Michael P. Dorsch, PharmD, MS, FCCP, FAHA, FACC, BCCP

Business Address

University of Michigan College of Pharmacy 428 Church Street Ann Arbor, MI 48109 Phone: 734-647-1452

Professional Experience

2023-Present	Lynda S. Welage Collegiate Professor of Pharmacy College of Pharmacy, University of Michigan, Ann Arbor, MI
2022-Present	Section Editor Journal of Medical Internet Research, mHealth and uHealth (JMU)
2021-Present	Associate Professor with Tenure College of Pharmacy, University of Michigan, Ann Arbor, MI
2018-2021	Assistant Professor (tenure track) College of Pharmacy, University of Michigan, Ann Arbor, MI
2014-2018	Clinical Associate Professor College of Pharmacy, University of Michigan, Ann Arbor, MI
2007-2018	Director, PGY2 Cardiology Specialty Residency Department of Pharmacy Services, University of Michigan Health System, Ann Arbor, MI
2005-Present	Clinical Pharmacist, Cardiology Department of Pharmacy Services, University of Michigan Health System, Ann Arbor, MI
2012-2014	Clinical Assistant Professor College of Pharmacy, University of Michigan, Ann Arbor, MI
2007-2012	Adjunct Clinical Assistant Professor College of Pharmacy, University of Michigan, Ann Arbor, MI
2006-2009	Preceptor, ACCP Heart Failure Traineeship Department of Pharmacy Services, University of Michigan Health System, Ann Arbor, MI
2005-2007	Adjunct Clinical Instructor College of Pharmacy, University of Michigan, Ann Arbor, MI
2004-2005	Clinical Instructor Division of Pharmacotherapy and Experimental Therapeutics School of Pharmacy, University of North Carolina, Chapel Hill, NC

2004-2005	Pharmacist Department of Pharmacy, University of North Carolina Hospitals, Chapel Hill, NC
2003-2004	Pharmacist Department of Pharmacy, Riverside Methodist Hospital, Columbus, OH
2003-2004	Pharmacist The Kroger Company, Columbus, OH
1997-2002	Pharmacy Intern Drug Information Center, Ohio Northern University, Ada, OH
Education an	d Training
2007-2009	Master of Science, Clinical Research Design and Statistical Analysis University of Michigan, School of Public Health, Ann Arbor, MI
2007-2009	Clinical Research Training Program (K30) University of Michigan, Medical School, Ann Arbor, MI
2004-2005	PGY2 Cardiology Specialty Residency , <i>ASHP accredited</i> University of North Carolina Hospitals, Chapel Hill, NC
2003-2004	PGY1 Pharmacy Practice Residency , <i>ASHP accredited</i> Riverside Methodist Hospital, Columbus, OH
1997-2003	Doctor of Pharmacy Ohio Northern University, Ada, Ohio

Licensure

2003-Present	Registered pharmacist, Ohio
2004-Present	Registered pharmacist, North Carolina
2005-Present	Registered pharmacist, Michigan

SCHOLARSHIP

<u>Narrative:</u> My research program studies the effects of digital health tools on cardiovascular disease. This work includes patient and provider-facing clinical decision support and adapts methods from behavioral health, computer science, data science, and clinical translation. I have prospectively studied two mobile application-based just-in-time adaptive interventions (JITAIs) and provider-facing applications in hypertension, anticoagulation, and heart failure. In addition to these technology-based interventions, I am passionate about research on appropriate medication therapy in cardiovascular disease. This is evident from my over 17 years of research publications in outcomes research. The following sections reflect my dedication to a sustainable research program and demonstrate my commitment to collaboration in team science.

Research Funding

Active

Preventing medication errors due to unsafe electronic prescription transactions with just-in-time feedbackAHRQ R18Total Award: \$1,460,66909/30/2022 - 09/29/2025

Role: Co-Investigator (5%), Principal Investigator (Lester) Description: We will implement and evaluate a just-in-time feedback intervention, SAVE-Rx, that automatically identifies these dangerous medication safety events and actively communicates them to healthcare organizations for resolution. The Impact of an Adaptive Patient-Centered Web Application on Medication Optimization in HFrEF Patients AHRQ R18 Total Award: \$2,988,632 09/30/2022 - 09/29/2025Role: PI (20%) Description: Our objectives are to (1) determine the effects of an adaptive SMART on FHIR web application on guideline-directed medication prescribing in HF, (2) assess concordance between the recommendations provided by the medication optimization algorithm and the medications prescribed, and (3) identify the patient and provider characteristics that moderate the effectiveness of the medication optimization web application. Implementing Prescriber-Pharmacist Collaborative Care for Evidence-based Anticoagulant Use AHRQ R18 Total Award: \$1,300,000 09/30/2021 - 09/29/2024Role: Co-Investigator (5%), Multiple Principal Investigator (Barnes/Smith) Description: The major goals of this project are to (1) implement and evaluate an EHR medication alert system to improve safe DOAC prescribing through prescriber-pharmacist collaboration; (2) identify which patient and provider characteristics predict the highest effectiveness of prescriber- vs. pharmacist-directed alerts; and (3) assess the patient acceptance of and barriers to anticoagulation pharmacist involvement in medication changes. A Just-In-Time Adaptive Mobile Application Intervention to Reduce Sodium Intake and Blood Pressure in Hypertensive Patients NIH/NHLBI R61/R33 Total Award: \$3,887,135 09/15/2021 - 08/31/2026Role: PI (20%), Co-PI - Nallamothu Description: This proposal aims to determine the efficacy of a mobile application-based JITAI on blood pressure in a prospective clinical trial (LowSalt4Life 2). Diversity Supplement: Cornelius James, MD Development and Implementation of a Digital Optimization Toolkit for Management of Heart Failure after Discharge - AHA HTI SFRN Supplement AHA SFRN, Health IT Total Award: \$700,000 07/01/2021 - 06/30/2025Role: PI (20%) Description: This is a collaborative project among all AHA HTI SFRN Centers. This project aims to create a toolkit synergized with the American Heart Association guideline-based care to improve medical therapy and medication adherence to improve patient outcomes in post-discharge heart failure patients. A multifaceted adaptive mobile application to promote self-management and improve outcomes in heart failure Total Award: \$3,067,380 04/15/2020 - 03/31/2025NIH/NIA R01

Role: PI (25%)

Description: The goals of this proposal are to (1) determine the impact of two unique adaptive mobile application interventions on HF readmission and health-related quality of life (HRQOL) in HF patients, (2) establish the effect the interventions have on proximal outcomes and that the proximal outcomes mediate the intervention's impact on HF readmission and HRQOL, and (3) develop data-driven machine learning models that can predict episodes of clinical worsening.

