# \*\*\*\* \*\*\*\*, MD

**Research & Scholarly Work**

Being a leader in research and scholarship for our department has been a very challenging and rewarding aspect of my career. When I arrived at UAMS in 2013, the research program in our department was significantly underdeveloped. Despite being relatively junior, I began taking advantage of research-related opportunities. I am proud to say that thanks to hard work between myself and several colleagues, we have built a successful Division of Research and Evidence-Based Medicine during my tenure as Associate Professor. We have obtained grant funding, published, and collaborated at the local, regional, and national levels. I believe that I have achieved excellence in the category of Research and Scholarly Work by focusing on three areas: oversight of the resident scholarly activity requirement, participation in federal and industry sponsored trials, and being a faculty leader for several quality improvement initiatives.

Department of Emergency Medicine Scholarly Activity Oversight

As the co-Chief of the Division of Research and Evidence-Based Medicine, I am responsible for teaching EBM concepts to our residents and overseeing the resident scholarship requirement. This responsibility requires significant coordination with each resident as they progress through training. In this role, I facilitate resident involvement in projects that are eventually presented nationally or published in a peer-reviewed journal, and I am also able to mentor them through the research process. In 2016, we created and implemented a novel scholarly activity point system that allowed residents to choose from various types of scholarship to fulfill their requirements. We performed a preliminary analysis of the point system in 2019, showing an improvement in scholarly output, which was presented nationally as an Innovation at the Society for Academic Emergency Medicine’s Annual Meeting in 2020. We then performed a more detailed, blinded analysis of the resident scholarly output from the EM class of 2014 through 2020. This again showed improvement in the quantity and quality of our resident scholarship and was recently accepted as a peer-reviewed educational innovation in the *Western Journal of Emergency Medicine*.

Federal and Industry Sponsored Trials

Over the last several years, I have participated in several federal or industry sponsored trials, typically as the site-Primary Investigator. When I became an Associate Professor in 2018, I was the site PI for a R01 trial (ED-SAFE 2) examining the effects of universal suicide screening and a safety planning intervention for suicidal patients being discharged from the emergency department. This study has since concluded, and results were recently published in JAMA Psychiatry, showing a reduction in suicide attempts or suicide related visits with safety planning. While this study was ongoing, I continued the UAMS EM participation in the Multicenter Airway Research Collaboration (MARC), specifically serving as the site-PI for MARC-41, a prospective industry sponsored trial studying the effect of a hospital-initiated asthma care bundle. This work has also been published, showing a reduction in asthma exacerbations for patients who followed the care bundle.

Currently, I am a site co-Investigator for two grant funded trials. ACTIV-6 is a multicenter federally funded grant studying medications being repurposed to treat COVID-19 infections and is currently enrolling subjects. Additionally, I am the site sub-investigator for the CARPO study, an industry sponsored trial examining a new medication treating pancreatitis, which is set to begin enrollment very soon.

In July 2023, our Division received a Notice of Award from the Substance Abuse and Mental Health Services Administration (SAMHSA) for a 3-year, $1.5 million grant examining alternatives to opioids for acute pain in the emergency department. This grant is expected to begin on September 30, 2023. As a co-Primary Investigator, this will allow me to bring evidence- based practices for managing acute pain and opioid reduction to the bedside. In addition to being a significant professional milestone for me personally, this grant represents the considerable efforts of many in our department and at UAMS over the past several years.

*Grant Details*

Emergency Department Patient Safety and Follow-up Evaluation 2 (EDSAFE 2)

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| --- | --- | --- |
| NIH/NIMH (1R01MH106726-01)\*\*\*\*, \*\*\*\* (UAMS Site-PI), | Boudreaux, Edward (PI) | 08/01/15 – 02/28/195% FTE, $225,000 |
| Multicenter Airway Research Collaboration (MARC) - 41 |
| Novartis | Hasegawa, Kohei (PI) | 11/1/2018 - 07/1/2020 |
| \*\*\*\*, \*\*\*\* (UAMS-Site-PI), |  | $28,000 |

ACTIV-6: COVID-19 outpatient randomized trial to evaluate efficacy of repurposed medications 3U24TR001608-05W1 Principal Investigator: Hernandez, Naggie

NIH (pass-through from Duke University) $99,998.06 Role: site Co-I

The major goals of this project are to evaluate the efficacy of repurposed medications for COVID-19.

A Randomized, Double-Blind, Placebo Controlled Dose-Ranging Study of Auxora in Patients with Acute Pancreatitis and Accompanying Systemic Inflammatory Response Syndrome (CARPO) Principal Investigator: Sudarshan Hebbar, MD CalciMedica, Inc.

Role: site Sub-I $183,569.00

Emergency Department Alternatives to Opioids Demonstration Program (ED-ALT)

SAMHSA 1H79TI086020-01 3-year, $1,500,000, start date 9/30/2023

Co-Primary Investigators: Mike Wilson, MD PhD; \*\*\*\* \*\*\*\*, MD

Quality Improvement Initiatives

During the early years of the above-mentioned ED-SAFE 2 grant, I underwent Lean Quality Improvement training and received a White Belt certification. Learning these core skills has allowed me to utilize my evidence-based medicine expertise to bring knowledge to the bedside through quality improvement initiatives. I have accomplished this while mentoring other faculty, medical students, and residents in several important initiatives, and will highlight three of them

in the following paragraphs.

As evidenced by my dual appointment in the Departments of Emergency Medicine and Pediatrics, pediatric patient care is a passion of mine. The National Pediatric Readiness Project is a national initiative spearheaded by the US Department of Health and Human Services’ Emergency Medical Services for Children Program. This project aims to ensure that all emergency departments, not just pediatric specific ones, are adequately prepared to care for pediatric patients. After seeing firsthand that we were underprepared for critical pediatric patients, in 2019 we started a Pediatric ED Task Force in the UAMS ED. I have led this team in improving our pediatric supplies, implementing education for staff related to supplies, protocols, and basic pediatric care, and have led simulation sessions for our emergency medicine residents. As a result of these efforts, I have recently been asked to serve as the physician Pediatric Emergency Care Coordinator (PECC) for UAMS, a position recommended as a best practice by the National Pediatric Readiness Project. As the physician PECC for UAMS, I will be a resource for our ED and continue these improvement efforts in the coming years.

Second, during the COVID-19 pandemic, emergency care providers saw firsthand how low vaccination rates can negatively impact health outcomes. Knowing that many patients did not have easy access to the COVID-19 vaccine, I led a team that began providing COVID-19 vaccines to patients in our emergency department. This mixed methods initiative included quantitative and qualitative data and was unique in utilizing medical and pharmacy students as vaccine screeners. While we encountered high vaccine hesitancy rates, we successfully vaccinated many patients, and we published the results of these efforts in the *Western Journal of Emergency Medicine*.

Lastly, given the changes in Arkansas state laws related to abortion after the Dobbs vs. Jackson Supreme Court ruling in 2022, our team felt it was essential to begin offering birth control options to patients in the ED. We understand that our underserved patients may especially need access to these preventive healthcare options to prevent unwanted pregnancy. This insight spurred me to lead another quality improvement initiative to offer two birth control options in the ED: Depo-Provera (a long-acting contraceptive injection) and a 3-month supply of oral contraceptive pills. This ongoing initiative went live in April 2023.

Summary

Research and scholarship are a major part of my day-to-day work, and I am proud of the growth and success of our Division during my time as Co-Chief. I believe that the accomplishments outlined above and in other areas of my dossier clearly demonstrate that I have achieved excellence in the areas of Research and Scholarship.