NORTHWESTERN
EMERGENCY MEDICINE RESIDENCY
2015-2016
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Welcome from the Program Director

Northwestern University is proud of its long tradition of national leadership in emergency medicine (EM) education and our state-of-the-art care for acutely ill or injured patients in the greater Chicago area. It is my pleasure to provide this brief introduction to our exceptional training program.

The first Northwestern EM resident graduated in 1973 from a program started at our former community affiliate, Evanston Hospital. In 1980, the Evanston EM program combined with a parallel residency that was housed at Northwestern Memorial Hospital – this merger created the current administrative structure for our residency program. We are the 6th oldest EM residency in the United States.

Northwestern EM residents care for and learn from a diverse population of patients at specially-chosen training sites. Our clinical curriculum is deliberately designed to produce residency graduates with advanced skills in life-saving and resuscitative procedures, critical care, trauma, and complex pediatric illness. The emergency departments (ED) of Northwestern Memorial Hospital (NMH) and Lurie Children’s Hospital of Chicago are both Level 1 Trauma Centers, with a combined annual ED census of over 136,000 patients. The two hospitals are located within three city blocks on the Chicago campus of Northwestern University, in the Streeterville neighborhood. The high-volume, high-complexity ED populations at these two tertiary care centers allow for a centralized training experience for our residents – 39 of the 48 months of our program occur within these neighboring hospitals.

Additional clinical training sites include Methodist Hospital ED (Northlake Campus) in Gary, IN (3 months), Northwestern Lake Forest Hospital ED in Lake Forest, IL (3 months), the Trauma Unit of Stroger Hospital of Cook County (2 months), and the Toxicon Consortium/Illinois Poison Center at Stroger Hospital (1 month). All clinical rotations outside the emergency department occur only in critical care units – our program does not offer training experiences on general hospital wards. EM residents spend a total of 8.5 rotations in an ICU setting, spread across our four-year curriculum. Of these, our residents provide senior coverage as admitting team leaders for two months in the NMH Medical ICU and one month at the Stroger Trauma Unit/Trauma ICU. EM residents also receive training in both adult and pediatric anesthesia, orthopedics, sports medicine, OB/GYN, and ultrasound. Three elective months are offered. All graduates complete the requisite number of ultrasound scans and didactic hours to meet credentialing recommendations of the American College of Emergency Physicians, with image confirmation by RDMS-certified EM faculty.

The NMH ED provides a challenging learning environment for our residents. There is no separation of acuity assignments between junior and senior residents. Under faculty and senior resident supervision, interns and second-year residents care for patients of any complexity level and are supervised as they perform all needed procedures. Interns participate in a resuscitation procedures “boot camp” throughout their first year that prepares them to translate skills to the bedside. Importantly, our senior residents benefit from true “graduated responsibility” – rather than simply “see more patients”, our third- and fourth-year residents serve as the junior attending. In this role, they receive presentations from all junior residents, medical students, and mid-level providers on their team. They interview and examine each of these patients, write supervisory notes on all of their charts, and assist in coordinating appropriate dispositions. Each senior resident is responsible for teams that care for 12-20 patients at one time – they learn to be highly efficient, drive throughput from the waiting room, and provide patient-centered, quality care. Residents receive formative reports of patient satisfaction through Press Ganey surveys, separate from their supervisory faculty. Our graduates learn both the science and
business of emergency medicine – they can expertly transition to an attending role in any setting and are highly sought after by prospective employers across the nation.

Our didactic conference curriculum is designed for adult learners and is rigorously evaluated on a yearly basis. Residents participate in a modular curriculum that focuses on a specific organ system or topic each month, which includes traditional lectures coordinated with simulation, small group learning, individualized interactive instruction, procedure labs and ultrasound labs. Two leadership development curricula are embedded throughout our longitudinal, four-year program: our Academic Colleges and Seminars in Professional Development. Research methodology is emphasized in our monthly Evidence-Based Conference series, our PGY-2 Research Rotation, and through faculty-mentored scholarly work requirements. All residents prepare at least one publishable manuscript prior to graduation.

Northwestern University accepts applications to our EM residency program only through the Electronic Residency Application Service (ERAS). We participate in the National Residency Matching Program (NRMP) and offer 12 PGY-1 positions each year. Competitive candidates demonstrate success throughout medical school, as evidenced by course grades, USMLE scores, letters of recommendation, leadership roles, and volunteerism. We welcome applications from candidates with a wide array of past experiences and strongly encourage applications from underrepresented minorities in our specialty.

Thank you for your interest in the Northwestern EM Residency Program. Further details about our educational program, rotation sites, MS 4 clerkship, and residency application process can be found throughout our Department website.

Michael Gisondi, MD, FACEP, FAAEM
Associate Professor of Emergency Medicine
Residency Program Director
Director, Feinberg Academy of Medical Educators
Welcome from the Department Chair

It is a great pleasure to welcome you to emergency medicine at the Northwestern University Feinberg School of Medicine. This booklet captures only a few of the ongoing developments and improvements in the quality and efficiency of clinical care, achievements in science, success in medical student and resident education, and breakthroughs in technology that are all improving patient care delivery.

All of the programs within emergency medicine are geared toward a single vision, which is the achievement of the best patient experience. This requires care of the highest technical quality, though technical quality alone is not enough. We must also assure efficiency, guarantee safety, promote communication, and achieve satisfaction. This broad vision sustains, motivates, and energizes our clinical and scientific enterprise.

In emergency medicine, the challenges are extreme, and a sound balance is tough to achieve. Yet doctors and nurses of extraordinary skill are drawn to the practice, perhaps because they honor the ability to serve those in need. Service is, in itself, the primary reward. Invigorated by the challenges, rejuvenated by our continued improvements, and fulfilled by caring for those in need, we are drawn to and remain in this special environment.

Thank you for taking the time to learn more about our Department and the many people that are key to its success.

James Adams, MD
Professor of Emergency Medicine
Department Chair
Senior Vice President and Chief Medical Officer,
Northwestern Medicine
Thank you for your interest in emergency medicine! The program at Northwestern is among the strongest in the specialty and we are proud to train the best emergency physicians in the country.

Our 4-year program includes a variety of clinical settings around the Chicago area, giving residents wide exposure to patients of every socioeconomic class and acuity. Our primary training site is Northwestern Memorial Hospital, a Level 1 Trauma center and premier academic medical center. We care for most of downtown Chicago and serve as a referral center for many hospitals and surrounding communities. Our Department is led by our Chairman, Dr. James Adams, and our faculty consists of the best clinicians and researchers in the country. Our clinical experience is well-rounded, with a depth of critical care experience that allows our residents comfort when caring for severely ill patients. Our residents have the privilege of training alongside leading researchers in the fields of sepsis, venous thromboembolic disease, and hospital resource utilization.

Our ancillary training sites include Methodist Northlake Hospital in Gary, Indiana, which provides residents with exposure to a community based setting in an underserved area. Northwestern Lake Forest Hospital in the city’s northern suburbs provides a suburban community ED environment. Lurie Children’s Hospital provides world-class training for our residents in pediatric emergency medicine. Our trauma experience is supplemented by rotations on the Trauma Service of John H. Stroger, Jr. Hospital of Cook County, one of the busiest and most respected trauma units in the country.

With a population of over 2.7 million, Chicago is the third most populous city in the country. When it comes to the arts, entertainment, and dining, the Second City is second to none. Our comedy and improv scenes are legendary and if you’re a foodie, Chicago offers a collection of world-renowned restaurants, farmers markets, and breweries. The Lake Shore trail has miles of pathways for biking and running, and there are intramural leagues for whatever sport interests you. Our street festivals, lakeside beaches, and concerts make summertime in Chicago unsurpassed.

We are all very proud to be part of the Northwestern Emergency Medicine Family. We hope that you strongly consider coming to Chicago and training with us for the next four years. Please take a look at our website and feel free to contact us with any questions. Good luck on the interview trail!

Life in Chicago

Chicago’s cultural, intellectual, and commercial vibrancy make it a unique place to work, learn, and play. Home to over 2.7 million people and host to nearly 40 million visitors annually, residents training in the Windy City enjoy diversity at every turn. The city is truly a melting pot in many ways - only 58% of Chicago residents were born in Illinois and over 20% were born in another country.

Though Chicago is also nicknamed “The City That Works,” there is no shortage of things to do during time off. Twenty-six miles of lakefront provide a stunning backdrop for activities and events to suit all interests. Sitting on the southwestern shore of Lake Michigan, many league sports teams take advantage of the 15 miles of beaches and over 500 parks in Chicago. For those that enjoy rooting for the home team, Chicago is one of only three cities in the US with six professional sports teams. The many collegiate teams here also add to the options for spectators.

Foodies will find that, in a city of over 7,300 restaurants, there is always something new to explore. Saveur Magazine even dubbed Chicago, “America’s new culinary star.” Chicago boasts world-renowned shopping and truly offers something for everyone, from the Magnificent Mile to the many independent shops and boutiques. Hundreds of art galleries and theatres and some of the largest festivals in the world also keep Chicagoans busy year-round.

Learning throughout the city is easy, thanks to Chicago’s nearly 50 museums, including those dedicated to art, history, science, and technology. From the beloved Shedd Aquarium and Adler Planetarium, and in every building along the city’s many architectural tours, the Second City is home to much that inspires and interests.

As a multicultural city that thrives on the harmony and diversity of its 77 distinct neighborhoods, Chicago today embodies the values of America’s heartland - integrity, hard work and community. It is the 3rd largest city in the US, with a unique mix of cozy neighborhood communities surrounded by a bustling urban metropolis. It is a great place to live, work, and play. Northwestern Emergency Medicine is proud to call Chicago home.
Northwestern Memorial Hospital, in partnership with the Northwestern University Feinberg School of Medicine, is a nationally recognized academic medical center and a major Midwest referral center, with more than 1,700 physicians representing virtually every clinical specialty. Patient accommodations include 894 beds between Northwestern Memorial and its Prentice Women’s Hospital. The Northwestern Memorial Hospital Emergency Department cared for 86,096 patients in 2014.

Northwestern Memorial Hospital (NMH) is the only hospital in Illinois on the US News and World Report Best Hospitals 2015-2016 Honor Roll. This year’s Honor Roll highlights just 15 hospitals, of which NMH ranks 11th nationwide for its breadth and depth of clinical excellence. Northwestern Memorial is recognized in the Best Hospitals ranking for outstanding performance in 13 of the 16 ranked specialties, including cancer, cardiology and heart surgery, diabetes and endocrinology, ear, nose and throat, gastroenterology and GI surgery, geriatrics, gynecology, nephrology, neurology and neurosurgery, orthopaedics, pulmonology, rheumatology, and urology.

NMH is the second largest provider of charity care in Illinois. In 2013, Northwestern provided $419.8 million in charity care, unreimbursed care, research, education, and community benefit. Northwestern Memorial Hospital’s patient- and community-driven mission has led to the development of partnerships and initiatives designed to have a measurable, positive impact on the health of medically underserved residents in our communities.
NMH TRAUMA CENTER

Northwestern has provided trauma care for the downtown Chicago area for over 30 years. With a population of over 2.7 million, there are only four Adult Level 1 Trauma Centers in the city of Chicago. During the summer months, 1 out of every 3 trauma patients at Northwestern presents with penetrating traumatic injuries.