Wearables In Reducing risk and Enhancing Daily Lifestyle (WIRED-L)

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bioinformatics, biostatistics, co studying mobile health (mHeal	omputer science, health equity, and busin the science in the second structure (the science) and the science is the science of	ness to create a reusable platform for
	Oral Anticoagulants: A Population Healt	
AHRQ R18	Total Award: \$1,499,506	04/01/2020 - 03/31/2024
Role: Co-Investigator (5%), Pr		
	s study will improve safe management a	
	agulant medications. This study will also	
implementation approach for p	oopulation health tools between fully inte	egrated and traditional health systems.
Previous		
	s to Support Consumers as They Make I	Decisions About Over-the-Counter
Medications	11 5	
Internal UM COP Award	Total Award: \$15,000	07/11/2022 - 07/10/2023
Role: Co-Investigator (1%). Pr	rincipal Investigator (Vordenberg)	
		-counter medication assistant for patients.
1 1		-
A user-center designed anticoa	gulation shared decision-making tool for	
AHRQ R21	Total Award: \$300,000	08/01/2019 - 07/31/2021
Role: PI (20%)		
Real-world characteristics and	treatment patterns among patients with	venous thromboembolism within the
United States integrated deliver		
Bristol-Myers Squibb Compan	y Total Award: \$54,600	09/05/2019 - 09/04/2020
Role: PI (10%)		
Development of an EHR clinic	al decision support application to impro	ve the safety and quality of heart failure
care		
UM MCubed	Total Award: \$60,000	09/01/2018 - 12/31/2020
Role: PI (effort in kind)		0,701,2010 12,01,2020
Quantify Use of ANTicoagUla	tion to improve Management of AF (QU	JANTUM AF study)
DCRI/Johnson & Johnson		01/01/2017 - 12/31/2019
Role: Steering Committee, Prin	ncipal Investigators (Hylek, Granger)	
	1.1	
• 1	ercholesterolemia Patients in the Univers	sity of Michigan Electronic Health
Record.	Total Award: \$187,037	09/01/2018 - 08/31/2019
Amgen, Inc.	101a1 Awalu. $518/.05/$	07/01/2010 - 00/31/2019

AHA SFRN, Health IT Role: PI (10%) Description: The American Heart Association funded Stanford, Johns Hopkins, Cincinnati Children's Hospital

Total Award: \$2,676,000

and UM to participate in a Strategic Focused Research Network (SFRN) in health information technology. The initial UM goals of this project are 1) adapt two JITAIs to deliver tailored, contextually rich behavior change messages to hypertension patients; 2) determine the effect of JITAIs on blood pressure over time in a large micro-randomized trial; and 3) expand our Center to develop future mHealth interventions in new conditions and at other SFRN sites. WIRED-L brings multidisciplinary experts in cardiology, neurology, pharmacy,

04/01/2020 - 03/31/2025

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Role: PI (10%)

A patient-centered mobile intervention to promote self-management and improve patient outcomes in chronic heart failure.		
NIH/NIA R21 Role: PI (20%)	Total Award: \$426,250	09/01/2016 - 04/30/2019
A geofencing-based adaptive messa hypertension.	ging system to support patient self-managem	ent of a low sodium diet in
AHRQ R21 Role: PI (20%)	Total Award: \$299,622	05/03/2016 - 04/30/2019
A patient-centered mobile application UM Frankel Cardiovascular Center Role: Co-Investigator (effort in kind	*	eart failure. 01/01/2014 – 12/31/2016
The validation of a novel adherence HOPA Role: Co-Investigator (5%), Princip	Total Award: \$47,500	01/01/2015 - 12/31/2015
MICHR Postdoctoral Translational Michigan Institute for Clinical and I Role: Mentor (effort in kind)	Scholars Program – Aqeel Ahmed, Ph.D. (PI Health Research	() 01/01/2014 - 12/31/2015
Echocardiography supplement: The Effects of Vitamin D supplementation and Genetics on Biomarkers and Functional Status in Systolic Heart Failure.		
UM Frankel Cardiovascular Center Role: PI		2010 - 2014
The Effects of Vitamin D supplementation and Genetics on Biomarkers and Functional Status in Systolic		
Heart Failure. UM CTSA grant (UL1RR024986) Role: PI	Total Award: \$75,000	2009 - 2012
Publications (* = for trainee)Total Number of Peer-reviewed Publications:92Google Scholar StatisticsCitations:1886h-index:21i10-index:40		

Original Research Publications (* = for trainee)

66. Golbus JR, Jeganathan VSE, Stevens R, Ekechukwu W, Farhan Z, Contreras R, Rao N, Trumpower B, Basu T, Luff E, Skolarus LE, Newman MW, Nallamothu BK, **Dorsch MP**. A Physical Activity and Diet Just-in-Time Adaptive Intervention to Reduce Blood Pressure: The myBPmyLife Study Rationale and Design. *J Am Heart Assoc*. 2024 Jan 16;13(2):e031234.

- 65. Skolarus LE, Farhan Z, Mishra SR, Rao N, Bowie K, Bailey S, **Dorsch MP**, Newman MW, Nallamothu BK, Golbus JR. Resource Requirements for Participant Enrollment From a University Health System and a Federally Qualified Health Center Network in a Mobile Health Study: The myBPmyLife Trial. *J Am Heart Assoc.* 2024 Jan 16;13(2):e030825.
- 64. Spaulding EM, Isakadze N, Molello N, KhourySR, Gao Y, Young L, Antonsdottir IM, Azizi Z, Dorsch MP, Golbus JR, Ciminelli A, Brant LC, Himmelfarb CR, Coresh J, Marvel FA, Longenecker CT, Commodore-Mensah Y, Gilotra N, Sandhu A, Nallamothu BK, Martin SS. Use of Human-Centered Design Methodology to Develop a Digital Toolkit to Optimize Heart Failure Guideline-Directed Medical Therapy. *J Cardiovasc Nurs.* 2023 Oct 19. doi: 10.1097/JCN.000000000001051.
- 63. Campos-Staffico AM, Jacoby JP, **Dorsch MP**, Limdi NA, Barnes GD, Luzum JA. Risk scores for major bleeding from direct oral anticoagulants: comparing predictive performance in patients with atrial fibrillation. *Res Pract Thromb Haemost*. 2024;8:e102285.
- 62. Ranusch A, Lin YJ, **Dorsch MP**, Allen AL, Spoutz P, Seagull FJ, Sussman JB, Barnes GD. Role of Individual Clinician Authority in the Implementation of Informatics Tools for Population-Based Medication Management: Qualitative Semi-structured Interview Study. *JMIR Hum Factors* 2023;10:e49025
- 61. Eze CE*, West BT, **Dorsch MP**, Coe AB, Lester CA, Buis LR, Farris KB. Facilitators and Barriers to Blood Pressure Telemonitoring: A Mixed-methods Study. *Digit Health*. 2023 Jul 25;9:20552076231187585.
- 60. Smith SN, Lanham M, Seagull FJ, **Dorsch MP**, Errickson J, Barnes GD. Implementing pharmacistprescriber collaboration to improve evidence-based anticoagulant use: a randomized trial. *Implement Sci*. 2023 May 15;18(1):16.
- 59. **Dorsch MP**, Sifuentes A, Cordwin DJ, Kuo R, Rowell BE, Arzac JJ, DeBacker K, Guidi JL, Hummel SL, Koelling TM. A Computable Algorithm for Medication Optimization in Heart Failure with Reduced Ejection Fraction. *JACC Advances*. 2023;2(3):100289.
- 58. Hellem AK, Casetti A, Bowie K, Golbus JR*, Merid B*, Nallamothu BK, **Dorsch MP**, Newman MW, Skolarus L. A community participatory approach to creating contextually tailored mHealth notifications: myBPmyLife Project. *Health Promot Pract*. Published online January 27, 2023.
- 57. Musse M, Lau JD, Yum B, Pinheiro LC, Curtis H, Anderson T, Steinman MA, Meyer M, **Dorsch MP**, Hummel SL, Goyal P. Physician Perspectives on the Use of Beta-Blockers in Heart Failure with Preserved Ejection Fraction. *Am J Cardiol.* 2023 Mar 4;193:70-74.
- 56. Dorsch MP, Chen CS, Allen AL, Sales AE, Seagull FJ, Spoutz P, Sussman JB, Barnes GD. The Nationwide Implementation of a Population Management Dashboard for Monitoring Direct Oral Anticoagulants: Insights from the Veterans Affairs Health System. *Circ Cardiovasc Qual Outcomes*. 2023 Feb;16(2):e009256.

