



THE OHIO STATE UNIVERSITY COLLEGE OF MEDICINE

# Emergency Medicine/ Internal Medicine Combined Residency Program



THE OHIO STATE  
UNIVERSITY

WEXNER MEDICAL CENTER

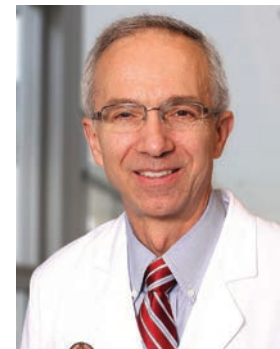


## OUR DEPARTMENT VISION:

Transforming Emergency Medicine Through Innovation

## DEPARTMENT OF EMERGENCY MEDICINE (EM)

### *A Message from Our Chair*



It is my pleasure to welcome you to our Department of Emergency Medicine's Residency Programs at The Ohio State University and The Ohio State University Wexner Medical Center. Having been a part of the EM Categorical Program for the past 25 years, I have seen these programs grow from infancy into some of the strongest programs in the country. As the chair of the department, I am excited about the innovation, energy and devotion of the residency leadership under the direction of Drs. Daniel Martin, Emily Kauffman, Sorabh Khandelwal, Geremiha Emerson, Andrew King, Simiao Li-Sauerwine and David Wininger. The EM/Internal Medicine (IM) Residency Program continues to grow and mature, providing our residents with outstanding career opportunities in academia and community medicine. Our EM/IM residency is entering its eighth year with our collaborative partner, Internal Medicine.

The residency is located within a strong academic department with nearly 60 faculty members who have a wealth of experience in clinical medicine, education and research.

We have just opened a brand-new Emergency Department (ED) in a brand-new hospital. This new ED, with approximately 110 beds, has doubled our size and is allowing us to engage in some innovative new care models, including oncologic emergencies, geriatric emergency care and observations medicine. At a time when many departments are struggling, we are sound and growing. We seek to train the leaders of tomorrow and welcome you to Ohio State. We are proud to provide the best possible patient care while respecting each individual's background and needs. We aspire to be one of the top academic departments in the country, and we see our residencies as one of the crown jewels in our department.

Mark Angelos, MD  
*Professor and Chair*  
*Department of Emergency Medicine*  
*The Ohio State University College of Medicine*  
*The Ohio State University Wexner Medical Center*

## DEPARTMENT OF INTERNAL MEDICINE (IM)

### *A Message from Our Chair*



The Department of Internal Medicine at The Ohio State University Wexner Medical Center is the largest department in one of the nation's leading academic medical centers. We are proud to be leading the way in research, education and patient care. *U.S. News & World Report* named our institution to its 2019-20 list of "Best Hospitals." The Department of Internal Medicine is proud to be home to three of the four nationally ranked specialties including Cancer (#20), Diabetes and

Endocrinology (#36) and Nephrology (#40). Four of the seven specialties recognized as high performing also fall under our department, including Cardiology & Heart Surgery, Gastroenterology & GI Surgery, Geriatrics and Pulmonology.

We have a long-standing commitment to outstanding patient care, translational research and education, and we are a pioneering institution in the developing field of personalized medicine. Our residency was selected as one of the initial 17 Educational Innovation Project (EIP) programs in the nation that were asked to explore innovative strategies to train competent physicians in our discipline. The focus of our educational innovation effort includes verifying competency, emphasizing teamwork in mastering skills, transition of care, and linking educational and clinical quality improvement.

Our mission is to improve the lives of people through innovation in research, education and patient care. Our vision is that, in working as a team, we will shape the future of medicine by creating, disseminating and applying new knowledge to meet the needs of

each individual. Our total research funding in FY19 exceeded \$90 million. Our extremely successful investigators strive to increase our research funding to make our vision become a reality. In working with The Ohio State University Center for Clinical and Translational Science, our experienced investigators are mentoring the next generation of physician-scientists.

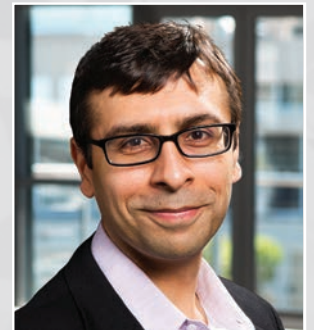
Our pride in educating the next generation of superb clinicians is reflected in the placement of our senior medical students in outstanding residency programs, including our own. Our residents who enter subspecialty training are equally successful in securing positions in prestigious fellowship programs. We are very pleased that many also choose to pursue fellowship programs at Ohio State. For those entering the practice of internal medicine, as either a primary care physician or a hospitalist, we have been extremely gratified with the positive feedback on their educational experience. These individuals proudly join the traditional "long scarlet-and-gray line" of The Ohio State University's medical alumni.

We welcome your interest and your questions.

Sincerely,  
Rama Mallampalli, MD  
*Chair, Department of Internal Medicine*



**David Wininger, MD**  
Associate Professor of  
Internal Medicine  
Internal Medicine Residency  
Program Director



**Sorabh Khandelwal, MD**  
*Samuel J. Kiehl III, MD*  
Professor in Emergency Medicine  
Emergency Medicine Residency  
Program Director



## DEPARTMENTS OF EMERGENCY MEDICINE AND INTERNAL MEDICINE

### *A Message from the Program Leadership*

In developing our Emergency Medicine/Internal Medicine (EM/IM) Combined Residency Program, we have combined excellence in leadership, residency training, and academic and patient care opportunities.

Together both departments provide more than 40 years of residency leadership experience and have graduated hundreds of individuals who have made an impact on both specialties. Our graduates have taken their careers in a number of directions based on their areas of interest, including academic subspecialty training, education and teaching activities, and clinical excellence. Many EM graduates have attained leadership positions in medical centers and academic organizations both regionally and nationally. Our Department of Internal Medicine has a number of nationally ranked *U.S. News & World Report* programs, while the Department of Emergency Medicine continues to be one of the most competitive training programs in the country.