NMH is the only Level 1 Adult Trauma Center in the Chicago Loop area, and the Northwestern trauma catchment area extends beyond the Loop from the southern edge of Lincoln Park down to the southeast side of Chicago.

“Trauma care is a mark of excellence for a high-quality organization,” says Dr. James Adams, Chair of the Northwestern Department of Emergency Medicine. “The ability to care optimally for every type of critically ill patient is a defining characteristic of the best hospitals.”

ULTRASOUND

The practice of bedside ultrasound is integral to patient care in the Emergency Department and ultrasound skill development is an important objective of our training program. The Point of Care Ultrasound (POCUS) Curriculum at Northwestern follows the American College of Emergency Physicians Guidelines providing didactic training throughout all four years of residency training, as well as documentation and review of credentialing exams. Northwestern EM residents learn to incorporate the use of POCUS in their daily practice for diagnostic, therapeutic, and procedural applications.

The POCUS curriculum is directed by Emily Baran, MD, FACEP, RDMS; CCH-fellowship-trained Danielle McGee, MD, and the Ultrasound Chief Resident (Rebecca Caton, MD 2015-2016). The Ultrasound Chief is a unique PGY-4 leadership role focusing on innovative ultrasound educational and operational objectives. An Introduction to POCUS Course occurs during the PGY-1 year which combines didactics in the form of lecture, online modules, hands-on scanning, and simulation experiences to cover the core applications of emergency ultrasound: EFAST/Trauma, Procedural/IV access, Cardiac, First-trimester OB, Renal, Biliary, Aortic and Musculoskeletal. Advanced ultrasound didactic sessions covering additional emergency applications are integrated into the core curriculum and occur throughout our four-year training program for all residents. Northwestern is also very proud of our Excellence in US Education (EUE) small group sessions which occur weekly and allow hands-on scanning in the ED. These sessions provide valuable time for one-on-one bedside teaching, as well as image review to improve bedside POCUS skills. All residents have the opportunity to become a member of the Ultrasound Leadership Committee, to teach ultrasound at the medical student and resident level, and to participate in the annual SAEM-sponsored Sonogames.
COMMUNITY OUTREACH

Northwestern Memorial Hospital is among only 5% of the nation’s hospitals designated as an Academic Medical Center (AMC) hospital by the Association of American Medical Colleges. AMC hospitals in aggregate deliver a vastly disproportionate share of the nation’s trauma, intensive care and tertiary services, provide 28% of all Medicaid care, and underwrite 41% of all hospital-based charity care. NMH is committed to providing healthcare to all members of our community regardless of their ability to pay.

NMH recently completed a comprehensive Community Health Needs Assessment (CHNA) to identify the highest priority health needs of residents in our community. One example of Northwestern’s outreach is the Denny Community Health Center, located at the Lawson House YMCA. Since August 2000, the Center has provided free medical care to the residents of the Lawson House YMCA, a population comprised of low-income, formerly homeless Chicagoans. With Northwestern Memorial providing staff and financial support, the Center accommodates approximately 2,500 patient visits per year.

The Chicago Cardiac Arrest Resuscitation Education Service (CCARES) is a community outreach organization started in 2011 by Northwestern EM faculty and alumni. Dr. George Chiampas and Dr. Amer Aldeen (NU EM ’06) founded CCARES with the simple mission to “increase the survival of sudden cardiac arrest victims in Chicago.” CCARES partners with City agencies, communities, schools, and businesses to educate and raise awareness of the importance of bystander CPR and AED use. In 2011, Illinois Governor Pat Quinn joined members of CCARES and the Northwestern Medicine community to commemorate the signing of the Illinois Good Samaritan Act. The law encourages bystanders to provide lifesaving CPR to victims of sudden cardiac arrest outside the hospital setting and marks an important step in support of hands-only CPR. Residents play an active role in CCARES.
PRENTICE WOMEN’S HOSPITAL

Prentice Women’s Hospital at Northwestern Memorial opened in October 2007, when it moved from its original facility to a new, one-million square foot state-of-the-art hospital dedicated to providing care for the unique needs of women through all stages of life. With 328 licensed beds, care at Prentice extends beyond obstetrics and gynecology, to women’s heart health, neurology, bone care, and mental health care. In partnership with the Northwestern Feinberg School of Medicine, the Women’s Health Research Institute at Prentice plays a critical role in research and health policy advocacy at institutional, state, and federal levels.

Northwestern EM residents have two rotations at Prentice in their second year: obstetrics/gynecology and the Neonatal ICU. Prentice facilitates 13,600 deliveries per year, making it the largest birthing center in the Midwest and among the top five birthing centers in the nation by volume of births. The Renee Schine Crown Neonatal Intensive Care Unit contains 86 Level III bassinets, making it one of the largest NICUs in the country. Northwestern’s commitment to providing quality care to all patients regardless of their ability to pay extends to Prentice Women’s Hospital; annually, nearly 30% of infant care provided in the NICU is reimbursed by Medicaid or provided as free care.

ANN & ROBERT H. LURIE CHILDREN’S HOSPITAL OF CHICAGO

In June 2012, after 130 years in the Lincoln Park neighborhood, Children’s Memorial Hospital moved to the Northwestern downtown campus and became the Ann & Robert H. Lurie Children’s Hospital of Chicago (LCH). Though the name is new, the relationship between Children’s and the Northwestern Feinberg School of Medicine spans over 60 years. LCH is one of only 13 pediatric hospitals in the US to earn 2015-2016 Honor Roll designation by US News and World Report. Overall, US News and World Report ranks Lurie the 11th best children’s hospital in the nation.

The LCH ED treated 50,172 patients in 2014. As a whole, the 288-bed hospital annually cares for children from every legislative district in Illinois, all 50 states, and over 30 countries. Patients come from far and wide to seek care at Lurie.

“Working at Lurie alongside attendings that are fellowship-trained is invaluable. You see routine pediatrics and also take care of extremely medically complex kids and interact with various pediatric sub-specialists who are experts in their fields. The endless supply of Teddy Grahams and Popsicles is also a bonus!”

Gabrielle Ahlzadeh, NU EM ’19
JOHN H. STROGER, JR. HOSPITAL OF COOK COUNTY

NU EM residents rotate in the trauma unit at Cook County once during their second year and again during their fourth year. The trauma unit/trauma ICU at Cook County was the first in the country and is one of the busiest in the US. The role of second year residents on the rotation is that of a junior on the service; senior residents act as the team leader for the 24-hour call day. In this role, senior residents have the same responsibility as the senior County residents on their call days - leading resuscitations and supervising all care within the unit. At Stroger, trauma patients are seen in a separate trauma unit, not in the regular ED. This patient care model is different than that of Northwestern Memorial, where trauma patients must be managed at the same time as all other patients on the trauma half of the main ED. This contrast in care models provides for outstanding, comprehensive trauma education for our residents.

All residents complete a one-month toxicology rotation at Stroger during their third year. Residents work with members of the Toxikon Consortium, a collaboration of healthcare providers from multiple academic institutions in Chicago who are dedicated to clinical care, training, education, and research related to poisoned patients. Residents divide their time during this rotation between the Illinois Poison Center, rounds with the Toxikon faculty and fellows, and didactic sessions.

METHODIST HOSPITAL - NORTHLAKE CAMPUS

Methodist Hospital - Northlake Campus is located 35 miles from downtown Chicago. The rotations at Methodist provide an opportunity to work in a busy, inner-city community ED with a large trauma population and high medical acuity. There are no other residents at the Northlake Campus, so our residents have the chance to work in a true “unopposed” community environment, one-on-one with the attending physician. The Northlake Campus Emergency Department treated 35,469 patients in 2014.

Methodist Hospital plays a major role in addressing the health needs of underserved patients of Northwest Indiana. In addition to support of community outreach programs, Methodist Hospitals provided nearly $98 million in unpaid Medicare, charity care, and community services last year. Local consumers ranked Methodist as the most preferred hospital in Lake County, Indiana in 2014.

“Methodist is the wild west of emergency medicine - your skills and knowledge are truly tested.”
Greg Apel, NU EM ‘16
Northwestern Lake Forest Hospital is a 215-bed community hospital located in Lake Forest, IL, 32 miles from downtown Chicago. Northwestern Lake Forest Hospital (NLFH) is a Level II Trauma Center and is ranked by consumers as the most preferred hospital in Lake and Kenosha Counties.

NLFH is an Emergency Department Approved for Pediatrics (EDAP) and 30% of its patient volume consists of pediatric patients. Certified by the Joint Commission as an Advanced Primary Stroke Center, Lake Forest has the resources to provide the highest level of care for stroke patients. The Lake Forest ED treated over 21,370 patients in 2014.

Our residents currently spend one block at Lake Forest during their second, third, and fourth years. Residents are provided optional housing during the rotations, as well as a complimentary membership at a fitness center on campus. Residents have the opportunity to work alongside many former graduates of the Northwestern Emergency Medicine Program, as well as highly dedicated nursing and ancillary staff. NLFH was recently awarded the Emergency Nursing Association’s Lantern Award, a recognition given to emergency departments that exemplify exceptional practice and innovative performance in the core areas of leadership, practice, education, advocacy and research.

NU EM residents may moonlight at the Lake Forest ED and its affiliated Grayslake ED, a stand alone emergency department.

“Lake Forest is a great addition to the program - it is an excellent example of community emergency medicine.”
Jordan Kaylor, NU EM ‘16
ELECTIVE OPPORTUNITIES

A total of three blocks of elective time are available to all residents. Elective blocks are unrestricted and residents may choose to go anywhere in the world. NU EM will assist with out of state licensure, malpractice insurance coverage, provide immunizations and evacuation insurance. Salary and benefits are paid during elective rotations.

“An advanced airway course and Grand Teton National Park - what more could one ask for?”
Andrew Pirotte, NU EM ‘15

“My elective time in West Africa broadened my scope as a person and as a physician. I improved existing skills and acquired new ones. Those weeks are among the most enriching I have spent in my life.”
Benjamin Sayers, NU EM ‘11

In 2009, Jon Van Roo and Matt Lazio (NU EM ‘10) spent a month on Aconcagua (22,841ft). They worked alongside Argentinian physicians at base camp and ultimately published four peer-reviewed articles and two letters to the editor based on their work there. During their elective they also summited the mountain.

“I spent my elective in Ireland with Dr. Andy Neill, emergency physician at the Mater Misericordiae University Hospital in Dublin. Dr. Neill runs the blog Emergency Medicine Ireland and is an avid proponent of FOAMed. Exciting things are in store for EM education and I am glad to be a part of it.”
Lauren Gallagher, NU EM ‘14
Diversity

The Department of Emergency Medicine strives to create and maintain a provider population that mirrors our diverse patient population. We believe that a diverse faculty, workforce, and student body is essential to our long-term success in academic medicine. We embrace all types of diversity as strengths.