- 55. Campos-Staffico AM*, **Dorsch MP**, Barnes GD, Zhu HJ, Limdi NA, Luzum JA. Eight pharmacokinetic genetic variants are not associated with the risk of bleeding from direct oral anticoagulants in non-valvular atrial fibrillation patients. *Front Pharmacol.* 2022 Nov 24;13:1007113.
- 54. Vordenberg SE, Maitah Y, Khan Z, DeBacker K, **Dorsch MP**. Consumer perceptions of the OTC Coach: A clinical decision support system aimed at improving the safe use of over-the-counter medications. *J Am Pharm Assoc.* 2023 Jan-Feb;63(1):135-143.
- 53. Alhashimi L*, Cordwin DJ, Dandu C, Hummel SL, **Dorsch MP**. Patient Self-Assessment of Urine Dipsticks to Estimate Sodium Intake in Patients with Hypertension. *Clin Nutr ESPEN*. 2022;51:295-300.
- 52. Robles MC*, Newman MW, Doshi A, Bailey S, Huang L, Choi SJ*, Kurien C*, Merid B*, Cowdery J, Golbus JR, Huang C, **Dorsch MP**, Nallamothu B, Skolarus LE. A Virtual, community-based participatory design approach to a Physical Activity Just-in-Time Adaptive Intervention in Partnership with a Predominately Black Community: Early-stage Design. *JMIR Form Res.* 2022 Mar 28;6(3):e33087.
- 51. Barnes GD, Sippola E, Ranusch A, Takamine L, Lanham M, **Dorsch MP**, Sales A, Sussman J. Implementing an electronic health record dashboard for safe anticoagulant management: learning from qualitative interviews with existing and potential users to develop an implementation process. *Implement Sci Commun.* 2022;3(1):10.
- 50. Adie SK, Bitar A, Konerman MC, **Dorsch MP**, Andrews CA, Pogue KT, Park JM. Tacrolimus time in therapeutic range and long-term outcomes in heart transplant recipients. *Pharmacotherapy*. 2022 Feb;42(2):106-111.
- 49. Eze CE*, West BT, **Dorsch MP**, Coe AB, Lester CA, Buis LR, Farris KB. Predictors of Smartphone and Tablet Use Among Patients With Hypertension: Secondary Analysis of Health Information National Trends Survey Data. *J Med Internet Res.* 2022;24(1):e33188.
- 48. Luzum JA, Edokobi O, **Dorsch MP**, Peterson E, Liu B, Gui H, Williams LK, Lanfear DE. Survival Association of Angiotensin Inhibitors in Heart Failure with Reduced Ejection Fraction: Comparisons Using Self-Identified Race and Genomic Ancestry. *J Card Fail*. 2022 Feb;28(2):215-225.
- 47. **Dorsch MP**, Farris KB, Rowell BE, Hummel SL, Koelling TM. The Effects of the ManageHF4Life Mobile Application on Patients With Chronic Heart Failure: Randomized Controlled Trial. *JMIR mHealth uHealth*. 2021 Dec 7;9(12):e26185. PMID: 34878990.
- 46. Campos-Staffico AM*, Cordwin D*, Murthy VL, **Dorsch MP**, Luzum JA. Comparative Performance of The Two Pooled Cohort Equations for Predicting Atherosclerotic Cardiovascular Disease. *Atherosclerosis*. 2021; 334:23-39.
- 45. Campos-Staffico AM*, Cordwin D*, Ding Y, Lester CA, Brook RD, Luzum JA, **Dorsch MP**. Fewer patients receive recommendations for pharmacotherapy in primary prevention using the 2018 atherosclerotic cardiovascular disease risk estimator. *Prev Med*. 2021 Jul;148:106555. PMID: 33862035.
- 44. Chen C*, Kim J, Guntupalli H, Garg N, Jagsi R, Griggs JJ, Sabel M, **Dorsch MP**, Callaghan B, Hertz DL. Chemotherapy-induced peripheral neuropathy detection via smartphone app: a cross-sectional pilot study.

JMIR mHealth and uHealth 2021;9(7):e27502.

