

Scholarship at Wyandotte

Henry Ford Wyandotte Emergency Medicine

Published scholarship • 2020–2026

For more than 20 years, scholarship has been part of the Henry Ford Wyandotte Emergency Medicine community. Since the residency program's inception, our residents and faculty have contributed dozens of case reports, peer-reviewed publications, quality improvement initiatives, funded grants, conference presentations, and other scholarly work.

The publications highlighted below represent **only a portion of that history**. Residents interested in scholarship can work alongside faculty mentors on case reports, quality improvement, clinical research, systematic reviews, multicenter collaborations, and projects shaped by their own interests and career goals. **We encourage residents to engage in scholarship at a level that is meaningful to them.**

A Tradition of Scholarship, An Opportunity to Contribute

Bold = HF Wyandotte-affiliated author • Journal titles are italicized



2025-2026

1. **Gunaga S**, Ouchi K, Liu SW, Lin D, Hay A, Selman K, et al. Emergency department-initiated hospice and palliative care consultation among older adults: protocol for a systematic review and meta-analysis. *JMIR Res Protoc*. 2026;15:e75346. doi:10.2196/75346. PMID: 42378528; PMCID: PMC13318083.
2. Beam L, Annis A, **Gunaga S**, Buchholz SW, Allman G, Miller J, et al. Direct bedding in the emergency department: a concept analysis. *J Emerg Nurs*. 2026. doi:10.1016/j.jen.2026.04.014. Epub ahead of print. PMID: 42257644.
3. Hawatian K, Emakhu J, Morton T, Husain A, Nassereddine H, Sidani M, et al. Association of hypertension severity with 30-day major adverse cardiovascular events in patients with intermediate high-sensitivity cardiac troponin I. *West J Emerg Med*. 2026;27(3):614-620. doi:10.5811/westjem.48347. PMID: 42258862; PMCID: PMC13246172

HF Wyandotte contributor: Gunaga S

4. Lee S, **Gunaga S**, Liu SW, Luo Q, Bayer TA, Rudolph JL, et al. Emergency department boarding for older adults: the impact of geography, temporal trends, and dementia status. *Ann Emerg Med*. 2026. doi:10.1016/j.annemergmed.2026.03.011. Epub ahead of print. PMID: 42084584.
5. **Gunaga S**, Miller J, Cook B, Gandolfo C, Hawatian K, Brennan B, et al. Comparing outcomes of a rapid high-sensitivity troponin protocol between hospital-based and freestanding emergency departments. *Acad Emerg Med*. 2026;33(3):e70210. doi:10.1111/acem.70210. Epub 2025 Dec 23. PMID: 41437417

HF Wyandotte contributor: Plemmons E

6. Emakhu J, David C, Etu EE, Masoud S, Tenebe I, Larot J, et al. Disparities in emergency department outcomes by race during the 2022-2023 COVID-influenza twindemic. *BMC Emerg Med*. 2026;26(1):92. doi:10.1186/s12873-026-01508-9. PMID: 41742076; PMCID: PMC13040694

HF Wyandotte contributor: Gunaga S

7. Wang G, Hooper CD, **Gunaga S**, Lee S, Coates WC, Campbell RL, et al. Motivating factors for participating in the Geriatric Emergency Department Guidelines 2.0. *Acad Emerg Med*. 2026;33(2):e70237. doi:10.1111/acem.70237. PMID: 41673986.
8. Beam L, **Gunaga S**, Willens D, Miller J, Mowbray FI. Outpatient triage models and older adults: an opportunity for improvement. *J Am Med Dir Assoc*. 2026;27(2):106010. doi:10.1016/j.jamda.2025.106010. Epub 2025 Dec 9. PMID: 41276259.
9. Hagerman TK, Ghosh S, Nour M, Cherukupalli C, Henry C, Peterson D, et al. Mismatch between emergency physician follow-up recommendations and primary care visit attendance among older adults: a retrospective cohort study. *Acad Emerg Med*. 2026;33(1):e70232. doi:10.1111/acem.70232. PMID: 41575384