Email addresses are listed below for leaders of the Diversity Initiatives Committee. Feel free to contact any committee member.

John E. Franklin, MD
Associate Dean, Minority and Cultural Affairs
jef@northwestern.edu

Larry Faines, MD
Assistant Professor
lfaines@yahoo.com

Danielle McGee, MD
Assistant Professor
Director, Ultrasound Education
dinimd77@yahoo.com

For more information about Diversity at Northwestern, including interviews with residents, please visit:

http://mcgaw.northwestern.edu/diversity/resident-voices

Open Door Policy -
On Interview Day and Everyday

The Feinberg Office of Diversity works with students, residents, staff, and faculty to further our mission of achieving a campus environment of belonging and inclusion for all.

Recruitment initiatives, community partnerships, and campus collaborations all help facilitate our mission.

Please let us know if you are interested in meeting with anyone from the Office of Diversity - we are more than happy to arrange a visit in the afternoon once your interviews are completed.

The Department of Emergency Medicine strongly encourages applications from minority candidates who are under-represented in our specialty, including women, racial and ethnic minorities, and LGBTQ students.

Northwestern University does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship or veteran status in matters of admissions, employment, housing or services or in the educational programs or activities it operates.
Diversity Initiatives

The Feinberg Office of Diversity is proud of its longstanding commitment to diversity and excellence. Through mentoring programs, community partnerships, recruitment initiatives and inter-campus cooperation and collaboration, we strive to help facilitate in every domain. Our campus communities have tremendous strengths and bring a wealth of ideas and experience that inform and guide our work.

LGBT Safe Space Training

The Office of Diversity offers LGBT Safe Space Training in partnership with individuals from the Northwestern LGBTQA Campus Advisory Network and the Feinberg School of Medicine Queers and Allies group. The Safe Space Program is an initiative to educate allies who support LGBTQ individuals in our campus community. Training consists of four modules that cover topics ranging from language and inclusive conversations, clinical encounters that promote health for all, and promoting knowledge and openness in clinical environments.

Spanish Courses

The Office of Diversity offers Spanish language courses at four levels, in partnership with Northwestern Medicine and the Universidad Nacional Autonoma de Mexico (UNAM) Chicago extension. Classes are open to health professions graduate students as well as faculty, staff, and employees of Northwestern Medicine. Individuals already fluent in Spanish may obtain a formal comprehensive proficiency evaluation from UNAM.

Northwestern McGaw Underrepresented Residents & Fellows Forum

Northwestern McGaw Underrepresented Residents & Fellows Forum (NMURFF) is an inter-departmental group for trainees at the McGaw Medical Center of Northwestern University. The NMURFF leadership consists of residents and fellows who carry out programming in four areas: mentoring, networking and career development, outreach, and strategy and collaboration. NMURFF welcomes members of all backgrounds who support its mission. NMURFF work centers on diversity and representation and is focused on, but not limited to, race, ethnicity, gender, and sexual orientation.

Northwestern Chicago Out Network

The campus- and affiliate-wide networking group for LGBT identified individuals and allies began informally meeting several years ago and quickly became a regular social networking group for the Northwestern Chicago campus. It currently draws participants from the medical school, graduate school, law school, and affiliated hospitals and clinics. Affiliated hospitals, schools, and practice groups are pleased to offer formal support of the group’s quarterly meetings. It is the collective goal of the Out Network that providing sponsorship for faculty, staff, and students who identify as LGBT or allies will ensure that our campus and affiliates have welcome and inclusive environments.
Wellness and Work-Life Balance

Our annual two-day retreat is an important part of resident wellness. All residents are excused from clinical duties to spend time at a rural retreat center outside Chicago. Our retreat agenda includes team-building activities, class meetings with faculty leadership, ropes courses, scavenger hunt competitions, class skits, and campfires. Suggestions for residency program changes and future goals are also discussed in work groups during the retreat.

Our monthly Adams Club evenings provide another opportunity for residents and faculty to gather off-campus, in a relaxed environment. Hosted by faculty members in their homes, Adams Club consists of dinner and faculty-led teaching sessions. During certain months, Adams Club allows the NU EM Family to celebrate holidays together, as well. Whether there is a Halloween costume contest, a backyard barbecue, or a game of Orthopedic EM Jeopardy on the agenda, the atmosphere at Adams Club is always laid back and fun.

The Northwestern Emergency Medicine Wellness Committee meets throughout the year and is open to all residents. With the mission of educating, promoting and supporting wellness and resiliency among emergency physicians at Northwestern, the committee works to develop wellness activities and practices, and to recognize the scholarly potential of examining wellness programs for emergency physicians.

A resident wellness initiative of a monthly class social helps foster camaraderie and relaxation. Each class works with the Chief Residents to schedule a night free of clinical duty every month.

“I’m a long way from home, but this residency has become family to me.”
Elizabeth Byrne, NU EM ’17
## Clinical Rotations

### PGY1
- Emergency Medicine (NMH/LCH): 8 Blocks
- Medical ICU (NMH): 2 Blocks
- Coronary Care Unit (NMH): 1 Block
- Anesthesia (NMH): 1 Block
- Surgical ICU/Trauma (NMH): 1 Block
- Orthopedics/Sports Medicine (NMH): 1 Block
- Ultrasound (NMH): 0.5 Blocks
- Interventional Pulmonology (NMH): 0.5 Blocks
- Vacation: 3 Weeks

### PGY2
- Emergency Medicine (NMH/LCH): 9 Blocks
- Emergency Medicine (NLFH): 1 Block
- Emergency Medicine (Methodist): 1 Block
- Medical ICU (NMH): 1 Block
- Trauma (Cook County): 1 Block
- Research (NMH): 0.5 Blocks
- OB/GYN (Prentice): 0.5 Blocks
- Neonatal ICU (Prentice): 0.5 Blocks
- Pediatric Anesthesia (LCH): 0.5 Blocks
- Vacation: 4 Weeks

### PGY3
- Emergency Medicine (NMH/LCH): 10 Blocks
- Emergency Medicine (NLFH): 1 Block
- Emergency Medicine (Methodist): 1 Block
- Toxicology (Cook County): 1 Block
- Elective: 1 Block
- Medical ICU (NMH): 0.5 Blocks
- Pediatric ICU (LCH): 0.5 Blocks
- Vacation: 4 Weeks

### PGY4
- Emergency Medicine (NMH/LCH): 10 Blocks
- Emergency Medicine (NLFH): 1 Block
- Emergency Medicine (Methodist): 1 Block
- Trauma (Cook County): 1 Block
- Elective: 2 Blocks
- Vacation: 4 Weeks
Simulation

Simulation is a key component of our educational curriculum. The residency program works closely with the Simulation Center within the Department of Medical Education to deliver a dynamic curriculum that supplements and enhances traditional didactic sessions. Simulation sessions take place in the 7000 square foot center which contains high-fidelity simulation and innovation spaces with state-of-the-art simulators, task trainers, and audiovisual equipment. Within the center are five replicated patient rooms with advanced high-fidelity simulators, a virtual reality space, and an area for procedural and task based training.

Simulation sessions are a required component of the monthly educational experience for all residents. The curriculum is divided into three main categories: boot camps, core simulation sessions, and procedure/skill sessions.

The boot camp curriculum is a resuscitation procedures curriculum designed specifically for interns. This curriculum provides first year residents significant time for practice and the opportunity to demonstrate mastery-level learning of critical procedures performed by the intern learner in emergency medicine. Boot camp sessions begin during intern orientation and occur regularly throughout the year. Taught by EM faculty, boot camps cover central lines, basic and advanced airway skills, chest tubes, paracentesis, thoracentesis, lumbar puncture, transvenous and transcutaneous pacing, and mock codes.

The core simulation curriculum occurs monthly and is designed to introduce new content that is not covered during didactic curriculum lectures. During the 90-120 minute simulation sessions, residents work in a junior/senior learner pair, similar to the model in the emergency department, to manage 2-3 patients simultaneously. These simulated encounters include both adult and pediatric patients. Following the simulation, learners debrief cases with a faculty member to identify performance gaps and areas for improvement. The small faculty to resident ratio ensures active participation and specific feedback for all learners. Simulation sessions provide residents an opportunity to learn and practice different aspects of emergency medicine in a safe learning environment. The carefully developed 4-year curriculum of simulation cases allows residents to progress through the entire training program and not duplicate learning experiences.

Residents also participate in specific simulation sessions focused on the acquisition and practice of procedural skills. These sessions include ultrasound labs, difficult airway sessions, and pediatric procedures.

Our simulation program also provides residents an opportunity to practice their skills as teachers, explore research, and experience simulation from the “other side of the curtain.” Teaching opportunities include leading airway and suture labs for 4th year medical students during the emergency medicine clerkship rotation, introducing 3rd year medical students to the initial management of a variety of medical conditions, and teaching 1st and 2nd year medical students during simulation-based learning in the pre-clinical curriculum. Senior residents may participate in an elective in simulation to participate in case writing, simulation-based teaching, and assist with boot camp instruction. Some residents complete educational research projects using simulation and have presented at numerous national conferences.

“Our simulation experience is impressive - the lengths that the faculty and staff go to in order to create clinically relevant, high fidelity cases truly augments our curriculum.”
- Colin McCloskey, NU EM ’16 - member of the 2015 EMRA Resident SIM WARS Championship Team
Didactic Curriculum

Northwestern provides a comprehensive educational curriculum that combines small groups, faculty didactic lectures, innovative research and leadership training, monthly suggested reading, and Rosh Review testing. Adult learning theory is a focus of our modular curriculum design, with different physiologic systems covered each month. Resident feedback helps faculty recognize the most successful educational initiatives. Our residents consistently excel on ABEM certification examinations.

Special skills labs occur throughout the year in our Simulation Center. Faculty members host monthly Adams Club meetings to provide informal settings in which to learn. National leaders in emergency medicine are invited as guest faculty for Grand Rounds throughout the year. Residents gain teaching experience through formal lectures to their peers and medical students.

The Emergency Medicine Foundations curriculum is specifically designed for intern-level learners and provides a comprehensive foundation of knowledge in emergency medicine. The course involves three phases - Fundamental Skills, Foundations Course, and Advanced Skills. Self-directed learning, textbooks, primary literature, and online resources keep interns on track, even while off-service.

Academic Colleges

For over 10 years our Department has offered a unique leadership skills training program, the Academic Colleges. The Colleges are divided into Research, Administration and Business, and Education tracks; residents opt to participate in the College that best matches their academic interests or future career goals. Each College meets with its faculty advisor on a monthly basis to review the development and progress of their scholarly projects. Additional didactic sessions or guest speakers supplement the sessions. Longitudinal progress of projects is supported and monitored by faculty, ultimately leading to manuscript preparation.