- 43. Compagner C*, Lester CA, **Dorsch MP**. Sentiment Analysis of Online Reviews for Selective Serotonin Reuptake Inhibitors and Serotonin-Norepinephrine Reuptake Inhibitors. *Pharmacy*. 2021 Jan 23;9(1):27.
- 42. Schaefer JK*, Li M, Wu Z, Tanima Basu T, **Dorsch MP**, Barnes GD, Carrier M, Griggs JJ, Sood SL. Anticoagulant Medication Adherence for Cancer Associated Thrombosis: A Comparison of LMWH to DOACs. *J Thromb Haemost*. 2021;19(1):212-220.
- 41. Coe AB, Choe HM, Diez HL, Rockey NG, Ashjian EJ, **Dorsch MP**, Kim HM, Farris KB. Pharmacists providing care in statewide physician organizations: findings from the Michigan Pharmacists Transforming Care and Quality Collaborative. *J Manag Care Spec Pharm*. 2020;26(12):1558-66.
- 40. Schumacher L*, Coe AB, Lester CA, Rothermal M, **Dorsch MP**. Factors that influence patient acceptance of clinical pharmacy services: A nationwide survey. *J Am Pharm Assoc* (2003). 2020;60(6):1058-1067.
- 39. Leino AD, **Dorsch MP**, Lester CA. Changes in Statin Utilization among US Adults with Diabetes: A Population-Based Analysis of NHANES 2011-2018. *Diabetes Care*. 2020;43(12):3110-3112.
- 38. Barnes GD, Sippola E, **Dorsch MP**, Errickson J, Lanham M, Allen A, Spoutz P, Sales A, Sussman J. Applying population health approaches to improve safe anticoagulant use in the outpatient setting: the DOAC Dashboard multi-cohort implementation evaluation study protocol. *Implement Sci.* 2020 Sep 21;15(1):83.
- 37. Brinker LM, Konerman MC, Navid P, **Dorsch MP**, McNamara J, Willer CJ, Tinetti ME, Hummel SL, Goyal P. Complex and Potentially Harmful Medication Patterns in Heart Failure with Preserved Ejection Fraction. *Am J Med.* 2021 Mar;134(3):374-382.
- 36. **Dorsch MP**, Cornellier ML, Poggi AD, Bilgen F, Chen P, Wu C, An LC, Hummel SL. Effects of a Novel Contextual Just-In-Time Mobile App Intervention (LowSalt4Life) on Sodium Intake in Adults With Hypertension: Pilot Randomized Controlled Trial. *JMIR mHealth uHealth*. 2020;8(8):e16696.
- 35. Zheng Y*, Jiang Y, **Dorsch MP**, Ding Y, Vydiswaran VGV, Lester CA. Work effort, readability and quality of pharmacy transcription of patient directions from electronic prescriptions: a retrospective observational cohort analysis. *BMJ Qual Saf.* 2021 Apr;30(4):311-319.
- Erickson SR, Basu T, Dorsch MP, Kamdar, N. Disparities in the Use of Guideline-Based Pharmacotherapy Exist for Atherosclerotic Cardiovascular Disease and Heart Failure Patients who have Intellectual/Developmental Disabilities in a Commercially Insured Database. *Ann Pharmacother*. 2020 Oct;54(10):958-966.
- Hanigan S, Das J, Pogue K, Barnes GD, Dorsch MP. The real world use of combined P-glycoprotein and moderate CYP3A4 inhibitors with rivaroxaban or apixaban increases bleeding. *J Thromb Thrombolysis*. 2020 May;49(4):636-643.

- 32. **Dorsch MP**, Lester CA, Ding Y, Joseph M, Brook RD. Effects of Race on Statin Prescribing for Primary Prevention With High Atherosclerotic Cardiovascular Disease Risk in a Large Healthcare System. *J Am Heart Assoc*. 2019 Nov 19;8(22):e014709.
- 31. Adie S*, Bitar A, Hanigan S, Pogue KT, Koelling TM, **Dorsch MP**. Real-world prevalence of adverse events after initiating sacubitril/valsartan compared to angiotensin converting enzyme inhibitors or angiotensin receptor blockers in systolic heart failure. *J Card Fail*. 2019 May;25(5):412-413.
- Rollins A*, Hanigan S, Pogue K, Renner E, Barnes G, Dorsch MP. Identifying Clinical Predictors of Switching From Direct Oral Anticoagulants to Warfarin. *Clinical Medicine Insights: Therapeutics*. 2019;11:1179559X19831287.
- 29. **Dorsch MP**, An LC, Hummel SL. A randomized controlled trial evaluating a novel just-in-time contextual mobile application intervention to reduce sodium intake in hypertension: Design and rationale for the LowSalt4Life trial. *JMIR Res Protoc.* 2018;7(12):e11282.
- 28. Bleske BE, Remington TL, Wells TD, Klein KC, **Dorsch MP**. A Randomized Crossover Comparison between Team-Based Learning and Lecture Format on Long-Term Learning Outcomes. *Pharmacy* 2018 Aug 4;6(3). pii: E81. doi: 10.3390/pharmacy6030081.
- 27. Remington TL, Bleske BE, Bartholomew T, **Dorsch MP**, Guthrie SK, Klein KC, Tingen JM, Wells TD. Qualitative Analysis of Student Perceptions Comparing Team-based Learning and Traditional Lecture in a Pharmacotherapeutics Course. *Am J Pharm Educ.* 2017 Apr;81(3):55.
- 26. Bleske BE, Remington TL, Wells TD, Klein KC, Guthrie SK, Tingen JM, Marshall VD, **Dorsch MP**. A Randomized Crossover Comparison of Team-based Learning and Lecture Format on Learning Outcomes. *Am J Pharm Educ.* 2016 Sep 25;80(7):120.
- 25. Early CR*, Park JM, **Dorsch MP**, Pogue KT, Hanigan S. Effect of Metronidazole Use on Tacrolimus Concentrations in Transplant Patients Treated for Clostridium difficile. *Transpl Infect Dis.* 2016 Oct;18(5):714-720.
- Albabtain M*, Brenner MJ, Nicklas JM, Hummel SL, McCormick MP, Remington TL, Gure TR, Dorsch MP, Bleske BE. Hyponatremia, Cognitive Function, and Mobility in an Outpatient Heart Failure Population. *Med Sci Monit*. 2016 Dec 18;22:4978-4985.
- 23. Erickson SR, Spoutz P, **Dorsch MP**, Bleske BE. Cardiovascular risk and treatment for adults with intellectual or developmental disabilities. *Int J Cardiol*. 2016 Jul 5;221:371-375.
- 22. Ha NB*, Yang K, Hanigan S, Kurtz B, **Dorsch MP**, Mak H, Nagel J. Impact of a Guideline for the Management of Antimicrobial/Warfarin Interactions in the Inpatient Setting and Across Transition of Care. *Ann Pharmacother*. 2016 Sep;50(9):734-40.
- Kaminsky B*, Pogue KT, Hanigan S, Koelling TK, Dorsch MP. Effects of Total Dose Infusion of Iron Intravenously in Patients with Acute Heart Failure and Anemia (Hemoglobin < 13 g/dL). *Am J Cardiol.* 2016 Jun 15;117(12):1942-6.