HF Wyandotte contributor: Gunaga S

10. **Gunaga S**, Yang DH, Hanson K, Merkle-Scotland EJ, Jagani S, Breyre AM. Statewide and regional variation in hospice and palliative care protocols in emergency medical services in the United States. *Prehosp Emerg Care*. 2025;1-7. doi:10.1080/10903127.2025.2589960. Epub ahead of print. PMID: 41269023.
11. **Gunaga S**, Carpenter CR, Kennedy M, Southerland LT, Lo AX, Lee S, et al. A model for developing subspecialty clinical practice guidelines: the Geriatric Emergency Department Guidelines 2.0. *J Am Coll Emerg Physicians Open*. 2025;6(6):100247. doi:10.1016/j.acepjo.2025.100247. PMID: 41019914; PMCID: PMC12476112

HF Wyandotte contributor: Swan K

12. **Gunaga S**, Al-Hage A, Buchheister A, Neelam H, **Corcoran J**, Welchans M, et al. Trends in hospice and palliative care consults initiated in the emergency department: an eight-year utilization analysis. *Am J Emerg Med*. 2025;97:237-243. doi:10.1016/j.ajem.2025.08.001. PMID: 40782511

HF Wyandotte contributor: Swan K

13. Breyre AM, Merkle-Scotland EJ, Yang DH, Hanson K, Jagani S, Tolkoff A, et al. Do not resuscitate (DNR) emergency medical services (EMS) protocol variation in the United States. *Am J Emerg Med*. 2025;97:123-128. doi:10.1016/j.ajem.2025.07.035. PMID: 40714438

HF Wyandotte contributor: Gunaga S

14. Lin DE, **Gunaga S**, Mowbray FI, Isaacs ED, Markwalter D, George N, et al. Emergency department-initiated palliative care screening among older adults: a systematic review and meta-analysis protocol. *BMJ Open*. 2025;15(10):e095894. doi:10.1136/bmjopen-2024-095894. PMID: 41125269; PMCID: PMC12548595.

2024-2025

1. Brochu JM, **Gunaga S**, Kenney RM, Veve MP. Unplanned healthcare encounters in drug-resistant urinary tract infections in emergency departments. *Cureus*. 2025;17(5):e85138. PMID: 40589684.
2. Aboul-Nour H, Jumah A, Mohamed G, **Gunaga S**, et al. *Fibrinogen depletion and the risk of intracerebral hemorrhage following endovascular mechanical thrombectomy*. *Interv Neuroradiol*. 2025 Apr. PMID: 40296708.
3. Miller J, Cook B, **Gunaga S**, et al. Health care resource utilization for patients with suspected myocardial infarction: a secondary analysis of the RACE-IT trial. *JAMA Netw Open*. 2025;8(4):e256930. PMID: 40279128.
4. Stollendorf DP, Storrow AB, Liu D, **Gunaga S**, et al. A mixed-methods observational study of strategies for success in implementation science. *BMC Health Serv Res*. 2025;25(1):147. PMID: 39865238.
6. Nedzlek C, Blanchett J, Illg Z, DiGiacinto G, Cunningham K, Wisniewski SJ, et al. Corticosteroid prescribing patterns in the emergency department for acute chronic obstructive pulmonary disease exacerbations: a retrospective analysis following an educational intervention. *Spartan Med Res J*. 2024;9(3). Published September 9, 2024.
7. **Gunaga S**, Smythe D, Shearer N, Hashem M, **Al-Hage A**. Man with convulsive syncope. *J Am Coll Emerg Physicians Open*. 2024;5(4):e13249. doi:10.1002/emp2.13249. PMID: 39104917.