<table>
<thead>
<tr>
<th>Examples of Colleges*</th>
<th>Requirements</th>
<th>Examples of Scholarly Projects</th>
<th>Career Choices of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>Publishable manuscript/talk monthly college meetings One or three elective months spent on a teaching rotation or conducting curriculum design research Assistant/clinical director in development of educational experiences for the medical students</td>
<td>Review article on bedside teaching in the ED Rotating resident curriculum residency adaptation and testing of the EPEC-EM curriculum Design and feasibility testing of a knowledge translation shift for senior residents Multiple dynamic emergency medicine tutorials EMF grant</td>
<td>Assistant/associate residency director Education fellow Simulation fellow International medicine fellow Toxicology fellow Research fellow Masters in education Masters in Biostatistics</td>
</tr>
<tr>
<td>Research</td>
<td>Publishable manuscript/talk monthly college meetings Participation in a clinical research study</td>
<td>Time to angioplasty for acute coronary syndromes Caffeine abuse: things you didn’t know Sepsis outcomes Community-acquired pandemic Neutropenic fever outcomes</td>
<td>Research fellow Masters in clinical investigation Masters in public health PhD program</td>
</tr>
<tr>
<td>Administration</td>
<td>Publishable manuscript/talk monthly college meetings Participation in an operations or administrative scholarly project</td>
<td>Cost-effectiveness of coronary CT angiography infection control through central line standardization Early goal-directed therapy for sepsis initiative</td>
<td>Health services research fellow Ultrasound fellow Sports medicine fellow Masters in clinical investigation</td>
</tr>
</tbody>
</table>

*All data from Northwestern University.

“In the 4 years prior to the Colleges, 33% of graduates entered academic practice and the number of resident peer-reviewed publications was 24. In the 4 years after, 67% entered academic practice and the number of resident peer-reviewed publications was 56.”

Academic Emergency Medicine, 17:S87-S94, page S92
Seminars in Professional Development

Northwestern Emergency Medicine residents participate in a four-year, class specific curriculum of workshops and didactics designed to enrich their professional development. Example curricula are outlined below.

PGY1: Medical Decision Making in Emergency Medicine
This course uses clinical cases to help interns develop the knowledge and skills needed to efficiently evaluate common undifferentiated patients in the emergency department. Each session incorporates a brief review of clinical research methodology or statistical concepts that resident learners are likely to encounter when reading medical literature. This seminar introduces the application of evidence-based decision-making to a clinical setting.

<table>
<thead>
<tr>
<th>Course Content</th>
<th>Statistical Concept</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest Pain</td>
<td>Sensitivity and Specificity</td>
</tr>
<tr>
<td>Dyspnea</td>
<td>Review</td>
</tr>
<tr>
<td>Stroke</td>
<td>Positive and Negative Predictive Value</td>
</tr>
<tr>
<td>Syncope/Seizure</td>
<td>Review</td>
</tr>
<tr>
<td>Low Back Pain</td>
<td>Pretest and Post-Test Probability</td>
</tr>
<tr>
<td>Wound Care/Lacerations</td>
<td>Review</td>
</tr>
<tr>
<td>Abdominal Pain</td>
<td>Positive and Negative Likelihood Ratio</td>
</tr>
<tr>
<td>Trauma</td>
<td>Review</td>
</tr>
<tr>
<td>Fever</td>
<td>P Values and Confidence Intervals</td>
</tr>
<tr>
<td>GI Bleed</td>
<td>Power and Errors</td>
</tr>
<tr>
<td>Headache</td>
<td>Overall Review</td>
</tr>
</tbody>
</table>

PGY2: Medico-Legal & Patient Safety Issues in Emergency Medicine I and Residents as Teachers I
The Medico-Legal and Patient Safety Issues in Emergency Medicine course establishes a foundation for the learner to knowledgeably lead change to improve patient safety in emergency medicine. This includes an introduction to legal issues in emergency medicine that focus on ways to avoid errors. Instructors review the most common types of medical errors and use clinical cases to illustrate how high-risk errors can be mitigated in the emergency department.

<table>
<thead>
<tr>
<th>Course Content</th>
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</thead>
<tbody>
<tr>
<td>Handoffs and Fumbles</td>
</tr>
<tr>
<td>Quality Cases</td>
</tr>
<tr>
<td>Malpractice and High Risk Defensive Medicine</td>
</tr>
<tr>
<td>Old, Drunk and Crazy</td>
</tr>
<tr>
<td>Communication</td>
</tr>
<tr>
<td>Introduction to Teaching and Learning: What Makes a Good Teacher?</td>
</tr>
<tr>
<td>Lecture Skills</td>
</tr>
<tr>
<td>Procedure Teaching</td>
</tr>
<tr>
<td>Clinical Teaching</td>
</tr>
<tr>
<td>Feedback and Assessment</td>
</tr>
</tbody>
</table>
PGY3: Medico-Legal & Patient Safety Issues in Emergency Medicine II and Residents as Teachers II
Building on the PGY2 seminar, this course prepares PGY3 residents for administrative roles within emergency medicine. Residents are encouraged to develop their presentation, leadership and teaching abilities through coursework and the supervision of medical students and junior residents.

Course Content
Bedside Teaching and Listening to Presentations and Signouts
Teaching Procedures
Teaching the Intangibles: Professionalism
Lecture Skills
Teaching and Learning in Small Groups
Feedback and Assessment
Team Leadership
The Problem Learner
Evidence-Based Teaching

PGY4: Career Transitions Program
This course prepares senior residents to competitively search for post-graduate employment. Sessions in the latter part of the year include discussions of wellness, lifelong learning, and the proper assimilation to new administrative roles within a medical staff.

Course Content
CV and Cover Letter Workshop
What Kind of Job Do You Want? Academic vs. Community
Applying for Your First Job: The Nuts and Bolts of the Process
Interviewing Skills
Contract Negotiations
Financial Planning
Finding Mentorship
Lifelong Learning: How to Stay Current in the Literature
Wellness, Balance, and When to Say No
Ten Secrets of the Successful Attending
Integrating into a Medical Staff
Check out @nm_365 on Twitter and nm_365 on Instagram to see a year in the life of residents and fellows training at Northwestern.

I think procedures are the best. Procedures are rad. Did I mention that I love procedures? In all seriousness, I am a big supporter of the independent, self-sufficient emergentologist, and I revel in the endless skill potential of our specialty. Outside the hospital, I do my best being a husband and a dad - the most challenging procedure of them all!

John Sarwark, MD (NU EM ’16), Editor, www.emcurious.com/procedures-club

Follow Northwestern EM on Social Media

Michael Macias, MD (NU EM ’17), Founder, www.emcurious.com
Creator, NUEM Blog

FOAMed really allows residents to take control of their learning and gives them the opportunity to network, develop educational skills and become an important member in the next generation of medical education.

New this year, the NUEM Blog is a resident-run educational site devoted to enhancing emergency medicine education through online, asynchronous learning. It allows residents to explore their interests in EM, share their deep dives, and develop as writers, researchers, and peer reviewers.

Live in November 2015: www.nuemblog.com

Check out our PD hosting ALIEM’s #EMMatchAdvice web series

Follow Matt Klein (NU EM ’18) @MKleinMD and #emconf for live tweeting during conferences
Sports Medicine

Leading the Sports Medicine team in the Department of Emergency Medicine at Northwestern are Dr. George Chiampas, Dr. Sanjeev Malik, and Dr. Christopher Hogrefe. Dr. Chiampas, Dr. Malik, and Dr. Hogrefe are board-certified in emergency medicine, fellowship trained and board-certified in Sports Medicine, and hold Certificates of Added Qualification (CAQ) in Sports Medicine.

The sports medicine faculty members continually work to expand the musculoskeletal and sports medicine curriculum for the residency with an enhanced orthopedic/sports medicine rotation and the development of an optional sports medicine selective. During the orthopedic/sports medicine rotation residents divide their time between orthopedic cases in the ED and the sports medicine clinic run by Dr. Hogrefe. In addition to their clinical, academic, and community commitments, the sports medicine faculty members regularly work with multidisciplinary teams on sports medicine and disaster/mass-gathering research projects and publications.

Dr. Chiampas is the Medical Director for the Bank of America Chicago Marathon and he is the Chief Medical Officer of US Soccer. He also serves as the Team Emergency Physician for the Chicago Blackhawks. Since 2014, Dr. Chiampas and other NU EM faculty have served as on-site emergency physicians at every Blackhawks home game.

Together Dr. Chiampas and Dr. Malik serve as co-directors of the Shamrock Shuffle and the Hustle up the Hancock climb. Their work within the community means that Northwestern EM residents have not only special access to their expertise, but also unique opportunities to volunteer at mass gathering events, practice sports medicine in the field, and collaborate on research in an exciting and rapidly expanding subspecialty of Emergency Medicine. Northwestern EM residents have served as volunteer emergency physicians for collegiate basketball games, golf tournaments, cycling events, yacht races, marathons, triathlons, and runs and walks of all types.

Emergency Medical Services

The Chicago Fire Department responds to over 500,000 calls annually. Northwestern shares the title of Resource Hospital for Chicago EMS with the University of Chicago Medical Center and Advocate Illinois Masonic Medical Center. As a Resource Hospital, Northwestern shares the authority and responsibility of the entire EMS system in the City of Chicago (Region XI). The EMS team at Northwestern provides medical supervision and training to hundreds of paramedics, emergency medical technicians, and dispatchers. Residents at Northwestern complete an asynchronous EMS curriculum during which they attend operational meetings, participate in ambulance ride-alongs, and develop a thorough understanding of the emergency physician’s role in medical oversight and disaster response.
Global Emergency Medicine Health Initiatives

The Global Emergency Medicine (GEM) initiatives in the Department of Emergency Medicine focus on the health of individuals and populations in emergent and dynamic environments. Collaborations focus on inter- and intra-university partnerships through research, educational efforts, and the support of organizations providing health and services in emergency settings. Under the direction of Global Emergency Medicine Director Jennifer Chan, MD, MPH, the Department engages in global health activities and the practice of international emergency healthcare through collaborations with the Center for Global Health, Northwestern Non-Pro fit and Humanitarian Logistics groups, and other academic organizations around the world.

Residents have the opportunity to seek out global health opportunities within the Feinberg School of Medicine, Northwestern University community, and beyond. Potential support for GEM educational and clinical opportunities of high quality are available through the competitive Spirit of 2010 grant. This grant was graciously established by the Class of 2010, a diverse group that pursued equally diverse interests during their time at Northwestern. This Award encourages future classes to maintain this spirit and seek out diverse medical and cultural experiences. It supports selected 3rd or 4th year residents, and thus far, the Spirit of 2010 Award has funded Global Emergency Medicine elective rotations to Ethiopia, Honduras, Guatemala, Ireland, and Cambodia.

- Alison Marshall (NU EM ‘17) participated in the two-week Humanitarian Response Intensive Course hosted by the Harvard Humanitarian Initiative. The Course focuses on primary frameworks in humanitarianism and practical issues that arise in humanitarian fieldwork.

- Elizabeth Dearing (NU EM ‘15) spent her PGY4 elective teaching ultrasound skills at Clinica Esperanza, a small clinic in Roatan, Honduras that provides pediatric, medicine, and obstetric care to over 100 patients per day. Elizabeth worked closely with the team at the clinic to fix ultrasound equipment, train providers, and integrate basic ultrasound exams into everyday practice.