- 20. Vu NH, Jaynes E, Chan C, **Dorsch MP**, Pipe S, Alaniz C. Argatroban Monitoring: aPTT versus Chromogenic Assay. *Am J Hematol*. 2016 Jun;91(6):E303-4.
- 19. **Dorsch MP**, Chong YP, McCormick MP, Grossi J, Farris KB, Koelling TM, Bleske BE. Survey of Computer, Smart Devices, and Internet use in Heart Failure Patients. *International Cardiovascular Forum Journal*. 2016;6:84-85.
- Scherkenbach LA*, Kraft MD, Stout SM, Dorsch MP, Chen X, Tran H, Pleva MR. Impact of an Intravenous Magnesium Shortage on Potassium Doses in Adult Surgical Patients Receiving Parenteral Nutrition. JPEN J Parenter Enteral Nutr. February 5, 2015. [Epub ahead of print]
- 17. **Dorsch MP**, Farris KB, Bleske BE, Koelling TM. A web application for self-monitoring improves symptoms in chronic systolic heart failure. *Telemed J E Health*. 2015;21(4):267-70.
- 16. Lose JM*, **Dorsch MP**, DiDomenico RJ. Comparison of practice patterns between inpatient cardiology pharmacists with and without added qualifications in cardiology. *Hosp Pharm*. 2015 Jan;50(1):51-8.
- 15. Bleske BE, Dillman NO, Cornelius D, Ward JK, Burson SC, Diez HL, Pickworth KK, Bennett MS, Nicklas JM, **Dorsch MP**. Heart failure assessment at the community pharmacy level: a feasibility pilot study. *J Am Pharm Assoc*. 2014 Nov-Dec;54(6):634-41.
- Dorsch MP, Lose JM*, DiDomenico RJ. The Effect of Cardiovascular Credentialed Pharmacists on Process Measures and Outcomes in Myocardial Infarction and Heart Failure. *Pharmacotherapy*. 2014 Aug;34(8):803-8.
- 13. Bleske BE, Remington TL, Wells TD, **Dorsch MP**, Guthrie SK, Stumpf JL, Alaniz MC, Ellingrod VL, Tingen JM. Team-based learning to improve learning outcomes in a therapeutics course sequence. *Am J Pharm Educ*. 2014 Feb 12;78(1):13.
- 12. **Dorsch MP**, Nemerovski CW*, Ellingrod V, Cowger CA, Dyke DB, Koelling TM, Wu AH, Simpson RU, Bleske BE. Vitamin D Receptor Genetics on Extracellular Matrix Biomarkers and Hemodynamics in Systolic Heart Failure. *J Cardiovasc Pharmacol Ther* 2014 Sep;19(5):439-45.
- 11. Shuster JE*, **Dorsch MP**. Utilization of a Computerized Clinical Surveillance System to Increase Acute Myocardial Infarction Core Measure Compliance. *Hosp Pharm* 2014; 49 (1): 1-6.
- 10. Lose JM*, **Dorsch MP**, Stevenson JG. Cost Containment for Argatroban Through Reduction in Drug Waste: Experience at a Single Center. *Pharmacy Times* March 2013 Supplement: 1-4.
- 9. Clarke MM*, **Dorsch MP**, Kim S, Aaronson KD, Koelling TM, Bleske BE. Baseline Albumin Is Associated with Worsening Renal Function in Patients with Acute Decompensated Heart Failure Receiving Continuous Infusion Loop Diuretics. *Pharmacotherapy*. 2013;33(6):583-8.
- 8. Bleske BE, Clark MM*, Wu AH, **Dorsch MP**. The Effect of Continuous Infusion Loop Diuretics in Patients With Acute Decompensated Heart Failure With Hypoalbuminemia. *J Cardiovasc Pharmacol Ther* 2013 Jul;18(4):334-7.

- 7. Pettit RS*, Zimmerman CR, Alaniz C, **Dorsch MP**. Cost Analysis Before and After Implementation of a Computerized Physician Order Entry Order Form for Enoxaparin. *Pharmacy and Therapeutics* 2012. 37 (2): 107-111.
- 6. Carroll N*, **Dorsch MP**. Cost Implications of Providing Discharge Supplies of Antiplatelet Medication to PCI Patients. *Am J Manag Care*. 2011;17(12):803-810.
- 5. **Dorsch MP**, Gillespie BW, Erickson SR, Bleske BE, Weder AB. Chlorthalidone reduces cardiovascular events compared to hydrochlorothiazide: A retrospective cohort analysis. *Hypertension* 2011 Apr;57(4):689-94.
- 4. Nicolasora NP, Malani PN, Riddell J, **Dorsch MP**, Reaume KT*, Dyke DB, Pagani FD, Aaronson KD, Kaul DR. Opportunistic infections in heart transplant patients: The role of thymoglobulin and corticosteroid dosing. *Infect Dis Clin Pract* 2010; 18:318-23.
- 3. Booher AM, **Dorsch MP**, Gurm HS. Case report: the effect of proton pump inhibitor administration on hemodynamics in a cardiac intensive care unit. *Clin Cardiol* 2010; 33 (6):E111-
- Reaume KT*, Erickson SR, Dorsch MP, Dunham NL, Hiniker SM, Prabhakar, N, Kline-Rogers EM, Eagle KA. Effects of cerivastatin withdrawal on statin persistence. *Ann Pharmacother* 2008; Jul;42(7):956-61.
- 1. **Dorsch MP**, Lee JS, Lynch DR, Dunn SP, Rodgers JE, Schwartz T, Colby E, Montague D, Smyth SS. Aspirin resistance in patients with stable coronary artery disease with and without a history of myocardial infarction. *Ann Pharmaother* 2007; 41: 737-41.

<u>Peer-Reviewed Manuscripts – Reviews (* = for trainee)</u>

- 25. James CA, **Dorsch MP**, Piette JD, Nallamothu BK. Prescribing Mobile Health Applications. *Circ Cardiovasc Qual Outcomes*. 2024. Accepted for publication.
- 24. Azizi Z, Golbus JR, Spaulding EM, Hwang PH, Ciminelli ALA, Lacar K, Hernandez MF, Gilotra NA, Din N, Brant LCC, Au R, Beaton A, Nallamothu BK, Longenecker CT, Martin SS, **Dorsch MP**, Sandhu AT. Challenge of Optimizing Medical Therapy in Heart Failure: Unlocking the Potential of Digital Health and Patient Engagement. *J Am Heart Assoc.* 2024 Jan 16;13(2):e030952.
- 23. Krishnaswami A, Beavers C, Dorsch MP, Dodson JA, Masterson Creber R, Kitsiou S, Goyal P, Maurer MS, Wenger NK, Croy DS, Alexander KP, Batsis JS, Turakhia MP, Forman DE, Bernacki GM, Kirkpatrick JN, Orr NM, Peterson ED, Rich MW, Freeman AM, Bhavnani SP. Challenges and Opportunities Of Gerotechnology For The Prevention And Treatment Of Cardiovascular Disease In Older Adults. *J Am Coll Cardiol* 2020;76:2650-70.
- 22. Lester CA, Coe AB, **Dorsch MP**, Farris KB, Flynn AJ. A learning pharmacy practice enabled by the pharmacists' patient care process. *J Am Pharm Assoc* (2003). 2020, 60(6), pp. e66–e72. PMID: 32620363.