2023-2024

1. **Gunaga S**, Zygowiec J. Primary palliative care in the emergency department and acute care setting. *Cancer Treat Res*. 2023;187:115-135. doi:10.1007/978-3-031-29923-0_9. PMID: 37851223.
2. Danagouliau S, Miller J, Cook B, **Gunaga S**, Fadel R, Gandolfo C, Mills NL, Modi S, Mahler SA, Levy PD, Parikh S, Krupp S, Abdul-Nour K, Klausner H, Rockoff S, Gindi R, Lewandowski A, Hudson M, Perrotta G, Zweig B, Lanfear D, Kim H, **Shaheen E**, Darnell G, Nassereddine H, Hawatian K, Tang A, Keerie C, McCord J. Is rapid acute coronary syndrome evaluation with high-sensitivity cardiac troponin less costly? An economic evaluation. *J Am Coll Emerg Physicians Open*. 2024;5(2):e13140. doi:10.1002/emp2.13140. PMID: 38567033.
3. Miller J, Cook B, Gandolfo C, et al. **HFWY contributors: Gunaga S, Shamoun L, Babel J, Broome A, Digiacinto G, Shaheen E, Darnell G, Plemmons E**. Rapid acute coronary syndrome evaluation over one hour with high-sensitivity cardiac troponin I: a United States-based stepped-wedge, randomized trial. *Ann Emerg Med*. 2024;84(4):399-408. doi:10.1016/j.annemergmed.2024.04.024. PMID: 38888531.

2022-2023

1. **Nguyen A**, Hage A, Yu H, **Gunaga S**. Arterial occlusion and acute deep vein thrombosis-induced acute limb ischemia in a COVID-19 patient. *Cureus*. 2022;14(7):e26689. PMID: 35949755.
2. Vuong L, Kenney RM, Thomson JM, Faison DJ, Church BM, McCollom R, **Gunaga S**, Cahill MM, Slezak MA, Davis SL, Veve MP. Implementation of indication-based antibiotic order sentences improves antibiotic use in emergency departments. *Am J Emerg Med*. 2023;69:5-10. doi:10.1016/j.ajem.2023.03.048. PMID: 37027958.

2021-2022

1. **Nguyen A**, **Corcoran J**, **Nedzlek C**. Sinus arrest in asymptomatic COVID-19 infection. *Cureus*. 2022;14(4):e23736. doi:10.7759/cureus.23736. PMID: 35509766.
2. **Nedzlek CD**, **Michaelis A**. An unusual presentation of an uncommon drug: a case report on phenibut overdose. *Cureus*. 2022;14(4):e23913. doi:10.7759/cureus.23913. PMID: 35530906.
3. **Illg Z**, Dabaja A, **Garcia L**, **Adams N**, **Gunaga S**. Neurogenic stunned myocardium following an attempt to pass a drug test. *Cureus*. 2021;13(9):e18318. doi:10.7759/cureus.18318. PMID: 34722083.
4. Michaelis T, **Gunaga S**, **McKechnie T**, **Shafiq Q**. Acute myocardial infarction in a patient with twin pregnancy: a case report. *Clin Pract Cases Emerg Med*. 2021;5(4):507-510. doi:10.5811/cpcem.2021.6.52939. PMID: 34813459.
5. **Heimberg DH**, **Illg Z**, Corser WD. Quality improvement intervention associated with improved lung protective ventilation settings in an emergency department. *Spartan Med Res J*. 2022;7(1):29603. doi:10.51894/001c.29603. PMID: 35291703.

2020-2021

1. McDonald L, **Illg Z**, **Dow A**, **Gunaga S**. Maternity experiences and perceptions of emergency medicine physicians. *Spartan Med Res J*. 2021;6(1):22009. doi:10.51894/001c.22009. PMID: 33870004.

Interested in scholarship?

Residents are welcome to connect with faculty mentors and pursue projects that fit their interests—whether that means a first case report, a quality-improvement idea, or participation in a larger collaborative study.