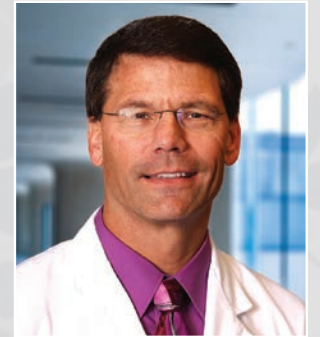
The departments of Emergency Medicine and Internal Medicine have demonstrated academic and educational excellence. Both are among national leaders in research funding and have enjoyed increases in research support during the past several years. Although Internal Medicine is one of the leading contributors to the education of our medical students, Emergency Medicine has contributed more teaching hours per faculty member than any other department. Both departments have had many faculty recognized for teaching excellence, and many have been voted “Professor of the Year,” the highest recognition for teaching excellence from medical students. Both residency training programs continue to receive an increased

number of highly qualified applications. The departments also have added fellowship programs while continuing to emphasize the importance and vital role of providing primary care. Both residency programs have steadily increased their residency size as well as the numbers and expertise of their educational faculty. Both have a track record of excellence regarding residency review-committee accreditation.

Common areas of emphasis and expertise include the treatment of critically ill patients with evidence-based medicine, simulation and ultrasonography. Our programs have benefited from a medical center-wide initiative to emphasize such key areas as patient satisfaction, professionalism, communication and patient safety. This has been accomplished through education, mentorship, feedback and innovation. Even more important to our success has been the establishment of a collaborative culture among departments in all of our mission areas.

Recruiting and developing leaders and scholars will ensure the success of our EM/IM program. Our graduates will provide a leadership impact ranging from their excellence in patient care to their participation in areas of organized medicine. Key leadership qualities include a vision for change and innovation and overwhelming optimism regarding future potential. Key scholarly qualities include an overwhelming desire to learn from scientific evidence and a desire to contribute to the development of future leaders and scholars.

We welcome your interest in our EM/IM residency training program.

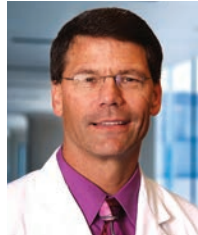


**Daniel Martin, MD, MBA**  
Professor and Vice Chair of Education  
EM/IM Residency Program Director  
Departments of Emergency Medicine and Internal Medicine



**Emily Kauffman, DO, MPH**  
Assistant Professor  
Associate EM/IM Residency Program Director  
Departments of Emergency Medicine and Internal Medicine

## EMERGENCY MEDICINE/INTERNAL MEDICINE RESIDENCY FACULTY



**Daniel Martin, MD, MBA**

*Professor and Vice Chair of Education*

Daniel Martin, MD, MBA, is a professor of Emergency Medicine and Internal Medicine at The Ohio State University Wexner Medical Center. He is the program director of the Emergency Medicine/Internal Medicine Residency Program, and he is the vice chair of education for the Department of Emergency Medicine. Dr. Martin served as the program director for the Emergency Medicine Categorical Program at Ohio State from 1990 to 2010. He received his medical degree from Indiana University School of Medicine, completed his Internal Medicine residency at University of Iowa Hospitals and Clinics, and completed an Emergency Medicine residency at the Medical College of Wisconsin, serving as chief resident during his final year. His clinical interests include the treatment of infectious diseases in the Emergency Department (ED), trauma management, emergency medicine education and patient experience. His research interests include the ED treatment of infections, such as pneumonia and respiratory infections, as well as medical education studies. Dr. Martin is an Ohio American College of Emergency Physicians (ACEP) board member and councilor. He also serves on a number of committees within EM, the College of Medicine and Ohio State Wexner Medical Center, along with being an active member in national organizations such as the Society for Academic Emergency Medicine (SAEM), the Council of Emergency Medicine Residency Directors (CORD), ACEP and the American Academy of Emergency Medicine (AAEM), to name a few. He has lectured as a visiting professor both regionally and nationally on such topics as respiratory infections, case studies of infectious emergencies, recognizing and reducing cognitive errors in medicine and applying leadership literature to medicine.



**Emily Kauffman, DO, MPH**

*Assistant Professor*

Emily Kauffman, DO, MPH, is an assistant professor of Emergency Medicine and Internal Medicine at The Ohio State University Wexner Medical Center and associate program director of the Emergency Medicine/Internal Medicine Residency Program. Dr. Kauffman received her Master of Public Health degree from The Ohio State University and her medical degree from the Ohio University College of Osteopathic Medicine, where she completed a predoctoral fellowship in Osteopathic Manipulation Therapy. She completed a combined Emergency Medicine/Internal Medicine residency at Louisiana State University

Health Sciences Center, where she served as chief resident for one year. Dr. Kauffman's professional interests include sepsis guidelines, HIV in Latino populations, community development in underserved areas and international public health. She divides her clinical time between attending in the Emergency Department at The Ohio State University Wexner Medical Center's east campus (70%), as well as attending on the General Internal Medicine Hospitalist service (30%).



**Eric Adkins, MD, MSc**

*Associate Professor*

Eric Adkins, MD, MSc, is an associate professor of Emergency Medicine, Internal Medicine and Critical Care at The Ohio State University Wexner Medical Center. He is the vice chair of clinical affairs in the Emergency Department. He received his medical degree from West Virginia University in 2002, and in 2007 he completed a combined Emergency Medicine/Internal Medicine residency at Christiana Care Health Services in Delaware, where he served as chief resident in his final year of training. He then completed a three-year fellowship training program in Pulmonary and Critical Care Medicine at The Ohio State University Wexner Medical Center in 2010, having served as chief fellow. He is board certified in all four specialties. He completed a master's degree in Medical Science at The Ohio State University in 2010. Dr. Adkins focuses his academic efforts on critical care and ultrasound in the Emergency Department. He divides his clinical time 75% in the Emergency Department and 25% in the Intensive Care Unit.