- 21. Haase J*, Farris KB, **Dorsch MP**. Mobile Applications to Improve Medication Adherence. *Telemed J E Health.* 2017 Feb;23(2):75-79.
- 20. Jimbo M, **Dorsch MP**, Ealovega MW, Harrison RV, Jamerson KA. Essential Hypertension. Ann Arbor, MI: Quality Department, University of Michigan Health System, 2014. [Available at http://www.uofmhealth.org/provider/clinical-care-guidelines] [practice guideline].
- 19. Walter CP*, Bleske BE, **Dorsch MP**. Pharmacotherapy for weight loss: the cardiovascular effects of the old and new agents. *J Clin Pharm Ther*. 2014 Oct;39(5):475-84.
- Lose JM*, Bleske B, Dorsch MP. Evaluation of proprotein convertase subtilisin kexin type 9: focus on potential clinical and therapeutic implications for LDL cholesterol lowering. *Pharmacotherapy*. 2013 Apr;33(4):447-60.
- Shuster JE*, Bleske BE, Dorsch MP. Clinical utility of azilsartan–chlorthalidone fixed combination in the management of hypertension. *Vascular Health and Risk Management* 2012. 8 (1): 381-7.
- 16. Barnes MM*, **Dorsch MP**, Hummel SL, Koelling TM, Bleske BE. Treatment of heart failure with preserved ejection fraction. *Pharmacotherapy* 2011; 31(3):312-31.
- 15. Nemerovski CW, **Dorsch MP**, Jennings DL. What Should We Be Fine Tuning in Acute Coronary Syndromes Dosing of Antiplatelet Therapy or Data Presentation? *Ann Pharmacother* 2011; 45: 120-122.
- 14. Mohammad RA, Goldberg T, **Dorsch MP**, Cheng JWM. Antiplatelet Therapy After Drug-Eluting Stent Placement: A Narrative Review. *Clin Ther* 2010; 32 (14): 2265-81.
- 13. Momary KM, **Dorsch MP**. Factors associated with clopidogrel nonresponsiveness. *Future Cardiol* 2010; 6 (2):195-210.
- 12. Momary KM, **Dorsch MP**, Bates ER. Genetic causes of clopidogrel nonresponsiveness: which ones really count? *Pharmacotherapy* 2010; 30 (3):265-74.
- 11. Chow SL, **Dorsch MP**, Dunn SP, Jackevicius CA, Page RL, Trujillo T, Vardeny O, Wiggins B, Bleske BE. Key articles related to complementary and alternative medicine in cardiovascular disease: part 1. *Pharmacotherapy* 2010; 30 (1):109.
- 10. Jimbo M, Barrie WE, **Dorsch MP**, Harrison RV, Jamerson KA. Essential Hypertension. Ann Arbor, MI: Office of Clinical Affairs, University of Michigan Health System, 2009. [Available from the Agency for Healthcare Research and Quality at www.guideline.gov and from UMHS at www.med.umich.edu/1info/fhp/practiceguides] [practice guideline]
- 9. Nemerovski, CW*, **Dorsch MP**, Simpson RU, Bone HG, Aaronson K and Bleske BE. Vitamin D and Cardiovascular Disease. *Pharmacotherapy* 2009; 29 (6): 691–708.

- 8. Dunn SP, Bleske BE, **Dorsch MP**, Macaulay T, Van Tassell B, Vardeny O. Nutrition and Heart Failure: Impact of Drug Therapies and Management Strategies. *Nutr Clin Pract* 2009; 24: 60-75.
- 7. Matthews JC, Dardas TF, **Dorsch MP**, Aaronson KD. Right-sided heart failure: diagnosis and treatment strategies. *Curr Treat Options Cardiovasc Med* 2008; 10: 329-41.
- 6. Reaume KT*, Regal RE, **Dorsch MP**. Indications for dual antiplatelet therapy with aspirin and clopidogrel: evidence-based recommendations for use. *Ann Pharmacother* 2008; 42: 550-7.
- 5. Butler SO, **Dorsch MP**. Antifibrinolytic agents in coronary artery bypass graft surgery. UHC Drug Monograph, March 2007.
- 4. **Dorsch MP**, Rodgers JE. Nesiritide Harmful or Harmless. *Pharmacotherapy* 2006; 26 (10): 1465-1478.
- 3. **Dorsch MP**, Dunn SP. Antiplatelet drug resistance: almost ready for prime time. *Pharmacotherapy* 2006; 26 (8): 1201-1202.
- 2. **Dorsch MP**, Montague D, Rodgers, JE, Patterson C. Abciximab-associated thrombocytopenia after previous tirofiban-related thrombocytopenia. *Pharmacotherapy* 2006; 26 (3): 423-427.
- 1. Denucci K, **Dorsch MP**, Sweeney M. Bringing knowledge to the community, *Ohio Pharmacist* May 2003.
- Peer-Reviewed Manuscripts Invited Editorials
- 1. Dardas T, **Dorsch MP**. Remote management of heart failure: Herculean or Sisyphean task? Heart. 2020 Oct;106 (20):1543-1544.

Peer-Reviewed Book Chapters

1. **Dorsch MP**, Pogue KT. Newer Antithrombotic Agents and Their Role in Acute Coronary Syndrome. Pharmacy Self-Assessment Program. Book 1 Cardiology/Endocrinology. Release 2013.

Presentations

Winter 2023	Use of Technology to Improve Antihypertensive Adherence: Just a Distraction!
	American College of Cardiology Annual Meeting
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- Winter 2023 Role of Multidisciplinary Approach in the Management of Heart Failure Consultant360, Webinar
- Winter 2023 **Optimizing GDMT for HFrEF: Current Challenges & Opportunities for Digital Health Innovation** Consultant360, Webinar
- Winter 2022Mobile technologies in research: My experience
Clinical Trials Support Office, Medical School, University of Michigan
- Fall 2022Using AI to Optimize Patient Engagement in mHealth
e-Health & Artificial Intelligence (e-HAIL), Medical School, University of Michigan