All residents and fellows are eligible to participate in the McGaw Global Health Clinical Scholars Program. This two-year competency-based global health certificate program trains residents and fellows in clinical care delivery in resource-limited settings worldwide. Program components include lectures, journal club, asynchronous learning modules, global field experience, a scholarly project, and faculty mentorship in global health. The simulation portion of the program teaches the skills needed to provide care in a resource-limited setting, and to diversify procedural and patient care. For details about the program, and to learn more about global health initiatives at Northwestern, visit www.globalhealth.northwestern.edu.

For more information about Global Emergency Medicine in our Department, please visit our website. Links to current project details and our Global EM blog are in the “Initiatives” section.
Research

The mission of the Northwestern EM Research Program is to be a leading national academic department that provides patient-centered, time-dependent, acute care in a manner that optimizes efficiency, safety, and outcome. In the past 10 years, four faculty members have obtained or completed K training awards, two faculty members have obtained R awards, and an additional five faculty members have completed formal master’s degrees and mentored fellowships in health services research. Residents learn research skills through scholarly projects mentored by faculty who are both federally and privately funded investigators and national leaders in administration and education. Each resident is required to produce a publishable manuscript prior to graduation.

In April, 2015 Danielle McCarthy, MD, MS (NU MD ’06, NU EM ‘10, NU MS ’12, NU Institute for Health Services Research Fellowship ‘12) received an R18 grant from the federal Agency for Healthcare Research and Quality (AHRQ) to study communication methods to promote safe opioid use. Building on her previous work done in conjunction with the Northwestern Center for Healthcare Studies, the current study aims to leverage electronic health records to implement a multifaceted strategy to better educate ED patients about opioid medication risks and safe use.

In September, 2015, Emilie Powell, MD, MBA, MS (NU EM ’09, NU MS ‘11, NU Institute for Health Services Research Fellowship ‘11) received an R18 grant from the AHRQ to investigate how clinicians in the rural emergency setting can optimize the timely recognition and treatment of severe sepsis and septic shock.

Interdisciplinary work is another important aspect of our research program; residents and faculty have collaborated and published with colleagues from the Northwestern’s McCormick School of Engineering, the NU Center for Healthcare Studies, and Medill School of Journalism. Interested residents work with faculty on active studies and participate in preparation for IRB submission, subject enrollment, data collection, statistical analyses, and the publication and presentation process.

Over the past five years, residents have published in:


The research rotation is a dedicated week-long rotation during the PGY-2 year. During this rotation residents have protected time to start their research project, complete CITI training, receive one-on-one feedback from research faculty, participate in individualized training sessions at the Galter Health Sciences Library, and learn all aspects of clinical research from grantwriting and IRB submissions to screening, enrolling, and consenting patients.

Residents particularly interested in research are eligible to participate in the Northwestern Physician Scientist Training Program (PSTP). The intent of the PSTP program is to support and facilitate the transition from residency training to a productive career in clinical research. The PSTP program in Emergency Medicine is designed to meet the research-intensive training needs of the individual within the collaborative interdisciplinary culture of Northwestern. All interested applicants are invited to explore the PSTP option further by visiting our website and by speaking with the residency Program Director.

The Residency program supports travel costs for residents to present their work at qualifying regional and national meetings. Please visit our website for more information about current research and recent resident publications and presentations.
Why Four Years?

Northwestern University sponsors a comprehensive residency program in emergency medicine that strategically utilizes the additional training time and flexibility afforded by the PGY 1-4 format. We believe that four years is essential for the expert preparation of a 21st century emergency physician. The expanding breadth and complexity of our young specialty is best taught across a longitudinal four year curriculum.

Northwestern is proud to be among a relatively small number of peer institutions that offer a PGY 1-4, university-based, research-oriented, EM residency. The best universities in the nation want to produce the very best graduates from their programs, to lead in their respective fields. These institutions recognize the importance of the PGY 1-4 format for emergency medicine. We benefit from the commitment of Northwestern University to develop such graduates.

We are not “three years of EM + one year of something else.” We are not the equivalent of “three years of EM + one year of fellowship” – such a training path offers only three years of emergency medicine training and one year of something that is not emergency medicine. Our program is fortunate to have the necessary financial support that allows the funding of a fourth year dedicated to emergency medicine education.

Our PGY 1-4 format ensures two years of clinical training in the senior role as “junior attending.” NU PGY-3 and PGY-4 residents care for hundreds more patients during residency because they supervise entire teams of junior residents, medical students and mid-level providers. Rather than seeing a few more patients per shift individually each year, they are able to interview, examine, and coordinate the care of significantly more patients every shift. This form of true graduated responsibility ensures that our residents develop a deep understanding of efficiency, patient safety, patient satisfaction, operations, quality assurance, and bedside teaching. These are marketable skills that are important to prospective employers.

The extra year of training allows for a comprehensive educational curriculum. We have the time to utilize mastery rather than competency evaluations for procedural skills development. Our didactic curriculum covers the entirety of the Model of Clinical Practice of EM, with a diverse array of teaching methodologies and simulation experiences geared towards different types of adult learners. We have the flexibility to accommodate formal curricula in leadership skills, ultrasound, pre-hospital care, palliative medicine, ED operations and administration, and critical care medicine. Northwestern offers 10 clinical rotations in critical care units, with EM residents as supervisory seniors in various settings.

- Exposure to more patients and procedures in a mastery model of learning
- Additional time for research and scholarly work, leading to the development of a substantive academic or administrative niche
- Opportunities to practice teaching skills at the bedside as a supervisory resident
- Time to explore a variety of career paths through mentored, experiential learning
- Better job placement and post-graduate employment opportunities - prospective employers prefer graduates of four-year programs
- Dynamic curriculum that can accommodate the increasing breadth of knowledge in our field
- Ability to offer both junior and senior level training in several critical care units
- Professional skills development in preparation for leadership roles in academic or community medicine
Where do NU EM grads go?

- Midwest: 56%
- East Coast: 15%
- South Coast: 17%
- West Coast: 12%

What do NU EM grads do?

Alumni Job Titles 1973-2015

[Word cloud of job titles]
Kori Sauser Zachrison, MD, MS - NU EM ’12
Assistant Professor of Emergency Medicine
Massachusetts General Hospital
Harvard Medical School

How did the Northwestern Emergency Medicine Residency prepare you for your RWJ fellowship?
Beyond the superior clinical training we received at Northwestern, my four years in the residency program were instrumental in shaping my career direction and preparing me for fellowship. My interest in health services research was piqued through a project we did in the Research College. Then, as I explored EM research, I was supported and encouraged by incredible faculty mentorship. And because the faculty was so deeply invested in both my clinical and my research development, I was prepared to pursue a competitive health services and healthcare policy research fellowship through the Robert Wood Johnson Clinical Scholars Program.

What is great about your job?
There are so many wonderful things about my job - where to begin?! I find my clinical time to be more than satisfying. In addition to clinical work, I spend about half of my time on research, and I find this to be a great balance. While clinical shifts are busy and dynamic, with fast-paced moment-to-moment decision making, my research time is slower, more thoughtful, analytical and cerebral. The two components of my job are very complimentary. They inform one another, they use different skill sets and satisfy different components of my personality, and they are both very rewarding in very distinct ways.

Manish Asaravala, MD, FACEP - NU EM ’10
Senior Emergency Physician
Permanente Group-Kaiser Santa Clara Medical Center
Clinical Instructor
Stanford University

How did the Northwestern Emergency Medicine Residency prepare you for practice in a community-based academic setting?
Northwestern provided me the foundation to excel as a community-based academic EM physician. The well-defined graduated responsibility during training, and particularly the junior attending role in the third and fourth years, fostered my bedside teaching skills and provided ample opportunity to improve my efficiency within the ED. Additionally, the elective time offered during training prepared me for fellowship in point-of-care ultrasound at UCSF and helped me find a niche within emergency medicine.

What is great about your job?
My job is great because I get to work alongside superbly-trained physicians, nurses, and staff to provide care for appreciative patients, all while training future generations of emergency physicians.

What do NU EM Grads Do?

15.5% Fellowships

20.5% Community-Based Faculty
Amer Z. Aldeen, MD, FACEP - NU EM ‘06  
Chair and Medical Director  
Presence Saint Joseph Medical Center

How did the Northwestern Emergency Medicine Residency prepare you for private practice?

I joined community emergency medicine after spending eight years as faculty at Northwestern. I loved the academic world and I wanted to learn more about the community environment to experience firsthand how emergency medicine was practiced in the majority of hospitals throughout the country. Northwestern’s residency training prepared me equally for the rigors of academics as well as the challenges of community practice. I work for US Acute Care Solutions and am leading the busiest community ED in the state of Illinois. My experience at Northwestern has been the single most important contributor to our success at Presence Saint Joseph.

What is great about your job?

I am honored to have the opportunity to work with extremely dedicated physicians, nurses, pharmacists, administrators, and other team members to help improve the care of ED patients. I am a valued member of the leadership team of an excellent community hospital and I get to work with well-trained and motivated young physicians in their post-residency careers. Northwestern’s emphasis on both clinical and professional excellence has trained me well to develop as a physician leader in a complex and rapidly changing health care environment.

Frederick Korley, MD, PhD - NU EM ‘07  
Assistant Professor of Emergency Medicine  
Johns Hopkins University

How did the Northwestern Emergency Medicine Residency prepare you for practice in a university-based academic setting?

At Northwestern I received training that allowed me to become not only an excellent clinician but an effective clinician-educator. The breadth of the education experience I received also provided me with the foundational training that has allowed me to launch a successful career in clinical research. As an academic emergency physician, the only path to excelling in clinical care, resident education, and scientific discovery involves putting patients first in all you do. Nobody teaches “patients first” better than Northwestern.

What is great about your job?

As an academic physician, I have tremendous flexibility with my schedule. Although I work very hard, I do so because I want to, not because I have to. I also enjoy collaborating with a multidisciplinary team of very smart individuals who are all passionate about pushing the boundaries of discovery and transforming patient care.