**Jeffrey Caterino, MD, MPH**

*Professor*

Jeffrey Caterino, MD, MPH, is a professor of Emergency Medicine and Internal Medicine, associate dean for research, and vice chair for research in the Department of Emergency Medicine. He received his medical degree from Pennsylvania State University. Dr. Caterino completed a combined Emergency Medicine/Internal Medicine residency at Allegheny General Hospital, where he served as chief resident. He completed his Master of Public Health degree in Clinical and Translational Sciences at The Ohio State University. He is board certified in both Emergency and Internal Medicine, serves clinically as an attending physician in the ED and the observation unit, and has attended on the General Internal Medicine Hospitalist service. His primary research interest is in geriatric emergency medicine with a specific focus on diagnosis and treatment of geriatric infectious diseases. Dr. Caterino has been funded by the National Institutes of Health (NIH) for the past decade and is currently leading an R01 grant studying biomarkers to improve UTI diagnosis in older adults.





## INTRODUCTION

The Ohio State University Affiliated Emergency Medicine/Internal Medicine Residency is a five-year program (PGY 1, 2, 3, 4, 5) that provides education and experience in the clinical, educational, administrative and research aspects of emergency and internal medicine and its allied fields.

The clinical program is a cooperative endeavor of The Ohio State University Wexner Medical Center, East Hospital, Nationwide Children's Hospital (NCH) and OhioHealth Grant Medical Center.

The Ohio State University Wexner Medical Center is one of the largest university hospitals in the country. It serves as a tertiary referral center for the state of Ohio and neighboring states. It also delivers primary care to a large segment of central Ohio. Nationwide Children's Hospital is one of the largest children's hospitals in the country. It is the pediatric tertiary referral center of central Ohio. Both hospitals offer multiple subspecialty training programs and expertise in a variety of disciplines.

More than 180,000 patients are collectively treated at The Ohio State University Wexner Medical Center and Nationwide Children's Hospital EDs. Each hospital receives a representative share of critically ill medical and surgical patients.

## THE OHIO STATE UNIVERSITY WEXNER MEDICAL CENTER EXPANSION

In 2018, plans were launched for a new hospital tower, with up to 840 private-room beds; state-of-the-art facilities with an emergency department, imaging service areas, operating rooms and critical-care areas; digital technologies to advance care and teaching; and two parking garages.

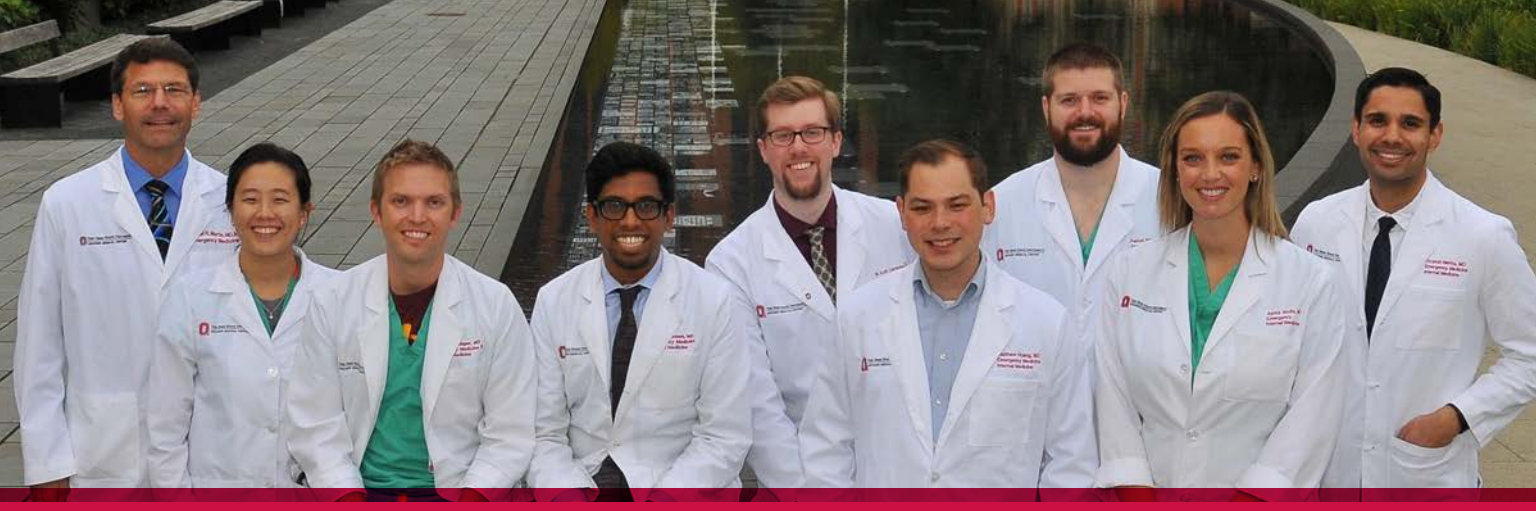
The most recently completed construction project is The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute and a new critical care building, as well as integrated state-of-the-art research facilities.



At The Ohio State University Wexner Medical Center, we're proud to be celebrating our 27th consecutive year ranked in *U.S. News & World Report's* Best Hospitals list.

*U.S. News* consistently ranks Ohio State as the top hospital in Columbus.





## HEAR FROM OUR RESIDENTS

### *Class of 2020*

#### **Matthew Huang, MD**

“I decided to pursue training in both emergency medicine and internal medicine because I have a strong interest in critical care. The training at Ohio State is a good mix of both specialties with emphasis on education and leadership, which are an important part of my future career goals.”

#### **Patrick Sylvester, MD**

“I have no doubt that at the end of this training I will be well-equipped to take on a wide variety of positions in medicine, thanks to a strong foundation in clinical medicine, academics and research.”