Fall 2022	Health fad turned medical monitoring device: applications for wearable technology in pharmacy practice American College of Clinical Pharmacy Global Conference
Spring 2022	Decision algorithms to support student learning about self-care therapeutics American Association of Colleges of Pharmacy, Self-care Therapeutics SIG
Fall 2021	Just-in-time adaptive interventions for sodium intake – LowSalt4Life Centre for Health Informatics, Digital Health Reading and Research Group, University of Manchester, Manchester, England
Fall 2021	Just-in-time adaptive interventions (JITAI) and Microrandomized trials (MRT) in mHealth American Heart Association, Quality of Care and Outcomes Research Annual Meeting
Spring 2021	Patient-centered Clinical Decision Support in Heart Failure 4 th National Taiwan University School of Pharmacy Research Day and International Conference, Taipei, Taiwan
Winter 2021	Mobile Technology and Wearables for Heart Failure Patient Management Heart Failure Society of America, Patient Podcast
Spring 2019	Patient-centered clinical decision support: A case for precision health Precision Health Initiative Conference, University of Michigan
Spring 2018	Heart Failure 101: The Pharmacists Role Michigan Pharmacists Transforming Care and Quality Meeting
Winter 2017	Mobile Health Technologies in Cardiovascular Disease Learning Health System Collaboratory, Medical School, University of Michigan
Fall 2016	Hyperkalemia: Implication for HF Management (Moderator) Heart Failure Society of America Annual Scientific Meeting
Fall 2015	Innovations in Practice Technology (Discussant) American College of Clinical Pharmacy Annual Meeting
Fall 2015	Clinical Reasoning Series: Heart Failure: Current and Emerging Management Strategies American College of Clinical Pharmacy Annual Meeting
Fall 2015	Reduction in Heart Failure Readmissions – Medication Reconciliation American College of Cardiology, Michigan Chapter Annual Meeting
Spring 2014	Integration of IPPE and APPE students into an inpatient service Michigan Pharmacists Association Annual Meeting

Spring 2013	Novel Anticoagulants and Antithrombotics: Atrial Fibrillation Society of Vascular Medicine Annual Meeting
Fall 2012	Using IT to Make Your Work as a Pharmacist More Efficient MSHP Annual Meeting
Fall 2012	Establishing a Role for New Oral Anticoagulants University of Michigan College of Pharmacy Annual Pharmacy Lectures
Fall 2012	To Replace Clopidogrel or Not? The Case for Clopidogrel Only American College of Clinical Pharmacy Annual Meeting
Fall 2011	Update on Hyponatremia American College of Clinical Pharmacy Cardiology PRN Business Meeting
Fall 2011	The Use of TheraDoc® in Research Grand Rounds, University of Michigan Department of Pharmacy
Summer 2009	Are Clopidogrel's Kinetics a Catastrophe? Grand Rounds, University of Michigan Department of Pharmacy
Winter 2008	Integrating Treatment Guidelines for ACS into Clinical Practice: Antiplatelet and Anticoagulant Therapies ASHP Midyear Meeting
Spring 2008	Meeting the Needs of Patients with Acute Severe Hypertension: Current Practices, Future Directions ASHP Annual Meeting
Winter 2008	Acute Cardiac Life Support – Case-Based Discussion Grand Rounds, University of Michigan Department of Pharmacy
Fall 2007	Comorbidities of Uncontrolled Hypertension: Reducing Risks and Burden American College of Clinical Pharmacy Annual Meeting and Webcast
Spring 2007	Debating Long Term Antithrombotic Therapy-Interpreting Registries, Trials and Current Practice Patterns AMCP Annual Meeting and Webcast
Winter 2007	A Review of the "New" Guidelines in the Management of Heart Failure University of Michigan Department of Pharmacy
Fall 2006	Pitfalls with Inpatient Cardiovascular Drug Therapies: From pharmacokinetics, dynamics and genomics to common myths in inpatient drug use Cardiovascular Medicine Grand Rounds, University of Michigan Cardiovascular Center

Fall 2006	Incorporating the Guidelines: Case Studies Cardiology PRN Pre-symposium, ACCP Annual Meeting
Summer 2006	Treatment of Acute Decompensated Heart Failure University of Michigan Cardiovascular Center, Symposium for Nurses
Spring 2005	An Update on the Management of Heart Failure UNC Hospitals, Department of Pharmacy
Winter 2005	Pharmacology of Ischemic Heart Disease University of North Carolina, School of Pharmacy
Fall 2004	The Vasopressin Receptor: A New Target in Heart Failure UNC Hospitals, Department of Pharmacy
Fall 2004	Pharmacokinetics and Drug Delivery University of North Carolina, School of Nursing
Fall 2004	Overview of Cardiovascular Medications: Implications for Dentists University of North Carolina, School of Dentistry
Spring 2004	Medications and the Older Adult Central Ohio Area Agency on Aging Annual Meeting
Winter 2003	Drug Information: What is Available? Riverside Methodist Hospital, Department of Pharmacy Services
Fall 2003	Argatroban: What a Nurse Needs to Know Riverside Methodist Hospital
Spring 2003	Heart Failure Ohio Northern University, Department of Pharmacy Practice
Spring 2003	Acute Heart Failure Ohio Northern University, Department of Pharmacy Practice
TEACHING <u>Undergraduate Courses</u> 2020-Present Precision Health Elective – Digital Health (Teacher)	
Doctor of Pharmacy Courses	

2021-Present Health-System Pharmacy Practice (Course Coordinator and Teacher)
2021-Present Therapeutic Problem Solving (Teacher)
2018-Present Medicinal Chemistry, Cardiology Capstone (Teacher)
2018 Evidence-Based Medicine
2016-2020 Therapeutic Problem Solving (Course Coordinator and Teacher)
2013-2015 PharmD Investigations (Course Coordinator)

Michael P. Dorsch, PharmD, MS, FCCP, FAHA, FACC, BCCP

2011-2015	Therapeutic Problem Solving (Teacher)
2011-2012	Principles of Research and Problem-Solving
2008-Present	PharmD Investigations (Independent Study)
2007-Present	Research (Independent Study)
2006-2011	Pathophysiology and Therapeutics (Teacher)

Doctor of Pharmacy, Experiential Education

2006-2018 Inpatient Cardiology P4 APPE (Primary or Secondary preceptor for 10-15 students/year) 2014-2018 Inpatient P3 IPPE (Primary or Secondary preceptor for 1-3 students/year)

Doctor of Philosophy in Clinical Pharmacy Translational Science Courses

2018-Present Pharmacy Informatics2018-2020 Grant Writing, Part 2 (Co-coordinate)

Pharmacy Resident Research Series, Michigan Medicine

2009-2017 Statistical Power

2009-2017 Data Analysis

UM Division of Cardiovascular Medicine, Cardiology Fellowship

2009-2017 Antiadrenergic Agents in Chronic Heart Failure

PGY2 Cardiology Residency Program Director, Michigan Medicine

Kristen Pogue, PharmD (2007-2008); Carrie Nemerovski, PharmD (2008-2009); Megan Barnes, PharmD (2009-2010); Jennifer Lose, PharmD (2011-2012); Jerrica Shuster, PharmD (2011-2012); Claire Walter, PharmD (2012-2013); Brad Williams, PharmD (2013-2014); Denise Sutter, PharmD (2014-2015); Bonnie Kaminsky, PharmD (2015-2016); Monique Conway, PharmD (2016-2017); Sarah Adie, PharmD (2017-2018)