33% University-Based Faculty

31% Private Practice

National Average:
Academics: 10-20%
Private Practice: 80-90%
# Job Placement of Recent Graduates

## Class of 2015

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Location</th>
<th>Practice Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theodore Elsaesser, MD</td>
<td>University of Wisconsin</td>
<td>Madison, WI</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Kristen Grabow Moore, MD, MEd</td>
<td>Emory University</td>
<td>Atlanta, GA</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Aaron Kraut, MD</td>
<td>University of Wisconsin</td>
<td>Madison, WI</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Jason Palmatier, MD</td>
<td>Loyola University</td>
<td>Maywood, IL</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Elizabeth Dearing, MD</td>
<td>Vanderbilt University</td>
<td>Nashville, TN</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Dana Hirsch, MD</td>
<td>Mercy Hospital</td>
<td>Chicago, IL</td>
<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Jude Kieltyka, MD, MPH</td>
<td>Methodist Hospital</td>
<td>Gary, IN</td>
<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Juliet Seery, MD</td>
<td>Advocate Lutheran General Hospital</td>
<td>Park Ridge, IL</td>
<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Christopher Frantz, MD</td>
<td>Sherman Hospital</td>
<td>Elgin, IL</td>
<td>Private Practice</td>
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<tr>
<td>Matthew Kuhns, MD</td>
<td>Northwest Community Hospital</td>
<td>Arlington Heights, IL</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Andrew Pirotte, MD</td>
<td>Lawrence Memorial Hospital</td>
<td>Lawrence, KS</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Peter Samuel, MD, MBA</td>
<td>Presence Saint Joseph Medical Center</td>
<td>Joliet, IL</td>
<td>Private Practice</td>
</tr>
</tbody>
</table>

## Class of 2014

<table>
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<th>Location</th>
<th>Practice Setting</th>
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<tr>
<td>Krista Brucker, MD</td>
<td>Indiana University</td>
<td>Indianapolis, IN</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Alicia Peterson, MD</td>
<td>University of Kansas</td>
<td>Kansas City, KS</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Benjamin Roth, MD</td>
<td>University of South Carolina, Greenville</td>
<td>Greenville, SC</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Adriana Segura, MD</td>
<td>University of Texas, San Antonio</td>
<td>San Antonio, TX</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Nathan Olson, MD</td>
<td>US Air Force, Brooke Army Medical Center</td>
<td>Sam Houston, TX</td>
<td>Private Practice</td>
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<tr>
<td>Lexie Doré, MD</td>
<td>Methodist Hospital</td>
<td>Gary, IN</td>
<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Alison Foster-Goldman, MD</td>
<td>Cedars-Sinai Medical Center</td>
<td>Los Angeles, CA</td>
<td>Community Teaching Affiliate of UCLA</td>
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<tr>
<td>Lauren Gallagher, MD, MA</td>
<td>St. Luke’s Hospital</td>
<td>New Bedford, MA</td>
<td>Community Teaching Affiliate of UCLA</td>
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<tr>
<td>Amy Kiraly, MD</td>
<td>Northwestern Lake Forest Hospital</td>
<td>Lake Forest, IL</td>
<td>Community Teaching Affiliate of Northwestern</td>
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<td>Matthew Patton, MD</td>
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<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Evan Pushchak, MD</td>
<td>Wake Emergency Physicians</td>
<td>Cary, NC</td>
<td>Community Teaching Affiliate of Wake Forest</td>
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<tr>
<td>Brian Sellers, MD</td>
<td>Northwestern Lake Forest Hospital</td>
<td>Lake Forest, IL</td>
<td>Community Teaching Affiliate of Northwestern</td>
</tr>
<tr>
<td>Jason Koob, MD</td>
<td>Kaiser Permanente</td>
<td>San Francisco, CA</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Charles Pearce, MD</td>
<td>Madison Emergency Physicians</td>
<td>Madison, WI</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Conor Schaye, MD, MPH</td>
<td>Sherman Hospital</td>
<td>Elgin, IL</td>
<td>Private Practice</td>
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### Class of 2013

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<tr>
<th>Name</th>
<th>Institution</th>
<th>Location</th>
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<tbody>
<tr>
<td>Nicholas Hartman, MD, MPH</td>
<td>Wake Forest Baptist Health</td>
<td>Winston-Salem, NC</td>
<td>Academic/Faculty</td>
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<tr>
<td>Andrew Lee, MD</td>
<td>University of Wisconsin</td>
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<tr>
<td>Brian Patterson, MD, MPH</td>
<td>University of Wisconsin</td>
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<tr>
<td>Amit Phull, MD</td>
<td>Northwestern University Bain Consulting</td>
<td>Chicago, IL</td>
<td>Academic/Faculty Consulting</td>
</tr>
<tr>
<td>Natasha Wheaton, MD</td>
<td>University of Iowa</td>
<td>Iowa City, IA</td>
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<tr>
<td>Usha Periyarayagam, MD, MPH</td>
<td>Brigham and Women’s Hospital</td>
<td>Boston, MA</td>
<td>Fellowship, International Emergency Medicine</td>
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<tr>
<td>Shelby Kaplan, MD, MBA</td>
<td>West Suburban Medical Center</td>
<td>Oak Park, IL</td>
<td>Community Teaching Affiliate of Cook County</td>
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<tr>
<td>Melissa Marinelli, MD</td>
<td>Lutheran General Hospital</td>
<td>Park Ridge, IL</td>
<td>Community Teaching Affiliate of UIC</td>
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<tr>
<td>Molly Weiner, MD</td>
<td>Exempla St. Joseph Hospital</td>
<td>Denver, CO</td>
<td>Community Teaching Affiliate of Denver Health</td>
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<tr>
<td>Nicholas Borm, MD</td>
<td>Emergency Medical Associates</td>
<td>Manhattan Beach, CA</td>
<td>Private Practice</td>
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<tr>
<td>Jacqueline Khorasanee, MD</td>
<td>Kaiser Permanente Woodland Hills</td>
<td>Woodland Hills, CA</td>
<td>Private Practice</td>
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### Class of 2012

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<tbody>
<tr>
<td>Holly Bartimus, MD</td>
<td>Lutheran Medical Center</td>
<td>Brooklyn, NY</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Mary McHugh, MD</td>
<td>Loyola University Medical Center</td>
<td>Maywood, IL</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Lauren Pierce, MD</td>
<td>SUNY Downstate</td>
<td>Brooklyn, NY</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Matthew Pirotte, MD</td>
<td>Loyola University Medical Center</td>
<td>Maywood, IL</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Lucas Rosiere, MD</td>
<td>Baystate Medical Center</td>
<td>Springfield, MA</td>
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<tr>
<td>Navneet Cheema, MD</td>
<td>Toxikon Consortium</td>
<td>Chicago, IL</td>
<td>Fellowship, Toxicology</td>
</tr>
<tr>
<td>Christopher Richards, MD</td>
<td>Northwestern University Northwestern University Institute for Healthcare Studies</td>
<td>Chicago, IL</td>
<td>Fellowship, Emergency Medical Services Fellowship, Health Services Research</td>
</tr>
<tr>
<td>Kori Sauser, MD</td>
<td>University of Michigan</td>
<td>Ann Arbor, MI</td>
<td>Fellowship, Robert Wood Johnson Foundation Clinical Scholar</td>
</tr>
<tr>
<td>Heather Leonard, MD</td>
<td>Hartford Hospital</td>
<td>Hartford, CT</td>
<td>Community Teaching Affiliate of UCONN</td>
</tr>
<tr>
<td>Robert Lockwood, MD, MA</td>
<td>Wake Forest Baptist Health</td>
<td>Winston-Salem, NC</td>
<td>Community Teaching Affiliate of Wake Forest University</td>
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<tr>
<td>Eunice Park, MD</td>
<td>Vista Health Care</td>
<td>Waukegan, IL</td>
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<tr>
<td>Masood Zaman, MD</td>
<td>Sherman Hospital</td>
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### Class of 2011

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<th>Name</th>
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<tbody>
<tr>
<td>Julie Cooper, MD</td>
<td>Christiana Care Health System</td>
<td>Newark, DE</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Kelly Williamson, MD</td>
<td>Advocate Christ Medical Center</td>
<td>Oak Lawn, IL</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Emily Doelger, RN, MD</td>
<td>University of Sydney</td>
<td>Sydney, Australia</td>
<td>Fellowship, Medical Simulation</td>
</tr>
<tr>
<td>Shana Kusin, MD</td>
<td>Oregon Health &amp; Science University</td>
<td>Portland, OR</td>
<td>Fellowship, Toxicology</td>
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<tr>
<td>Sara Friedman, MD</td>
<td>Mercy Hospital &amp; Medical Center</td>
<td>Chicago, IL</td>
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<tr>
<td>Erin Quattromani, MD</td>
<td>Methodist Hospital</td>
<td>Gary, IN</td>
<td>Community Teaching Affiliate of Northwestern</td>
</tr>
<tr>
<td>Anne Chung, MD, MPH</td>
<td>North Shore Medical Center</td>
<td>Salem, MA</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Kendra Cole, MD</td>
<td>Advocate Condell Medical Center</td>
<td>Libertyville, IL</td>
<td>Private Practice</td>
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<tr>
<td>Andrew Foster, MD</td>
<td>Madison Emergency Physicians</td>
<td>Madison, WI</td>
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<tr>
<td>Ashley Peko, MD, MS</td>
<td>Porter Hospital</td>
<td>Denver, CO</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Benjamin Sayers, MD</td>
<td>Forsyth Medical Center</td>
<td>Winston-Salem, NC</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Shera Teitge, MD, MA</td>
<td>Tacoma General Hospital</td>
<td>Tacoma, WA</td>
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### Class of 2010

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<tbody>
<tr>
<td>Jeremy Branzetti, MD</td>
<td>University of Washington</td>
<td>Seattle, WA</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Dave Lu, MD, MBe</td>
<td>University of Washington</td>
<td>Seattle, WA</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Matthew Kleinmaier, MD</td>
<td>Northwestern University</td>
<td>Chicago, IL</td>
<td>Academic/Faculty</td>
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<tr>
<td>Manish Asaravala, MD</td>
<td>University of California, San Francisco</td>
<td>San Francisco, CA</td>
<td>Fellowship, Ultrasound</td>
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<tr>
<td>Patrick Lank, MD</td>
<td>Northwestern University</td>
<td>Chicago, IL</td>
<td>Fellowship, Epidemiology</td>
</tr>
<tr>
<td>Katrina Leone, MD</td>
<td>Oregon Health &amp; Science University</td>
<td>Portland, OR</td>
<td>Fellowship, Medical Education</td>
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<tr>
<td>Danielle McCarthy, MD</td>
<td>Northwestern University Institute for Healthcare Studies</td>
<td>Chicago, IL</td>
<td>Fellowship, Health Services Research</td>
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<tr>
<td>Patrick Coleman, MD</td>
<td>Inova Fairfax Hospital</td>
<td>Falls Church, VA</td>
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<tr>
<td>Cynthia Galvan, MD</td>
<td>Methodist Hospital</td>
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<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Matthew Lazio, MD</td>
<td>Madison Emergency Physicians</td>
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<tr>
<td>Jon Van Roo, MD</td>
<td>Madison Emergency Physicians</td>
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<td>Private Practice</td>
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<tr>
<td>Steven Zahn, MD</td>
<td>Sherman Hospital</td>
<td>Elgin, IL</td>
<td>Private Practice</td>
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### Class of 2009

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<th>Name</th>
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<tbody>
<tr>
<td>Colleen Hickey, MD</td>
<td>John H. Stroger, Jr. Hospital of Cook County</td>
<td>Chicago, IL</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>Wesley Self, MD</td>
<td>Vanderbilt Medical Center</td>
<td>Nashville, TN</td>
<td>Academic/Faculty</td>
</tr>
<tr>
<td>May Yen, MD</td>
<td>Nashville General Hospital, Meharry Medical School</td>
<td>Nashville, TN</td>
<td>Academic/Faculty</td>
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<tr>
<td>Joshua Hilton, MD</td>
<td>University of Pennsylvania</td>
<td>Philadelphia, PA</td>
<td>Fellowship, Health Services Research</td>
</tr>
<tr>
<td>Emilie Powell, MD, MBA</td>
<td>Northwestern University Institute for Healthcare Studies</td>
<td>Chicago, IL</td>
<td>Fellowship, Health Services Research</td>
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## Class of 2009 - continued