#### **Caleb Taylor, MD**

“The EM/IM leadership took a personal interest in my career development from day one. They were knowledgeable about what an EM/IM experience at Ohio State offered and how it could be tailored toward my interests. Both the individual EM and IM program leaders were flexible and understanding and they treated me like family in all of my interactions with them.”

### *Class of 2021*

#### **Paul DeJulio, MD**

“I chose Ohio State for its excellent academic reputation and friendly Midwestern feel. I feel very fortunate to be a member of the pioneering EM/IM program. Training in both emergency and internal medicine affords me the unique opportunity to follow patients longitudinally from admission to discharge, which has been particularly rewarding. I have found that my co-residents are enthusiastic about working with EM/IM residents and the perspective we bring to the team.”

#### **Divyesh Mehta, MD**

“My initial interactions with the EM/IM program occurred during my fourth year of medical school at The Ohio State University. From the beginning, the faculty and residents took a strong and genuine interest in my education and sought to push me toward taking active ownership of my medical journey. The support that this residency provides me has been far beyond anything I could have expected or merited. When I look to the clinicians who represent this program, I see physicians whom I aspire to become.”

### *Class of 2022*

#### **M. Scott Cardone, MD**

“I chose to pursue residency in Emergency Medicine and Internal Medicine because I want to be the most well-trained physician I can be. To that end, I found that The Ohio State University would best help me reach my goal. Both the EM and IM programs here are very strong, and the combined program is well-rounded. I have felt equally at home in both departments and feel that I receive equally outstanding training no matter which service I am on.”

#### **Serena Hua, MD**

“Having been a medical student here at The Ohio State University, the decision to continue my training here was easy. Both the Emergency and Internal Medicine departments boast leaders in their fields who are enthusiastic about teaching and inspiring their residents. I am confident that learning from them, with access to the countless opportunities that Ohio State has to offer, will make me the best clinician I can be.”

### *Class of 2023*

#### **Craig Laufenberg, MD**

“I chose to pursue a combined Emergency and Internal Medicine program because I envision myself practicing as both an emergency physician and hospitalist. My aspiration is to become a teaching clinician in both fields. I firmly believe that the strong leadership and opportunities found in the EM and IM programs at OSU will empower me to achieve my career goals.”

#### **Jason Lyou, MD**

“To the coldly calculating, I could say that I chose to rank OSU EM/IM highly because of the balanced strength of both IM and EM programs, or the abundance of research opportunities that are offered here, or even how much money I would save from parking reimbursement. But I didn’t love this program because of a tally of made-up points at a bottom of a spreadsheet. After my interview day, I walked out

of the hospital toward the parking lot already feeling warm and fevered with the hope that I would match here. It was that ‘gut feeling’ people talk about but rarely describe. It came from a sense that this place and this program would make me happy. It came from the fun I had with the residents, the warmth of the PD and APD, and the invitation of a fun Midwest city that I overlooked at first. For all these reasons, I left OSU constantly imagining myself coming back. That must have been my ‘gut feeling’ — a love for a place that couldn’t be tallied.”

### *Class of 2024*

#### **Matthew Barraza, MD**

“I have always known that I want to teach. Part of what drew me to Ohio State is the strong commitment to education. Additionally, from the moment I learned about EM/IM, I knew I wanted to be an EM/IM physician. I believe understanding different perspectives and ways to approach problems will not only allow me to give better care to my patients, it will also allow me to understand multiple different learning styles to better support and teach my students. On top of all of this, Columbus is a great city! There are multiple climbing gyms to climb at and I keep finding awesome hiking spots nearby. I also love to eat and there are tons of great restaurants all around. I could not have asked for more!”

#### **Meghana Moodabagil, MD**

“I couples matched with my fiancé and we are so happy to be living in a great city like Columbus. I came to OSU because of the amazing training I knew I would get in both EM and IM. I hope to pursue a pulmonary/critical care fellowship and eventually dual practice in the ICU and the ED. I would also be interested in practicing both Hospitalist Medicine and Emergency Medicine one day. Lastly, I chose EM/IM because it offers a phenomenal path toward a career in academia. The resident leadership here is a dedicated and supportive team, and I know I will be set for the future under their guidance.”



## EMERGENCY MEDICINE/INTERNAL MEDICINE

## BLOCK CURRICULUM

BLOCK	1	2	3	4	5	6	7	8	9	10	11	12	13
PGY-1	EM Orientation	Ambulatory Elective	Cardiology Ward	Gen Med Ward	OSU ED Main	Anesthesia/ Ultrasound	Orthopedics	Ambulatory Elective/EKG	Night Float	OSU ED Main	ED (Main, East, NCH)	Children's ED	MICU
PGY-2	Gen Med Ward	Subspec. Ward	ID Consults	ED (Main, East, NCH)	Trauma/SICU	ED (Main, East, NCH)	Ambulatory Elective	MICU	Ambulatory Elective	ED (Main, East, NCH)	OB/Gyn/ Toxicology	ED (Main, East, NCH)	Neuro Critical Care/NICU
PGY-3	Cardiology CHF Service	Ambulatory Elective	Gen Med Ward	ED (Main, East, NCH)	EMS/US	ED (Main, East, NCH)	Subspec. Ward	Ambulatory Elective Geriatrics	Critical Care Night Float	ED (Main, East, NCH)	ED (Main, East, NCH)	SICU	Community EM or Ross ICU
PGY-4	Mini-Fellowship vs. Elective	Mini-Fellowship vs. Elective	Mini-Fellowship vs. Elective	ED (Main, East, NCH)	SELECTIVE Tropical/ International	ED (Main, East, NCH)	MICU	Ambulatory Elective	Hepatology Ward	IM Elective Diabetes Week	ED (Main, East, NCH)	ED (Main, East, NCH)	IM Elective
PGY-5	General or Subspec. Ward	MC	IM Ward Selective	ED (Main, East, NCH)/US	ED (Main, East, NCH)	ED (Main, East, NCH)	Ambulatory Elective	IM Elective	IM Elective	ED (Main, East, NCH)	ED (Main, East, NCH)	EM Elective	IM Elective



