The Ohio State University Wexner Medical Center Department of Emergency Medicine is an integral part of one of the nation’s premier academic health centers. The department is growing in size and excellence in our three principal mission areas: clinical care, education and research. As a department, we provided care to 132,632 patients last year who visited our two Emergency Departments, of which 36,317 patients were admitted and an additional 15,477 patients presented to our two AfterHours clinics. This care is delivered by attending physician faculty, Emergency Medicine and Emergency Medicine/Internal Medicine residents, fellows and advanced practice providers.

The Department of Emergency Medicine has developed a national reputation centered on basic science discovery, clinical investigation and educational research. In the last three years, we’ve seen a significant rise in our externally funded research efforts ($2,401,418.73 in FY19) — particularly in our NIH-funded research. In 2018, the department achieved a national ranking of 15 in the Blue Ridge Institute rankings for NIH funding. This year, we have two new NIH grantees, Lauren Southerland, MD, recipient of a K23 award, and Katie Buck, MD, recipient of an R03 award.

This was a very successful year with resident recruitment. We matched 17 Emergency Medicine residents and two Emergency Medicine/Internal Medicine residents from many outstanding medical schools across the country. In this year’s resident match, Ohio State Emergency Medicine exceeded Ohio State Wexner Medical Center goals in obtaining a higher percentage of top students.

We continue to recruit successfully to all of our mission areas. This past year’s recruitment included four new fellows in Ultrasound, Medical Education, Research and EMS, as well as two new clinical excellence faculty. This past year, as a department we have been good stewards in partnering with the Ohio State Wexner Medical Center. We exceeded our budget goals, our philanthropic goals, our research goals and our faculty engagement survey alignment score goals.

We recognize the value of discovery, research and education to improve the care of our patients — something that we are uniquely well-positioned to accomplish as part of a dynamic academic health center.

Mark Angelos, MD
Professor and Chair
Department of Emergency Medicine

MISSION STATEMENT

TO PROVIDE innovative, efficient, safe and compassionate patient care to patients presenting to The Ohio State University Wexner Medical Center’s Emergency Departments and AfterHours clinics.

TO BE A LEADER in the education of medical students, residents and fellows in emergency medical care.

TO PERFORM cutting-edge research and scholarly investigation to identify the causes, treatments and prevention of emergency medical conditions.

TO PROMOTE transforming emergency medicine through innovation, faculty development and excellence.

VISION STATEMENT

Transforming emergency medicine through innovation.

BEHAVIORS OF A COHESIVE TEAM [TO CARE]

TRUST
Trust is the confidence among team members that their peers’ intentions are good, and there is no reason to be protective or careful around the group.

COMMIT
The ability to engage in conflict and provide input enables team members to buy in or commit to decisions.

ACCOUNTABLE
After commitment is established, team members must be willing to hold one another accountable for their behaviors and remind one another when actions are counterproductive to the team.

RESULTS
Collective team results must supersede personal objectives or pursuits.

ENGAGE
When trust is present, teams are able to engage in unfiltered ideological debate around ideas and issues and the decision that must be made.
OHIO STATE EMERGENCY MEDICINE BY THE NUMBERS

Research funding:
NIH funding: $1,142,469.21
Grant funding: $2,401,418.73
Research grants submitted: $4.3 million

Blue Ridge Institute National Ranking for NIH Funding: 15th

Emergency Medicine patient visits:
University Hospital patient ED visits: 82,385
East Hospital patient ED visits: 50,247
AfterHours visits: Martha Morehouse Outpatient Care: 9,546; Outpatient Care Gahanna: 5,931

ED Admissions: 36,317

University Hospital: 28,746
East Hospital: 7,571

Hyperbaric Sessions: 805

wRVUs: 417,371
Total faculty: 63
New faculty hires: 9
New fellows: 1

Number of Residents: 60
Male: 31
Female: 29
Underrepresented minorities: 6

Number of Advance Practice Providers: 24

Publications: 101
Peer-reviewed: 76
Non-peer-reviewed: 11
Book chapters: 10
Case reports: 4

Presentations: 163
National: 91
Regional: 20
Local: 52
Clinical Research Mission

Over the past year, we’ve been working on a number of clinical projects to improve the care for patients in our Emergency Departments (EDs) and AfterHours care sites. Below is a list of significant projects and accomplishments. We look forward to continued improvements and ongoing innovation for the care of our patients and support of the clinical team members.