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<tbody>
<tr>
<td>David Salzman, MD</td>
<td>Northwestern University Center for Simulation Technology and Immersive Learning</td>
<td>Chicago, IL</td>
<td>Fellowship, Medical Simulation and Immersive Learning</td>
</tr>
<tr>
<td>Heather Costello, MD, MA</td>
<td>NorthShore University Health System</td>
<td>Evanston, IL</td>
<td>Community Teaching Affiliate of U of Chicago</td>
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<tr>
<td>Sarah Donlan, MD</td>
<td>NorthShore University Health System</td>
<td>Evanston, IL</td>
<td>Community Teaching Affiliate of U of Chicago</td>
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<tr>
<td>Daniel Reaven, MD</td>
<td>Methodist Hospital</td>
<td>Gary, IN</td>
<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>J. Ambrose Insua, MD</td>
<td>McNeal Hospital</td>
<td>Berwyn, IL</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Jennifer Locke, MD</td>
<td>St. Anthony’s Hospital</td>
<td>Chicago, IL</td>
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## Class of 2008

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<tr>
<td>Erin Lareau, MD</td>
<td>Northwestern University</td>
<td>Chicago, IL</td>
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<tr>
<td>Randall Myers, MD</td>
<td>University of New Mexico</td>
<td>Albuquerque, NM</td>
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<td>Danielle McGee, MD</td>
<td>Northwestern University</td>
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<td>Daniel Castillo, MD</td>
<td>Evanston Hospital</td>
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<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Noah DeGarmo, MD</td>
<td>Evanston Hospital</td>
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<td>Community Teaching Affiliate of Northwestern</td>
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<tr>
<td>Rachel Norris, MD, MBe</td>
<td>Evanston Hospital</td>
<td>Evanston, IL</td>
<td>Community Teaching Affiliate of Northwestern</td>
</tr>
<tr>
<td>Ritesh Bhayani, MD</td>
<td>Kaiser Permanente</td>
<td>Woodland Hills, CA</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Mark Carney, MD</td>
<td>Emergency Medicine Associates</td>
<td>Germantown, MD</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Christian Herrera, MD</td>
<td>California Emergency Physicians – Kaweah Delta Health Care</td>
<td>Visalia, CA</td>
<td>Private Practice</td>
</tr>
<tr>
<td>Andrew Louie, MD, MPH</td>
<td>Little Company of Mary Hospital</td>
<td>Torrance, CA</td>
<td>Private Practice</td>
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## Class of 2007

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<th>Name</th>
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<tr>
<td>Britney Anderson, MD</td>
<td>University of Colorado</td>
<td>Denver, CO</td>
<td>Academic/Faculty</td>
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<tr>
<td>Frederick Korley, MD</td>
<td>Johns Hopkins University</td>
<td>Baltimore, MD</td>
<td>Academic/Faculty</td>
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<tr>
<td>Stacey Chamberlain, MD</td>
<td>University of Illinois, Chicago</td>
<td>Chicago, IL</td>
<td>Fellowship, International Emergency Medicine</td>
</tr>
<tr>
<td>Sanjeev Malik, MD</td>
<td>Resurrection Medical Center</td>
<td>Chicago, IL</td>
<td>Fellowship, Sports Medicine</td>
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<tr>
<td>Amy Zosel, MD</td>
<td>Rocky Mountain Poison Center, University of Colorado</td>
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<td>Fellowship, Toxicology</td>
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<tr>
<td>Michael Pearlman, MD</td>
<td>St. Francis Hospital</td>
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<td>Community Teaching Affiliate of UIC</td>
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<td>Kerstin Dostal, MD</td>
<td>St. Catherine Hospital</td>
<td>East Chicago, IN</td>
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<tr>
<td>Christopher Jenson, MD</td>
<td>Lawrence Memorial Hospital</td>
<td>Lawrence, KS</td>
<td>Private Practice</td>
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<tr>
<td>Rachel Reisner, MD</td>
<td>Northwest Community Hospital</td>
<td>Arlington Heights, IL</td>
<td>Private Practice</td>
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<tr>
<td>Bryan Trueworthy, MD</td>
<td>Providence Portland Medical Center</td>
<td>Portland, OR</td>
<td>Private Practice</td>
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</table>
Fellowship Opportunities at Northwestern

Medical Education
The two-year Northwestern Emergency Medicine Medical Education Fellowship provides comprehensive formal training in medical education scholarship and ample experiential opportunities to assimilate practical skills necessary for effective medical education leadership and administration. Weekly fellowship conference includes didactics and medical education works-in-progress meetings, and fellows receive financial support for a master’s in medical education or equivalent graduate degree. Fellows receive travel support and conference registration to major emergency medicine meetings and are encouraged to attend additional medical education conferences that align with their fellowship and career goals. Fellows are appointed to the rank of Instructor in the Clinician Educator academic promotion track and are appointed as Interim Assistant Residency Director or Interim Assistant Clerkship Director.

Hospice and Palliative Medicine
The HPM fellowship at Northwestern is a one-year program open to EM-trained physicians, leading to subspecialty board eligibility. Collaboration opportunities are available throughout the University as well as with the Education in Palliative and End of Life Care (EPEC) Project, the Buehler Center of Aging, Health, and Society, and with the Robert Lurie Comprehensive Cancer Center of Northwestern University.

Pediatric Emergency Medicine
Northwestern’s Pediatric EM fellowship is based at the Ann & Robert H. Lurie Children’s Hospital of Chicago. Fellows in this three-year training program obtain a broad clinical experience in the ED at Lurie Children’s as well as the ED at Northwestern Memorial Hospital. Teaching, research, and elective experiences all contribute to this well-rounded fellowship that leads to subspecialty board eligibility in PEM.

Health Services Research
In collaboration with the Northwestern Center for Healthcare Studies, fellowships in Health Services Research provide physicians with interdisciplinary training that prepares graduates to carry out the nation’s health services and outcomes research agenda. During this two-year program, fellows also work towards a master’s degree in health services research. Much of the fellowship training is achieved through mentored relationships between fellows and distinguished faculty mentors from across the University.

Emergency Medical Services
The EMS fellowship program is designed to prepare physicians to become leaders in the rapidly growing field of Emergency Medical Services and to conduct all aspects of EMS system direction. Working closely with the Chicago Fire Department, EMS fellows focus on the education, training, research, administration, and treatment aspects of a successful EMS system. This one-year fellowship leads to subspeciality board eligibility in EMS.

Administration
Northwestern’s Administration Fellowship involves active participation in the operations of our department. Administration fellows develop key skills essential to becoming successful clinical operations leaders. Administrative fellows may focus on quality measures systems, faculty and staff education, risk management, advancement of clinical operations innovations, financial operations, coding and billing, and clinical mentoring. Administration fellows may pursue a master’s degree in a relevant field.
The People - Current Residents
PGY4 Residents - Class of 2016

Lora AlKhawam, MD
Undergraduate: Northwestern University
Medical School: Northwestern University
Hometown: Chicago, IL
l-alkhawam@northwestern.edu

Gregory Apel, MD, MA
Undergraduate: Northwestern University
Medical School: University of Illinois at Chicago
Hometown: Glenview, IL
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Rebecca Caton, MD
Undergraduate: Macalester College
Medical School: University of Wisconsin
Hometown: Whitefish Bay, WI
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Samia Farooqi, MD
Undergraduate: Harvard University
Medical School: Northwestern University
Hometown: Riyadh, Saudi Arabia
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Kory Gebhardt, MD
Undergraduate: University of Pittsburgh
Medical School: University of Pittsburgh
Hometown: Greensburg, PA
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Jordan Kaylor, MD
Undergraduate: Duke University
Medical School: Emory University
Hometown: McLean, VA
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Colin McCloskey, MD
Undergraduate: University of Pittsburgh
Medical School: Tufts University
Hometown: Spencerport, NY
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Ricardo Rivera-Yagnich, MD
Undergraduate: University of Puerto Rico
Medical School: University of Puerto Rico
Hometown: San Juan, Puerto Rico
ricardo.rivera-yagnich@northwestern.edu

Teddi Rusinak, MD
Undergraduate: University of Oklahoma
Medical School: University of Oklahoma
Hometown: Edmond, OKW
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John Sarwark, MD
Undergraduate: Northwestern University
Medical School: Northwestern University
Hometown: Chicago, IL
john-sarwark@northwestern.edu

Grant Scott, MD
Undergraduate: Haverford College
Medical School: University of Cincinnati
Hometown: Springfield, OH
grant.scott@northwestern.edu

Victoria Weston, MD
Undergraduate: Duke University
Medical School: University of Michigan
Hometown: Highland Park, IL
victoria.weston@northwestern.edu

“Having gone to both undergrad and med school at NU, I was very open to moving for residency and felt excited about the potential to live somewhere new. I interviewed all over the country, but truly could not find a program better than this one in terms of the opportunities for mentorship, the fantastic clinical experience, and the camaraderie of the residents. I am so glad I stayed!”
Lora AlKhawam, NU EM ’16
The People - Current Residents
PGY3 Residents - Class of 2017

William Burns, MD
Undergraduate: Marquette University
Medical School: Loyola University Chicago
Hometown: Chicago, IL
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Rachel Haney, MD
Undergraduate: University of Notre Dame
Medical School: Temple University
Hometown: Wenonah, NJ
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Adnan Hussain, MD
Undergraduate: Saint Louis University
Medical School: George Washington University
Hometown: Homewood, IL
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Andrew Ketterer, MD, MA
Undergraduate: University of Iowa
Medical School: Northwestern University
Hometown: Iowa City, IA
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Alison Marshall, MD
Undergraduate: Oberlin College
Medical School: Temple University
Hometown: Santa Cruz, CA
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Meghan Quigley, MD
Undergraduate: Cornell University
Medical School: University of Pittsburgh
Hometown: Franklin, NJ
meghan.quigley@northwestern.edu

Joshua Zimmerman, MD
Undergraduate: University of Illinois
Medical School: University of Toledo
Hometown: Glenview, IL
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Elizabeth Byrne, MD
Undergraduate: University of Florida
Medical School: University of Florida
Hometown: Miami, FL
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Ryan Huebinger, MD
Undergraduate: Texas A&M University
Medical School: University of Texas, Southwestern
Hometown: McAllen, TX
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Sushil Jain, MD, MBA
Undergraduate: University of California, Los Angeles
Medical School: University of Chicago
Hometown: Anaheim, CA
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Michael Macias, MD
Undergraduate: University of California, San Diego
Medical School: Northwestern University
Hometown: Upland, CA
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Carrie Pinchbeck, MD
Undergraduate: George Washington University
Medical School: George Washington University
Hometown: Ridgefield, CT
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Logan Weygandt, MD, MPH
Undergraduate: Washington and Jefferson College
Medical School: Johns Hopkins University
Hometown: Johnstown, PA
paul.weygandt@northwestern.edu
The People - Current Residents
PGY2 Residents - Class of 2018