## AREAS OF FOCUS FOR MINI-FELLOWSHIPS INCLUDE:

1. Basic science or clinical research
2. Ultrasound training working toward certification as a registered diagnostic medical sonographer
3. Administration
4. Medical education
5. Community medicine (e.g., free clinics, EMS)
6. International medicine
7. Scholarly activity involved in medical writing, possibly related to case reports or review articles
8. Opportunity to initiate graduate-level classwork toward a master's-level degree in a program approved by the program director

## EMERGENCY MEDICINE/ INTERNAL MEDICINE RESIDENCY CURRICULUM



### *Mini-Fellowships*

This portion of the curriculum is meant to allow the trainee the opportunity to develop a unique interest or skill set. It is a continuous 12-week block of time in which the resident will be supported by a mentor or adviser who will work closely with him or her. It will also afford the trainee the opportunity to explore possible interest in subspecialty training.

Approximately three months prior to the start of this period, the residents will be asked to supply a one-page summary indicating what they plan to do over the 12-week period to develop their specific interest. It will include a list of measurable objectives and goals and will require approval by the program directors. Trainees will work with a mentor or adviser on the topic of their choice. Ideally, this will allow for development of skills that will promote an academic career.

During this 12-week block, the trainees will remain involved with their continuity clinic. If the resident chooses not to be involved in the Mini-Fellowship portion of the curriculum, it will be filled with other elective rotations.

### *First Postgraduate Year*

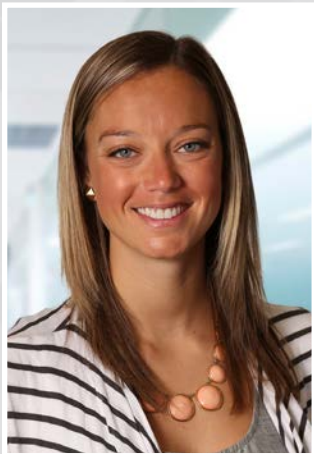
The orientation curriculum in the first block is designed to familiarize and orient new residents with Nationwide Children's Hospital and Ohio State emergency departments and the Department of Internal Medicine, to offer an intensive didactic experience highlighting management of emergent and inpatient conditions, and to provide experience and certification in Advanced Cardiac Life Support (ACLS), Advanced Trauma Life Support (ATLS) and Pediatric Advanced Life Support (PALS). During the first year of the program, the resident will gain experience in a variety of disciplines relevant to emergency medicine and internal medicine. The resident also gains formal training in emergency ultrasound and will choose from several ambulatory elective opportunities to personalize his or her residency experience.

### *Second and Third Postgraduate Years*

The second and third years are similar to the second years of the EM and IM categorical years. The second year focuses on development of progressive autonomy in patient management. In addition, the resident obtains experience in a variety of subspecialties, including trauma and surgical critical care. As a member of the trauma team, the resident plays an integral role in major trauma resuscitations. In the Surgical Intensive Care Unit, the resident provides management for the most critically ill surgical and trauma patients. During this year, the Cardiology CHF service, the MICU, SICU and Trauma months represent significant exposure to ICU care.

The resident gains further experience and expertise in performing procedures such as placement of central lines, airway management and emergency ultrasound.

During the second and third year of the program, the resident is provided with the opportunity to accept responsibility for managing many patients simultaneously while supervising and teaching junior-level house officers and students in the Emergency Department and on the inpatient floors of Ohio State Wexner Medical Center and Nationwide Children's Hospital. This graded responsibility helps the resident to gain independence and expertise in managing the Emergency Department and inpatient units. The resident will receive experience in Emergency Department administration and management of emergency medical service systems as well as additional ultrasound training. The resident will choose from several subspecialty ward opportunities to personalize his or her residency experience.



“Throughout my residency, the quality of training in Emergency Medicine and Internal Medicine at Ohio State exceeded my expectations and has well-prepared me for fellowship in Pulmonary and Critical Care medicine. One aspect of the culture at Ohio State that I found unique was the faculty’s focus on resident and medical student education. Ohio State has put an emphasis on hiring faculty that are excellent teachers, and the results have really elevated the residency programs, producing well-trained physicians that have taken on leadership roles in their respective fields. Not only did my clinical experience provide the training necessary for success in fellowship, but I also found it easy to become involved in research, which is a valuable experience regardless of your future career plans, but especially when planning to do a fellowship. I am very thankful for the training I received at Ohio State as I feel well prepared for whatever career path I choose.”

– **Alexis “Ali” Hausfeld Wolfe, MD**  
alumna, class of 2018 and program’s first graduate

#### *Fourth and Fifth Postgraduate Years*

The fourth and fifth years are similar to both the Emergency Medicine and Internal Medicine third years. During these years, emphasis is placed on enhancing patient care through resident education. Three strategies employed include focusing on continuous quality improvement, instilling the commitment and skills to demonstrate competency, and providing concrete experiences to help residents become masters of effective teamwork and enhance their ability to plan and manage care transitions inherent in today’s healthcare environment. The residents will also choose from several selective opportunities to personalize their residency experience.

The fourth and fifth years of the program provide the senior resident with the opportunity to accept responsibility for managing many patients in different settings. Supervision of all levels of EM and IM residents occurs during this year. The resident also participates in MICU End-of-Life Discussion training during this year.

There are also many elective possibilities in both Emergency Medicine and Internal Medicine. Although unlimited possibilities exist, popular electives include Community Emergency Medicine in Hawaii, Sports Medicine, Hyperbaric Medicine, Aeromedical Transport, Plastic Surgery, Radiology, Otolaryngology, Ophthalmology, Critical Care, Oral Surgery, Dermatology, Trauma Surgery, Disaster Medicine and EMS. The fifth-year resident can also participate in extensive research in both departments.