- New Collaboration with The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute to cover the Intermediate Care Clinic (ICC): Expansion of clinical services to provide services in the ICC
- AfterHours clinics: 3.6% annual increase in patient volume
- University Hospital ED: Annual patient volume increased (despite record boarding in the ED this year)
- ED observation unit: Reworking of our observation unit workflow together with compliance to allow billing of previously unbilled observation care
- East Hospital ED: ED expansion with addition of four new beds
- Medical Assisted Treatment (MAT) program: Institution of MAT program at both EDs to address opioid addiction and increased ED naloxone distribution
- Geriatric ED designation: American College of Emergency Physicians accredited Ohio State’s University Hospital Emergency Department as a Level 1 Geriatric Emergency Department

Education programs are a major focus of our department, and we continue to develop excellent programs led by exceptional leaders. Educational efforts encompass the development of faculty, fellows, residents (graduate medical education) and students (undergraduate medical education). We’ve even developed courses for Ohio State University undergraduate students. Although our education leaders have defined roles in graduate or undergraduate medical education, there is great collaboration and crossover in education efforts, and we welcome contributions by faculty at all levels.

- Emergency Medicine Residency: Seventeen 2019 graduates
- Emergency Medicine/Internal Medicine combined residency: Two 2019 graduates — Kush Nandam, MD, is taking a joint academic position with the departments of Internal and Emergency Medicine at Emory University, and Greg Esinger, MD, matched into our Pulmonary Critical Care Fellowship at Ohio State.
- Fellowship training of resident graduates: Seven of our 19 EM and EM/IM graduates are embarking on additional fellowship training in the following programs: Pulmonary Critical Care, EMS, Climate and Health Science Policy, Ultrasound, and Medical Education and Research, with four of the seven completing their fellowship training at Ohio State.
- Education Fellowship: Department of Emergency Medicine Education fellowship was approved by the Society of Academic Emergency Medicine
- Phil Tseng, MD (PGY 2 resident), was elected vice chair of the Emergency Medicine Residents’ Association (EMRA) Administration and Operations Committee
- Matt Haung, MD, was elected vice chair of the EMRA Critical Care Section

CLINICAL MISSION HIGHLIGHTS

EDUCATION MISSION HIGHLIGHTS
• Resident wellness program: Institution of our resident wellness program funded through the Samuel J. Koehl endowment. The resident wellness committee was established, and we hosted a wellness retreat featuring a leadership lecture by former Ohio State head football coach Urban Meyer in May 2019. National presentations were made regarding the curriculum.

• Residency curriculum: Farhad Aziz, MD, has led didactic scheduling with new curriculum sessions. Geremiha Emerson, MD, has developed a series of state-of-the-art review sessions called Rapid Fire, where audience participation is required. This format is also used for our EKG curriculum. We developed and implemented our two-year leadership curriculum in June 2019. Our visiting professor series has included Asim Roy, MD (on fatigue mitigation), Rebecca Smith-Coggins, MD (on sleep deprivation), and Urban Meyer (on leadership).

• Faculty airway course: Colin Kaide, MD, and Ben Ostro, MD, have delivered a state-of-the-art, faculty-level airway course.

• Simulation learning: Jennifer Yee, MD, is developing a simulation curriculum that defines procedural competency for Emergency Medicine residents and a new, in-situ simulation curriculum.

• Education scholarship: The Department of Emergency Medicine medical educators were credited with 22 peer-reviewed publications and 29 authorships. This continues to rank the department #1 of all Ohio State College of Medicine departments for Medical Education Scholarship.

• Medical Education Research Group (MERG): Led by Dave Way, MEd, and Simiao Li-Sauerwine, MD, our educators have started a Medical Education Research Group designed to share education research projects and brainstorm new innovative research ideas.

• New Compensation Plan Academic Incentive: The education component of the new incentive program was finalized.

• Accreditation Council for Graduate Medical Education (ACGME) surveys: The ACGME Resident and Faculty surveys reached all-time high results.

• Ohio American College of Emergency Physicians (ACEP) board: Brooke Pabst, MD (PGY-2 resident), served as a member of the Board of Directors.

• Advanced Management in Hospital-Based Care (AMHBC) M4 required EM clerkship: Chris San Miguel, MD, was named as the new director of the required EM clerkship.

• EM residency match: All Ohio State students interested in emergency medicine successfully matched.