Doctor of Philosophy in Clinical Pharmacy, College of Pharmacy, University of Michigan

Chinwe Eze, MS (2018-2023), Committee member Shana Littleton, BS (2020-Present), Committee member Yifan Zheng, PharmD (2022-Present), Committee member

Post-Doctoral Research Fellowship, College of Pharmacy, University of Michigan

David Cordwin, PharmD (2020-2021), Director Alessandra M. Campos-Staffico, PhD (2020-2023), Mentor

Post-Doctoral Research Fellowship, WIRED-L Center, University of Michigan

Jessica Golbus, MD, MS (2021-2023), Mentor Sonali Mishra, PhD (2022-Present), Mentor

Early Career Mentor, University of Michigan

Cornelius James, MD (2022-Present), NHLBI Diversity Supplement Mentor

SERVICE

Professional Service - Local

University of Michigan College of Pharmacy

Dean's Executive Committee
Search Committee, Anti-Racism Tenure Track Position
Academic Integrity Task Force Committee
Search Committee, Tenure Track Position
Founding Member, Pharmacy INformatics Group (PING)
Member, ExamSoft Implementation Team (ExSIT)
Member, Therapeutics Problem-Solving Course Coordinators
Search Committee, Tenure Track Position
Chair, PharmD Investigations Steering Committee
Chair, PharmD Investigations Committee
Member, Evidence-Based Medicine Subcommittee, Curriculum Committee
Member, Residency Advisory Committee

Michigan Clinical Outcomes Research and Reporting Program (MCORRP)

2022-Present Steering Committee, OVERCOME HF Registry

University of Michigan Hospitals and Health System

2015-2018	Member, Anticoagulation Subcommittee, Pharmacy and Therapeutics Committee
2010-2015	Co-chair, Anticoagulation Subcommittee, Pharmacy and Therapeutics Committee
2011-2017	Member, Pharmacy Practice Model Steering Committee
2009-2010	Secretary, Anticoagulation Subcommittee, Pharmacy and Therapeutics Committee

Professional Service - National

Professional Organizations

2023-Present Digital Medicine Society (DIME)

• Integrated Evidence Plans for Digital Health Products

2016-Present American College of Cardiology

2007-2014 National Lipid Association

2005-Present American Heart Association

• ACC/AHA Task Force on Performance Measures (2021-Present)

2004-Present American College of Clinical Pharmacy

- Cardiology PRN
 - Committee Chair for Young Investigator Research Presentations (2006-2011)
- Member Relations Ad Hoc Committee on Volunteer Recognition (2010-2012)
- PBRN Community Advisory Panel, ACCP Research Institute (2016-2018)
- University of Michigan Faculty Liaison (2019-Present)

Other Organizations

2024-Present Michigan Health Information Network (MiHIN)

Advanced Statewide Medication Reconciliation

Certificates, Honors, and Awards

- 2023Top Ten Original Research Articles of 2023JACC: Advances Editorial Board
- 2022 Fellow, American College of Cardiology (FACC) American College of Cardiology

2019	Mentoring Award American College of Clinical Pharmacy, Cardiology Practice and Research Network
2018-Present	Board-Certified Cardiology Pharmacist (BCCP) – replaces AQ Cardiology Board of Pharmaceutical Specialties
2016	Fellow, American Heart Association (FAHA) American Heart Association, Council on Quality of Care and Outcomes Research
2016	Professional Practice Award Michigan Society of Health-System Pharmacists
2016	Member, Institute for Health Policy and Innovation University of Michigan
2015	Fellow, American College of Clinical Pharmacy (FCCP) American College of Clinical Pharmacy Annual Meeting
2015	Essential Skills for Successful Leadership University of Michigan Medical School
2012	Top Paper Award for Population Science in 2011 <i>Hypertension</i> , 66 th Annual Meeting of the American Heart Association Council for High Blood Pressure Research Conference
2012	Role Delineation Study Member, Cardiology Specialty Board of Pharmacy Specialties
2011	Making A Difference Award University of Michigan Hospitals and Health Centers
2011	Teaching Recognition Award – P3 class Phi Delta Chi, University of Michigan, College of Pharmacy
2008	Teaching Recognition Award – P3 class Phi Delta Chi, University of Michigan, College of Pharmacy
2007-2018	Added Qualifications in Cardiology Board of Pharmaceutical Specialties
2005, 2006	You're Super Award University of Michigan Hospitals and Health Centers
2004-2018	Board-Certified Pharmacotherapy Specialist Board of Pharmaceutical Specialties

2003	Student Service and Leadership Award Council of Ohio Colleges of Pharmacy
2002	APhA-ASP Senior Recognition Award Ohio Northern University
2001	ONU Pharmacy Faculty Award

Ohio Northern University

Reviewer/Editor

Manuscript Referee American Journal of Cardiovascular Drugs Annals of Internal Medicine Circulation **Circulation: Heart Failure** Circulation: Cardiovascular Quality and Outcomes European Society of Cardiology: Heart Failure Expert Review of Cardiovascular Therapy Future Cardiology Future Medicine Journal of the American Medical Association Journal of the American College of Clinical Pharmacy Journal of Cardiac Failure Journal of Clinical Pharmacology Journal of Medical Internet Research (JMIR) JMIR Cardio JMIR Protocols JMIR mHealth uHealth Journal of Pharmacy Practice Journal of Telemedicine and Telecare Journal of the American Heart Association Pharmacotherapy Telemedicine and e-Health The American Journal of Cardiology The Lancet Therapeutic Delivery Thrombosis Research

<u>Abstract Reviewer</u> American College of Cardiology Annual Meeting 2024 American College of Cardiology Annual Meeting 2023

<u>Guest Editor</u> PLOS Digital Health

<u>Section Editor</u> JMIR mHealth uHealth

Book/Book Chapter Review

Cardiovascular Pharmacotherapy: A Point-of-care Guide Updates in Therapeutics: The Pharmacotherapy Preparatory Course, 2009 Edition Pharmacy Self-Assessment Program – Cardiology 2009 Pharmacy Self-Assessment Program – Economics and Patient-Centered Outcomes Assessment 2014

Grant Reviewer

- Ad Hoc Reviewer, NHLBI P01, NIH
- 2023 Ad Hoc Reviewer, Patient-Centered Outcomes Research Institute (PCORI)

Honorary Affiliations

- 2002-2003 **Omicron Delta Kappa** National Leadership Honor Society Ohio Northern University
- 2001-2003 **Phi Lambda Sigma** National Pharmacy Leadership Honor Society College of Pharmacy, Ohio Northern University

Updated: 2/24