## PEDIATRIC EMERGENCY MEDICINE

Nationwide Children’s Hospital Emergency Department is part of a tertiary care pediatric center and a Level I trauma center. This ED has an annual census of more than 90,000 patients. The Pediatric EM rotation offers an outstanding clinical experience, extensive bedside teaching and allotted time for pediatric and adult Emergency Medicine resident conferences. Nationwide Children’s Hospital has a very active pediatric emergency medicine training program, and the pediatric faculty are also Ohio State faculty members.

## OBSERVATION MEDICINE

The Clinical Decision Unit (CDU) in the Emergency Department at Ohio State Wexner Medical Center is a 20-bed unit that specializes in the efficient treatment of certain patient populations whose care dictates an extended stay for either diagnostic or therapeutic reasons. There are more than 30 active patient observation protocols, and the unit is staffed by advanced practitioners and attending physicians who specialize in ED-based observation care.

## NATIONAL CONFERENCES

The residency provides funds and time off for each resident to attend three EM national conferences. This conference time has proved to be both educational and enjoyable. Many residents value the bonding experience with co-residents, the dedicated educational experience and the opportunity to become involved in emergency medicine at a regional and national level. EM/IM residents will usually attend two national meetings, most commonly SAEM and ACEP, with their CME funds. Additional support is available for conferences where the resident presents scholarship.





Internal Medicine electives are listed below.

Inpatient Electives		Outpatient Electives	
Acute Leukemia Service	Aeromedical Transport	Geriatrics	Radiology
Airway Management	Advanced Hepatology	Hawaii ED	Rheumatology
Bone Marrow Transplant	Advanced Pulmonary	Hematology/Medical Oncology	Sports Medicine
Cardiology Consults – UH and East	Allergy	Infectious Disease	Toxicology
Diabetes Consults	Burn Surgical Service	Independent Research	Trauma Surgery
Electrophysiology	Cardiology	Medical Education	Ultrasound
Endocrinology Consults	Complementary Medicine	Mount Carmel Hospital ED	Women’s Health
Gastroenterology Consults	Critical Care	Nephrology	Wound Clinic/Hyperbaric Oxygen
General Medicine Consults	Dental	Ophthalmology	
Hematology/Oncology Consults	Dermatology	Otolaryngology	
Hospital Medicine	Disaster Medicine	Pediatric Orthopedic	
ID Consults – UH and East	Endocrinology	Plastic Surgery	
Nephrology Consults	EMS	Preventive Cardiology	
Neurology Consults	ENT	Primary Care/Surgical Subspecialty	
Pain/Palliative Consults	Gastroenterology	Pulmonary/Sleep Medicine	
Pulmonary Consults – UH and East	General Medicine	Quality Improvement	

## ELECTIVES

Elective rotations provide the opportunity for our residents to tailor their education to their individual career path. Numerous opportunities are available for residents to increase their exposure to content areas of interest to them, both within and outside the departments of Emergency and Internal Medicine.

Some electives occur exclusively in either the inpatient or outpatient environment, while others have clinical opportunities that are in both environments. Popular Emergency Medicine electives include Community Medicine in Hawaii, Sports Medicine, Hyperbaric Medicine, Aeromedical Transport, Plastic Surgery, Radiology, Otolaryngology, Ophthalmology, Critical Care, Oral Surgery, Dermatology, Trauma Surgery, Disaster Medicine or EMS. However, options are nearly limitless, so residents are encouraged to pursue other electives if they more closely align with individual goals and interests.



## EMERGENCY MEDICAL SERVICE (EMS) EXPERIENCE

Prehospital care is emphasized throughout the residency program. The curriculum is under the direction of EMS faculty and fellows. In addition to accompanying paramedic teams on emergency calls, residents will be directly involved in the planning and operation of the EMS systems.

## MEDICAL EDUCATION

The Medical Education two-week elective exposes residents to the variety of educational activities common to medical educators at academic centers. Residents can also complete an elective in Medical Education. Residents learn curriculum development, participate in peer review of teaching for faculty and residents, develop skills in web-based education and can initiate an educational scholarship project.

## ULTRASOUND

Ultrasound is an integral tool for emergency physicians and a strong focus of the Emergency Medicine residency at The Ohio State University. Residents have a longitudinal ultrasound experience, with both a dedicated longitudinal curriculum and integration into clinical shifts. Our program is cutting edge, with advanced ultrasound machines, wireless connectivity and a state-of-the-art skills training area. Upon graduation, our residents become credentialed in emergency indications for ultrasound and many have taken positions as ultrasound directors at their new facilities.

## TRAUMA SERVICES

Ohio State Wexner Medical Center has an active trauma service with a Level I trauma center designation. We've also been designated by the American College of Emergency Physicians as a Level 1 Geriatric Emergency Department, providing the most comprehensive care to vulnerable older adults in the Emergency Department. Emergency Medicine residents are an integral part of the trauma team in all trauma resuscitations. PGY2 through PGY5 residents in the Emergency Department participate in management of trauma resuscitations both as trauma team leaders and airway managers. A cooperative effort between the Department of Emergency Medicine and the Center for EMS (CEMS) at The Ohio State Wexner Medical Center seeks to provide an educational and research resource to the central Ohio EMS community.

MedFlight is the critical care transport service serving central Ohio and is operated by Ohio State Wexner Medical Center, OhioHealth Grant Medical Center and Akron General Hospital. Online medical control for the helicopter and mobile ICU is provided by the Emergency Department at Ohio State Wexner Medical Center. Residents may also elect to participate in patient transports with the crew of MedFlight and will participate in physician medical direction of the program.





## RESIDENT CONFERENCES

Emergency Medicine conferences take place every Wednesday morning and include four to five hours of small-group discussions, morbidity and mortality sessions focusing on cognitive errors, simulation and procedure sessions, lectures and case conferences. The format of this educational setting is specifically designed to be innovative and interactive.