• Director of Evaluation and Assessment for the Lead.Serve.Inspire. curriculum: Cynthia Leung, MD, PhD, was appointed director of this collegewide position and also as a clinic track

• Faculty airway course: Colin Kaide, MD, and Ben Ostro, MD, have delivered a state-of-the-art, faculty-level airway course.

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RESEARCH MISSION HIGHLIGHTS

Clinical Research Mission

The department research group had a highly successful year of growth, welcoming new faculty members, achieving continued success in obtaining NIH grant funding and supporting a number of national studies to advance the care of acutely ill patients. Particular areas of focus include geriatrics, acute lung injury and sepsis, opioids and cancer.

- **NIH-funded research:** The Department of Emergency Medicine research group continued its success, being listed in the top 15 nationally for NIH funding of all departments of emergency medicine. Five faculty members are principal investigators or site PIs on NIH-funded research.

- **Publications:** Scholarly output kept pace with past years, with increasing publications in high-impact journals.

- **16th Annual Department Spring Research Day:** On April 24, 2019, the Lashutka Emergency Medicine Endowed Lectureship was delivered by Emmy Betz, MD, MPH, from University of Colorado. Dr. Betz is an NIH-funded investigator and national expert on addressing gun violence.

- **New NIH K23 funded:** Lauren Southerland, MD, received a perfect score on her NIH K23 application to study methods of improving care for geriatric ED patients using our observation unit services. Dr. Southerland started work on the five-year grant in July.

- **New NIH R03 funded:** Katie Buck, MD, received notice that her study of improving diagnosis of dyspnea in older adults will be funded by the National Institute on Aging. She started work on the two-year grant in September.

- **Newly funded grants:** Emily Kaufman, DO, received a $950,000 grant from Franklin County and the Centers for Disease Control and Prevention to improve care for opioid-dependent patients through the implementation of a medication-assisted treatment (MAT) program in both EDs.

- **New researcher:** The research group welcomed Jason Bischof, MD, to the faculty. Dr. Bischof will be studying diagnosis and risk stratification of ED patients with cancer.

- **New Research fellow receives national award:** Katie Buck, MD, a graduating chief resident, will remain with Ohio State as a research fellow. She was awarded the Society for Academic Emergency Medicine’s Resident Researcher of the Year Award at the annual meeting in spring 2019.

Research Laboratory Mission

Our current research focuses on establishing the role of stem cells for treating a damaged heart following myocardial infarction (MI). We’re studying intramyocardial delivery of stem cells into the damaged heart utilizing biomimetic nanofiber scaffolds composed of human stem cells for cardiac regeneration. We’re also working on the reprogramming of stem cells (hiPSCs) into cardiac and endothelial lineage to repair failing heart muscles. The next step is to translate the findings from our small-animal model into a preclinical large-animal model, which could be utilized for clinical translation in future. Another research focus is evaluating cell-free therapeutics for cardiac repair via isolating extracellular vesicles or exosomes from cultured stem-cell supernatant.
The goal of the Department of Emergency Medicine is to have faculty who make meaningful contributions to the department, the medical center, the College of Medicine and the university. In doing so, faculty members have a high likelihood of progressing up the academic ladder from assistant to associate to full professor.

- **Department of EM Mentorship Program:** The department instituted a formal mentorship program to aid faculty in their career development. Each new faculty member is assigned interim advisors to aid in their transition before they have sufficient familiarity to self-select mentors. At the beginning of year two, faculty may choose to keep their advisor or choose a new faculty member to act as a formal mentor. Initial expectation for advisor, mentor and mentee is to develop a personal mission statement and establish a three- to five-year plan.

- **Department promotion:** Promotion timelines for Emergency Medicine and input formats for dossiers have been revised and codified to align with College of Medicine goals.

- **Faculty promotions:** Three faculty members were promoted to associate professor: Rob Cooper, MD; Luca Delatore, MD; and Lauren Southerland, MD.

