsened in the Post-COVID Era. American Thoracic Society 2023. Washington, DC. May 2023.
 - *Podium Presentation*
 17. Kenes MT, Adie SK, Valley TS, McSparron JI, Coe AB. Continuation of ICU-Initiated Amiodarone in Survivors of Critical Illness. Society of Critical Care Medicine's 2023 Critical Care Congress. San Francisco, CA. January 2023.
 - *Scholarship Award, Research Section*
 18. Stollings J, Poyant J, Growth C, Rappaport S, Kruer RM, Miller E, McIntire A, McDaniel C, Betthausen K, Mohammad R, Kenes M, *Korona R, MacTavish P, Dixit D, Yeung A, Barber A. An International, Multicenter Evaluation of Pharmacist Medication Management in ICU Recovery Centers. Society of Critical Care Medicine's 2023 Critical Care Congress. San Francisco, CA. January 2023.
 - *Gold Snapshot Award*
 19. *Ingebrigtsen M, Farina N, Miller J, Renius K, McSparron JI, Kenes MT. Cisatracurium Dosing Requirements in COVID-19 Compared to Non-COVID-19 Patients. Society of Critical Care Medicine's 50th Critical Care Congress. Virtual. Virtual Conference. February 2021.
 20. Kenes MT, Belford PM. Anticoagulation Practices with Catheter-Directed Thrombolysis for Treatment of Pulmonary

- Embolism. Society of Critical Care Medicine's 49th Critical Care Congress. Orlando, FL. February 2020.
21. Mahmood S, Brooks A, Files DC, Kenes MT, *Bookstaver R, Bakhru R. Evaluation of Pain in Post-ICU Clinic Patients. Society of Critical Care Medicine's 49th Critical Care Congress. Orlando, FL. February 2020.
 22. Mahmood S, Feng X, McCullough G, Bode A, Files DC, Kenes MT, *Bookstaver R, Bakhru R. Evaluation of Speech and Swallow Function in Post-ICU Clinic Patients. Society of Critical Care Medicine's 49th Critical Care Congress. Orlando, FL. February 2020.
 23. McMoon, M, Files DC, LaRose M, *Boostaver R, Kenes MT, Bakhru R. Perception of Quality of Life and Recovery Resource Availability in ICU Survivors. Society of Critical Care Medicine's 49th Critical Care Congress. Orlando, FL. February 2020.
 24. Kenes MT, *Maxam M, Thomas K. Respiratory Viral Infection Testing in Critically Ill Patients Diagnosed with Pneumonia. Society of Critical Care Medicine's 48th Critical Care Congress. San Diego, CA. February 2019.
 25. *Goad NT, Pirkle J, Bakhru R, Kenes MT. Association of Hyperchloremia and Unfavorable Clinical Outcomes in Adults with Diabetic Ketoacidosis. Society of Critical Care Medicine's 48th Critical Care Congress. San Diego, CA. February 2019.
 - *Star Research Award and Podium Presentation*
 26. Kenes MT, Davidson J, *Boostaver R, *Watson M, Creech O, Files DC, Bakhru R. Characterization of Non-Attendance in an Intensive Care Unit Recovery Clinic. Society of Critical Care Medicine's 46th Critical Care Congress. Honolulu, HI. January 2017.
 27. Kenes MT, Stollings JL, Wang L, Ely EW, Girard TD, Pandharipande PP. Persistence of Delirium after Cessation of Sedative and Analgesics and Impact on Clinical Outcomes in Critically Ill Patients. Society of Critical Care Medicine's 45th Critical Care Congress. Orlando, FL. February 2016.
 28. Kenes MT, Patel P, Jones W, Nelson G, Stollings J, Aronoff DA. Treatment Outcomes of Clostridium difficile Infection in Neutropenic Adults. IDWeek 2015. San Diego, CA. May 2015.
 29. Kenes MT, Kahn S, Hamblin S, et al. Effect of Scheduled Acetaminophen on Intravenous Opioid Use in Trauma Patients. Society of Critical Care Medicine's 44th Critical Care Congress. Phoenix, AZ. January 2015.
 30. Kenes MT, Leonard MC, Bauer SR, Wyman MJ. Comparison of Liposomal Bupivacaine and Elastomeric Continuous Infusion Bupivacaine Pump for the Treatment of Post-Operative Pain. American College of Clinical Pharmacy 2014 Annual Meeting. Encore Presentation. Austin, TX. October 2014.
 31. Kenes MT, Leonard MC, Bauer SR, Wyman MJ. Comparison of Liposomal Bupivacaine and Elastomeric Continuous Infusion Bupivacaine Pump for the Treatment of Post-Operative Pain. American Society of Anesthesiology 2014 Annual Meeting. New Orleans, LA. October 2014.

RESEARCH GRANTS

PEER REVIEWED

Role: Other Significant Contributor; PIs: Robert Dickson, Michael Sjoding, Kathleen Stringer. NIH/NHLBI R01. (\$5,060,751). The Role of the Microbiome in the Acute Respiratory Distress Syndrome: A Translational, Molecular Approach. Unfunded.

- Contributed successful pharmaceutical design of three medication regimens (antimicrobials for selective decontamination of the digestive track, antimicrobials for anaerobe depletion, and placebo), ensuring complete oral intake among alive and non-intubated pigs administered twice daily for seven days, to gather pre-submission data of independently publishable quality.

NON-PEER REVIEWED

Role: PI. College of Pharmacy, University of Michigan. Grant for statistical support (\$2,500). Long-Term Continuation of

Medications for New Onset Atrial Fibrillation in the ICU. Funded 2024.

Role: PI. College of Pharmacy, University of Michigan. Grant for statistical support (\$2,500). Propofol-Associated Hypertriglyceridemia in COVID-19 versus Non-COVID-19 Critically Ill Patients. Funded 2020.

Role: Co-Investigator (10% effort); PI: Jill Ohar. Investigator-Initiated, Unrestricted Research Grant. Boehringer Ingelheim. Utilization of Peak Inspiratory Flow Rate in Chronic Obstructive Pulmonary Disease. Funded 2019.

Role: Study Coordinator (no effort); PI: Jill Ohar. Investigator-Initiated Grant. Sunovion Pharmaceuticals Inc (\$604,026). Preliminary Study for Comparison of Triple Nebulizer Therapy versus Dry Powdered Inhalers for Care Transitions in Chronic Obstructive Pulmonary Disease. Funded 2017.

Role: Primary Investigator; Research Mentor: Joanna Stollings. Vanderbilt Institute for Clinical and Translational Research Grant for statistical support (\$5,000). The Persistence of ICU Delirium after Cessation of Sedatives and Analgesics. Vanderbilt University Medical Center. Funded 2015.

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