Emergency Medicine conferences are attended by education faculty and are considered protected time for residents working in the Emergency Department and in nearly all off-service rotations. Conferences promote self-directed learning using a “flipped classroom” model. In preparation for the weekly small-group discussions, residents review various educational resources pertaining to the topics being covered. Small-group sessions, which are evidence-based, are led by both Emergency Medicine faculty and senior residents. Teaching faculty attempt to maximize the use of technology in both the clinical and didactic settings. Asynchronous learning opportunities are also present with online modules and a question bank provided to each resident.

Visiting professors of national prominence are invited to share their expertise in specific areas of Emergency Medicine.

On Tuesdays, the Department of Internal Medicine hosts school sessions, as well as conferences that include a mixture of didactics, simulation-based training, and morbidity and mortality sessions. The department’s world-class subspecialty faculty routinely teach for two to three hours. Lunch is provided and residents enjoy time together. Some conferences are recorded, and an option of day-synchronous off-site or delayed viewing is available for this education content.



## CLINICAL SKILLS EDUCATION AND ASSESSMENT CENTER

The changing nature of medical practice and the national demand for accountability in medical education highlight the need for a leading-edge clinical skills center like the one at Ohio State. National accrediting bodies are challenging medical education institutions to demonstrate that medical students and residents possess the requisite knowledge, skills and attitudes essential to the practice of medicine. Emergency Medicine residents participate in weekly simulation and procedural sessions to review indications and contraindications and practice skills pertinent to Emergency Medicine processes and procedures.

The Clinical Skills Education and Assessment Center (CSEAC) at Ohio State Wexner Medical Center is a state-of-the-art training center simulating actual patient care experiences. The facility features patient encounter rooms, patient models, standardized patients, high-tech patient simulators and electronic monitoring stations. This offers simulated ICU and ED cases, as well as dedicated space for ultrasound training and hands-on procedural training. The center provides exciting opportunities for comprehensive interdisciplinary education. We anticipate continued acquisition of high-fidelity simulators to meet a broad range of education needs.



“Our partnership with CSEAC allows for a comprehensive and innovative emergency medicine simulation curriculum. We focus on refining leadership, communication, situational awareness and crisis resource management skills. From disaster preparedness to wilderness medicine day, simulation competitions to multidisciplinary in situ scenarios, we prioritize providing our residents with the tools they need to succeed.”

– **Jennifer Yee, DO**  
Emergency Medicine  
Simulation Director

## EM/IM ALUMNI

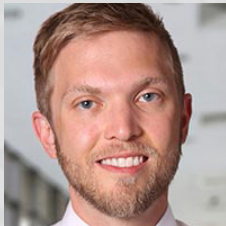
Where Are They Now?

### *Class of 2018*



**Ali Hausfeld Wolfe, MD**  
Northwestern University  
Fellowship, Pulmonary Critical Care

### *Class of 2019*



**Greg Eisinger, MD, MSW**  
Ohio State University  
Fellowship, Pulmonary Critical Care



**Kushal Nandam, MD**  
Emory University  
Faculty, Hospital Medicine and  
Emergency Medicine

## RESEARCH AND SCHOLARLY ACTIVITY

Residents are required to participate in at least one scholarly activity during the course of their training. This may be a basic science project, a clinical or epidemiological study, a case report or a collective clinical review. Elective time and Mini-Fellowship time may also be used to supplement this experience.

The purpose of the requirement is to introduce the resident to the critical evaluation of the biomedical literature and research methodology. The Emergency Medicine and Internal Medicine faculty are active in all facets of research and scholarly activity and serve to guide residents through this requirement. Residents are encouraged to publish and present at regional and national meetings during their training. All Emergency Medicine residents have protected time to attend or present at monthly journal clubs under supervision by our research faculty. This provides excellent training in critical review of current literature in Emergency Medicine.

The Department of Internal Medicine is involved in biomedical research, including basic mechanisms of disease, translational studies and clinical trials. Because of our wealth of diverse patients and our referral patterns, we have had significant impact in the areas of translational and clinical research. The Ohio State University Comprehensive Cancer Center – Arthur G. James Cancer Hospital and Richard J. Solove Research Institute is a good example of this, applying the bench-to-bedside philosophy and bringing new cancer therapeutics to clinical trial.



The theme of experimental therapeutics bridges many disciplines, including those within The Ohio State University Heart and Vascular Center, with its expertise in devices to improve or sustain myocardial function, the Center for Microbial Interface Biology in new antibiotic development and the Ohio SLE Study investigating new immunomodulators for patients with lupus and lupus nephritis.

This work is facilitated by state-of-the-art research facilities such as Ohio State's Biomedical Research Tower and Dorothy M. Davis Heart and Lung Research Institute. All of the departments' work is helped by the university's nationally funded Center for Clinical and Translational Science, which provides a number of resources for investigators.

In addition to department programs, the investigators in Internal Medicine work on multidisciplinary projects. An example of this is the collaboration between Ohio State's Diabetes Center and the Comprehensive Transplant Center to bring islet transplantation for diabetes to a clinical reality. The vibrant, active and internationally known faculty in the Department of Internal Medicine at The Ohio State University are very excited about involving trainees in their ongoing projects to expose future physicians to academic medicine.

Please inquire with the department's leadership if you would like to pursue specific research activities.





“The patients, the people and the passions! The patients at Ohio State are very sick as they are at any tertiary care center. The people (residents and attendings and support staff) you work with make a difference, and I have yet to meet someone at Ohio State who isn’t dedicated to being exemplary. Most importantly, the passions. People at Ohio State are driven by a passion for excellence. No matter what your interests, Ohio State has a faculty member who is passionate about it as well and can get you involved. They are also passionate about residents here, so if you don’t find what you are looking for, they will give you the opportunity to make an experience all on your own in your area of interest.”