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**Visiting Professor Lecture Series:**

- **“When the Tank Is Empty: Strategies for Promoting Professional Fulfillment”**
  - Rebecca Smith-Coggins, MD, FACEP
  - Associate Dean for Medical Student Life Advising
  - Professor and Vice Chair for Academic Affairs
  - Director of Emergency Medicine Simulation
  - Department of Emergency Medicine
  - Stanford University School of Medicine

- **“Building a Better Healthcare Workplace”**
  - Esther Choo, MD, MPH
  - Associate Professor
  - Center for Policy and Research in Emergency Medicine
  - Department of Emergency Medicine
  - Oregon Health and Science University

- **“Talking About Guns and Suicide: Clinical, Research and Advocacy Perspectives”**
  - Marian (Emmy) Betz, MD, MPH
  - Associate Professor
  - Emergency Medicine
  - Deputy Director
  - Program for Injury Prevention, Education and Research (PIPER)
  - Colorado School of Public Health
The Ultrasound Division at Ohio State’s Department of Emergency Medicine is focused on providing high-quality patient care utilizing state-of-the-art ultrasound techniques. Our Ultrasound Division faculty focus on high-quality ultrasound education for medical students, residents, fellows and attendings while publishing our educational advances in medical journals. Completing over 5,000 ultrasound cases per year between University Hospital and East Hospital Emergency Departments, the ultrasound program continues to grow to serve the patients in central Ohio. The Ultrasound Division faculty are active in national and international meetings, where they give lectures, present posters and compete in ultrasound competitions.

- Society of Clinical Ultrasound Fellowship Conference (April 26-27, 2019): Conference held at Ohio State for over 150 ultrasound faculty and fellows from around the country.
- The Ultrasound Academy Fund: Division received a $10,000 donation to the fund from alumnus Matt Lashutka, MD.
- 2018 SAEM award for best social media: Michael Prats, MD, received an award for his Ultrasound GEL podcast, which is now heard in over 160 countries across the world and downloaded an average of 73,600 times each month.
- Faculty ultrasound training: Sessions were implemented for all department faculty under the leadership of Lauren Branditz, MD.
- Institutional Point of Care Ultrasound (iPOCUS): iPOCUS committee is a hospitalwide group of ultrasound leaders looking to improve best practice with ultrasound and is led by Creagh Boulger, MD.
- Equipment grant: Jessica Everett, MD, received a grant to purchase five Clarius ultrasound devices.
- Professional billing collections: Increased to over $180,000 for the first time in the history of the division.
- Academy of Emergency Ultrasound (AEUS): Creagh Boulger, MD, served as its 2018-2019 president.
- International invited lectures: Creagh Boulger, MD, lectured in Ireland, Germany and Australia on ultrasound and social media; Michael Prats, MD, lectured in Australia with Dr. Boulger at the Social Media and Critical Care (SMACC) conference.
- Annual Ultrafest competition for medical students: The division hosted a diagnostic ultrasound competition for medical students in October 2018. Ultrafest is a regional gathering of ultrasound enthusiasts and educators to improve ultrasound skills and learning.
The Department of Emergency Medicine formed the Douglas A. Rund Emergency Medicine Alumni Society in fall 2015. By January 2016, the society had published its first newsletter and had begun the process of forming a Board of Governors and a set of bylaws. The first official meeting was held at the 2016 ACEP Academic Assembly, at which time the bylaws and slate of officers were approved. James Chan, MD (residency graduate 2012), the first society president, led the group to The Ohio State University Alumni Association’s highest status level, “Scarlet,” during its first year of operation. Alumni societies achieve Scarlet status through the accomplishment of organizational goals.

Over the past three years, the society has held social, service and educational events. The Emergency Department has provided opportunities for alumni and guests to gather and socialize by sponsoring dinners at two national meetings per year — the Society for Academic Emergency Medicine Annual Meeting and the American College of Emergency Physicians Annual Scientific Assembly. Each March, Brian Hiestand, MD (2009), directs the society in community service, organizing medical care at the annual Arnold Sports Festival in Columbus. Instructional seminars have been offered to society members for CME credit along the way. Thanks to Travis Ulmer, MD (2007), alumni tailgate in style every year at an Ohio State football game.

One of the most significant accomplishments of the society was the establishment of an endowed scholarship in the name of an alumnus who died in 2017. The Linda Hom Robinson, MD, endowed scholarship is given to a deserving graduate of the medical school who chooses emergency medicine as their specialty. This scholarship was made possible through a generous donation from Dr. Robinson’s family and additional donations from other alumni.

Alumnus Steven Slack, MD, was chosen to receive the society’s 2019 Richard N. Nelson Distinguished Alumni Award. This award is presented annually to a graduate of The Ohio State University College of Medicine, Emergency Medicine Residency and Fellowship programs who has distinguished themselves with significant contributions to the specialty of emergency medicine.