— **Caleb Taylor, MD**  
chief resident

## A DIVERSE AND SUPPORTIVE LEARNING ENVIRONMENT

The Ohio State University Medical Center, and in particular the Department of Emergency Medicine, recognizes and celebrates the importance of diversity. We strive to support a diverse, talented workforce that is inclusive of all individuals, regardless of ancestry, ethnicity, sex, gender identity, sexual orientation or disability. We recognize and celebrate the opportunity to benefit from broad perspectives, characteristics and life experiences, and we strive to create working and learning environments where we will benefit and thrive from our differences.

The Ohio State University Wexner Medical Center Office of Diversity and Inclusion (ODI), led by Leon McDougale, MD, MPH, works to create a thriving culture of inclusion, diversity and engagement within the medical center, across the university campus and across the country. The programs and initiatives driven by the ODI support and foster curricular innovations and supportive learning environments, as well as community service and engagement. The ODI also sponsors career development initiatives for underrepresented minority medical students, supports visiting rotations and offers a second-look weekend for interested resident candidates.

We recognize that we cannot promote diversity without employing a diverse group of talented providers. Within the Department of Emergency Medicine, 29 of our 66 attending providers are women or from groups underrepresented in medicine. By using a holistic application review process for our program, we have been fortunate to recruit an amazing group of talented residents from a broad range of backgrounds. Over the last three years, 49% of our graduating residents have been women, and 20% have been from groups underrepresented in medicine. The program has also established a peer mentorship program focused on supporting our underrepresented residents throughout their training. In addition, the department’s Parity and Equity Committee, led by Diane Gorgas, MD, and Nick Kman, MD, strive to support, promote and improve the diversity within our department and medical center.



## RESIDENT HAPPINESS

We understand that work-life integration is essential to physician wellness. We are proud of our Kiehl Resident Wellness Endowment and curriculum, which has been highlighted by the National Academy of Medicine as a model for promoting resident wellness. We promote a healthy balance in all facets of well-being including occupational, emotional, physical, financial, intellectual and social wellness. The wellness program features year-round education in these areas and works to create events/programs to reinforce these domains. Some of the wellness offerings include:

- Longitudinal Wellness Curriculum
- Wellness Rewards Program
- Wellness Family Events
- Annual Wellness Retreats
- Faculty-hosted Dinners
- All-resident Outings
- Community Supported Agriculture (fresh fruits and vegetables)
- Class Night Out
- Parents’ Night Out
- Resident Advocates for Wellness Peer Support Program

Another unique component of our Kiehl Wellness Endowment is the Professional Development Grant, which recognizes that occupational and intellectual wellness is an important component of career development and longevity. These grants support the professional and intellectual growth of resident physicians who demonstrate a passion for a specific academic niche and present a specific, well-developed plan for career development. In the year since its implementation, eight residents have been awarded grants to pursue a wide array of opportunities including conferences (ACEP Leadership and Advocacy), training courses (MERC at CORD, MedEdELITE) and language immersion/international experiences.



## OPPORTUNITIES FOR ADVANCED STUDY

At Ohio State, both the Department of Emergency Medicine and the Department of Internal Medicine offer numerous fellowships. Training varies from one to three years, with master's degrees possible in many of the fellowships. Programs are supported and facilitated by faculty members nationally known for their expertise. Clinical experiences abound with excellent supervision and teaching opportunities. All fellowships have scholarship potential.

For a complete listing of possible fellowships, please visit [internalmedicine.osu.edu/education/fellowships](https://internalmedicine.osu.edu/education/fellowships) and [go.osu.edu/EMfellowship](https://go.osu.edu/EMfellowship).

## THE OHIO STATE UNIVERSITY

The Ohio State University provides a wide range of athletic, entertainment and advanced education opportunities. Numerous athletic events, including the excitement of Big Ten football and basketball, are available throughout the year. Residents may use the nearby, nationally ranked Ohio State athletic facilities. Participation in intramural sports is also available.

Other regular events at The Ohio State University include numerous concerts, and local and Broadway theatrical performances, as well as a wide variety of cultural events at on-campus venues, including the Wexner Center for the Arts and the Schottenstein Center.

Excellent opportunities exist for continuing education courses in all academic disciplines for physicians, spouses and dependents, along with other benefits.



*"...Ohio's capital is the city others want to be."  
– Delta Sky Magazine*

## COLUMBUS UNEXPECTED

We understand that moving is a big deal and you're interested in what life will look like beyond the hospital walls. You're in luck. It's likely that Columbus has more than you expected.

## JUST THE FACTS

Not to brag, but here are a few facts and figures to convince you that Columbus is indeed one of America's premier cities:

**We're big.** Ohio's state capital is the 14th largest city in the United States. That makes us bigger than cities such as Charlotte, Seattle, Denver, Boston, Nashville and Baltimore — seriously, Google it. And when you factor in the entire Columbus metropolitan area, our population increases to more than 2 million.

**We're affordable.** The cost of living in Columbus is 10% below the national average. The median home sales price for the year ending May 2018 was \$145,000. Average monthly rent? As of April 2019, the average monthly rent was \$885 for one bedroom and \$1,167 for a two bedroom.

**We're accessible.** Columbus is within 550 miles of nearly half the nation's population. Day trips abound and weekend getaways are easy. Also, John Glenn Columbus International Airport, which is just 10 minutes from downtown, typically offers more than 150 daily nonstop departures to 40 airports. During the work week, the average Columbus commute is just 20.8 minutes, and depending on where you choose to live, it can be significantly less.

## We're a microcosm of America.

Our diverse population makes us a top test market. More than 109 languages are represented in Columbus.

**We're smart.** In addition to being named a "Top7 Intelligent Communities of the Year" by the Intelligent Community Forum, we have more PhDs than the national average and the largest concentration in the Midwest. There are more than 50 college and university campuses within the Columbus region, and 24 area high schools were in the top 10% of rankings for the *U.S. News & World Report* 2019 "Best High Schools" in America.



For more information, visit  
[em.osumc.edu](http://em.osumc.edu)



**THE OHIO STATE UNIVERSITY**

WEXNER MEDICAL CENTER