The Department of Emergency Medicine recognized Geraldine Keller, PhD, and her late husband, Marty Keller, MD for their contribution in establishing the Department of Emergency Medicine in 1990. Through their efforts the Department of Emergency Medicine, comprised of a team of dedicated physicians, nurses and other healthcare professionals, has committed to providing medical care to the rich diversity of people in Columbus and the surrounding communities.

Michael McCrea, MD (2007), currently heads the society as president. Troy Madsen, MD (2006), emeritus faculty Rick Nelson, MD, assistant to the department chair MJ Fortney and department educational researcher Dave Way, MEd, keep alumni informed through a quarterly newsletter.
**Emergency Medicine Awards and Accolades**

**Eric Adkins, MD:** 2018 Columbus Best Doctors list in Emergency Medicine, Columbus Business First

**Greg Archual, MBA:** 2019 Academy of Administrators in Academic Emergency Medicine (AAAEM) Significant Contributions AAAEM Annual Award, Outstanding Administrative Staff Award, Ohio State Department of Emergency Medicine

**Daniel Bachmann, MD:** Emergency Physician of the Year, Ohio American College of Emergency Physicians

**Michael Barrie, MD:** Part 3 Excellence in Education Award, The Ohio State University College of Medicine

**Creagh Boulger, MD:** 40 under 40, Columbus Business First; Outstanding Innovator for GEL Podcast, Ohio State Department of Emergency Medicine

**Lauren Branditz, MD:** Advanced Management in Hospital-Based EM Educator of the Year, The Ohio State University College of Medicine

**Arthur Broadstock, MD:** (M4) Outstanding Medical Student, American College of Emergency Physicians

**Katherine Buck, MD:** Resident Researcher Award, Society for Academic Emergency Medicine

**Jeffrey Caterino, MD:** 2018 Columbus Best Doctors list in Emergency Medicine, Columbus Business First; Douglas A. Rund Distinguished Faculty Award, Ohio State Department of Emergency Medicine

**Paul DeJulio, MD:** Inaugural Nina and Roger Rost Resident Award, The Ohio State University Annual Resident & Fellow Quality Improvement Symposium

**Greg Eisinger, MD:** 2019 Hermes Award; 2019 Excellence in Critical Care Medicine Award – Ohio State Department of Emergency Medicine; 2019 Internal Medicine Student Teaching Award – Ohio State Medical Intensive Care Unit and Ohio State College of Medicine

**Emile El-Shammaa, MD:** Emergency Physician of the Year Award, Ohio chapter of the American College of Emergency Surgeons

**Diane Gorgas, MD:** Clotilde D. Bowen Women of Excellence Award, The Ohio State University College of Medicine

**Ann Haynes, MD:** Clinical Peer Service Award, Ohio State Department of Emergency Medicine

**Gary Katz, MD:** 2018 Columbus Best Doctors list in Emergency Medicine, Columbus Business First

**Emily Kauffman, DO:** Physician Peer Mentor Award, The Ohio State University Wexner Medical Center

**Andrew King, MD:** Scholarship and Education Academy Scholar Award, Teaching and Evaluation Category, Council of Residency Directors in Emergency Medicine (CORD)

**Daniel Martin, MD:** 2019 Bill Hall Award for Service, Ohio Chapter of the American College of Emergency Physicians

**Ashish Panchal, MD:** 2019 Great Rivers Affiliate Distinguished Achievement Award, American Heart Association

**Michael Prats, MD:** Outstanding Innovator for GEL Podcast, American College of Emergency Physicians

**Michael Purcell, MD:** Clinical Peer Service Award, Ohio State Department of Emergency Medicine

**Caitlin Rublee, MD:** 2019 Video of the Year Award, Society for Academic Emergency Medicine; Best Poster Presentation, The Ohio State University Annual Resident & Fellow Quality Improvement Symposium

**Lauren Sotherland, MD:** Researcher of the Year Award, Ohio State Department of Emergency Medicine

**Patrick Sylvester, MD:** 2019 Hermes Award, Ohio State Department of Emergency Medicine

**Phillip Tseng, MD:** RAMS Chief Resident Forum Scholarship, 2019 SAEM Consensus Conference

**Howard Werman, MD:** Distinguished Senior Reviewer, Top 50 Peer Reviewers – Annals of Emergency Medicine
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