Ashley Amick, MD, MCSR
Undergraduate: Georgetown University
Medical School: University of Michigan
Hometown: Chicago, IL
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Evan Davis, MD
Undergraduate: University of Michigan
Medical School: Northwestern University
Hometown: East Lansing, MI
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Erik Handberg, MD
Undergraduate: Arizona State University
Medical School: University of Arizona
Hometown: Phoenix, AZ
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Kimberly Iwaki, MD
Undergraduate: University of California, Berkeley
Medical School: Northwestern University
Hometown: Monterey Park, CA
kimberly.iwaki@northwestern.edu

Matthew Klein, MD, MPH
Undergraduate: Yale University
Medical School: Brown University
Hometown: Park Ridge, IL
matthew.klein@northwestern.edu

Simiao Li, MD, MS
Undergraduate: Pomona College
Medical School: University of Pittsburgh
Hometown: Elgin, IL
simiao.li@northwestern.edu

Arthur Moore, MD
Undergraduate: Emory University
Medical School: Emory University
Hometown: Evans, GA
arthur.moore@northwestern.edu

Quentin Reuter, MD
Undergraduate: University of Wisconsin
Medical School: Vanderbilt University
Hometown: Milwaukee, WI
quentin.reuter@northwestern.edu

Charles Caffrey, MD
Undergraduate: American University
Medical School: Saint Louis University
Hometown: Kansas City, MO
charles.caffrey@northwestern.edu

Victor Gappmaier, MD
Undergraduate: University of Utah
Medical School: University of Illinois at Chicago
Hometown: Salt Lake City, UT
victor.gappmaier@northwestern.edu

Keith Hemmert, MD
Undergraduate: Harvard University
Medical School: New York University
Hometown: New York, NY
keith.hemmert@northwestern.edu

James Kenny, MD
Undergraduate: City College of New York
Medical School: Albany Medical College
Hometown: Staten Island, NY
james.kenny@northwestern.edu

Spenser Lang, MD
Undergraduate: Indiana Wesleyan University
Medical School: Ohio State University
Hometown: Colorado Springs, CO
spenser.lang@northwestern.edu

Andrew Moore, MD, MS
Undergraduate: University of Washington
Medical School: Virginia Tech
Hometown: Gig Harbor, WA
andrew.moore@northwestern.edu

Mitali Parmar, MD
Undergraduate: Johns Hopkins University
Medical School: Northwestern University
Hometown: Dubai, United Arab Emirates
mitali-parmar@northwestern.edu

Duncan Wilson, MD
Undergraduate: James Madison University
Medical School: Emory University
Hometown: Fairfax, VA
duncan.wilson@northwestern.edu
The People - Current Residents
PGY1 Residents - Class of 2019

Gabrielle Ahlzadeh, MD
Undergraduate: Northwestern University
Medical School: Northwestern University
Hometown: Los Angeles, CA
gabrielle-ahlzadeh@northwestern.edu

Jonathan Andereck, MD, MBA
Undergraduate: Vanderbilt University
Medical School: Vanderbilt University
Hometown: Dublin, OH
jonathan.andereck@northwestern.edu

Andrew Berg, MD
Undergraduate: University of California, Santa Barbara
Medical School: University of California, Irvine
Hometown: Sacramento, CA
andrew.berg@northwestern.edu

Jessica Bode, MD
Undergraduate: University of Florida
Medical School: University of Tennessee
Hometown: Memphis, TN
jessica.bode@northwestern.edu

Steve Chukwulebe, MD
Undergraduate: Loyola University Chicago
Medical School: University of Pennsylvania
Hometown: Lansing, IL
steve.chukwulebe@northwestern.edu

Katharine Colton, MD
Undergraduate: University of California, Berkeley
Medical School: Duke University
Hometown: Wellesley, MA
katharine.colton@northwestern.edu

Andrew Cunningham, MD
Undergraduate: University of California, Davis
Medical School: University of Southern California
Hometown: Vacaville, CA
andrew.cunningham@northwestern.edu

William Ford, MD, MBA
Undergraduate: University of Wyoming
Medical School: University of Colorado
Hometown: Stagecoach, CO
william.ford@northwestern.edu

Danielle Miller, MD
Undergraduate: Ohio State University
Medical School: Ohio State University
Hometown: Cincinnati, OH
danielle.miller@northwestern.edu

Aaron Quarles, MD, MPP
Undergraduate: University of Notre Dame
Medical School: Harvard University
Hometown: Cleveland, OH
aaron.quarles@northwestern.edu

Sarah Sanders, MD
Undergraduate: University of Wisconsin, Madison
Medical School: Northwestern University
Hometown: Plymouth, MN
sarah-sanders@northwestern.edu

Jacob Stelter, MD
Undergraduate: Elmhurst College
Medical School: Loyola University Chicago
Hometown: Lombard, IL
jacob.stelter@northwestern.edu

Jesús Treviño, MD, MBA
Undergraduate: Rice University
Medical School: Harvard University
Hometown: Edinburg, TX
jesus.trevino@northwestern.edu

Paul Trinquero, MD
Undergraduate: University of Georgia
Medical School: Northwestern University
Hometown: Peachtree City, GA
paul-trinquero@northwestern.edu

Hashim Zaidi, MD
Undergraduate: Rice University
Medical School: Baylor College of Medicine
Hometown: Houston, TX
hashim.zaidi@northwestern.edu
The People - Northwestern Faculty

James G. Adams, MD  
Professor of Emergency Medicine  
Chair, Dept. of Emergency Medicine  
Senior Vice President and Chief Medical Officer, Northwestern Medicine  
Medical School: Georgetown University  
Residency: University of Pittsburgh  
Fellowship: Medical Education, University of Texas, Southwestern

Stephen L. Adams, MD  
Professor of Emergency Medicine  
Professor of Internal Medicine  
Chicago Cubs Team Physician  
Medical School: Ohio State University  
Residency: Northwestern University

Emily A. Baran, MD, RDMS  
Assistant Professor of Emergency Medicine  
Assistant Director, Residency Program  
Director, Ultrasound Education  
Medical School: Northwestern University  
Residency: Stroger Hospital of Cook County

Christopher B. Beach, MD  
Associate Professor of Emergency Medicine  
Vice Chair, Dept. of Emergency Medicine  
Chief, Northwestern Lake Forest Hospital Department of Emergency Medicine  
Medical School: UMDNJ - Robert Wood Johnson  
Residency: Brooke Army Medical Center

Jennifer Chan, MD, MPH  
Assistant Professor of Emergency Medicine  
Director, Global Emergency Medicine  
Medical School: Northwestern University  
Residency: Harvard University (HAEMR)  
Graduate: Tulane University  
Fellowship: International Emergency Medicine, Harvard University

George Chiampas, DO  
Assistant Professor of Emergency Medicine  
Associate Director, Illinois EMS Region XI  
EMS Director, Chicago Police Department  
Chief Medical Officer, US Soccer Federation  
Medical Director, Chicago Marathon  
Medical School: Midwestern University  
Residency: Stroger Hospital of Cook County  
Fellowship: Sports Medicine, Resurrection Medical Center

D. Mark Courtney, MD, MSCI  
Associate Professor of Emergency Medicine  
Director, Research  
Medical School: Baylor University  
Residency: Carolinas Medical Center  
Graduate: Northwestern University  
Fellowship: Research, Carolinas Medical Center

Scott M. Dresden, MD, MS  
Assistant Professor of Emergency Medicine  
Medical School: Loyola University Chicago  
Residency: Boston University  
Graduate: Northwestern University  
Fellowship: Health Services Research, Northwestern University

Larry Faines, MD  
Assistant Professor of Emergency Medicine  
Director, Diversity Initiatives  
Medical School: UMDNJ - New Jersey  
Internship: Rush St. Luke’s Medical Center  
Residency: Stroger Hospital of Cook County

Abra Fant, MD, MS  
Instructor of Emergency Medicine  
Fellow, Medical Education  
Medical School: Rush University  
Residency: New York-Presbyterian Hospital  
Graduate: Northwestern University

Michael A. Giosndi, MD  
Associate Professor of Emergency Medicine  
Director, Residency Program  
Medical School: Loyola University Chicago  
Residency: Stanford University  
Fellowship: Faculty Development, Stanford University

Colleen Hickey, MD  
Assistant Professor of Emergency Medicine  
Medical School: Northwestern University  
Residency: Northwestern University
The People - Northwestern Faculty

Christopher Hogrefe, MD
Assistant Professor of Emergency Medicine
Assistant Professor of Orthopaedic Surgery
Medical School: University of Iowa
Residency: University of Iowa
Fellowship: Primary Care Sports Medicine, University of Iowa

Dale M. Kaufman, MD
Assistant Professor of Emergency Medicine
Medical School: University of Illinois at Chicago
Residency: Lutheran General Hospital

Howard Kim, MD
Instructor of Emergency Medicine
Fellow, Administration
Medical School: Duke University
Residency: Denver Health

Matthew A. Kippenhan, MD
Assistant Professor of Emergency Medicine
Assistant Director, Operations
Medical School: University of Wisconsin
Residency: Northwestern University

Amy V. Kontrick, MD
Assistant Professor of Emergency Medicine
Director, Medical Student Clerkship
Medical School: University of Pittsburgh
Residency: University of Chicago

Demetrios N. Kyriacou, MD, PhD, MPH
Professor of Emergency Medicine
Professor of Preventative Medicine
Senior Scientific Advisor
Medical School: University of Michigan
Residency: University of Southern California
Graduate: University of Michigan
Doctorate: Epidemiology, University of California, Los Angeles

Patrick Lank, MD, MS
Assistant Professor of Emergency Medicine
Assistant Director, Residency Program
Medical School: Albert Einstein College
Residency: Stroger Hospital of Cook County
Graduate: Epidemiology and Biostatistics, Northwestern University
Fellowship: Biostatistics, Northwestern University
Fellowship: Medical Toxicology, Toxikon Consortium

Erin Lareau, MD
Assistant Professor of Emergency Medicine
Medical School: Northwestern University
Residency: Northwestern University

Matthew R. Levine, MD
Assistant Professor of Emergency Medicine
Director, Trauma Education
Medical School: Northwestern University
Internship: Mt. Sinai Hospital
Residency: Long Island Jewish Medical Center

Dave W. Lu, MD, MBE
Assistant Professor of Emergency Medicine
Medical School: University of Pennsylvania
Residency: Northwestern University
Graduate: University of Pennsylvania

Sanjeev Malik, MD
Assistant Professor of Emergency Medicine
Director, Operations
Medical School: Northeastern Ohio University
Residency: Northwestern University
Fellowship: Sports Medicine, Resurrection Medical Center

James J. Mathews, MD
Professor Emeritus of Emergency Medicine
Medical School: University of Iowa
Residency: Northwestern University
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Medical School</th>
<th>Residency</th>
<th>Graduate</th>
<th>Fellowship</th>
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<tbody>
<tr>
<td>Danielle McCarthy, MD, MS</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>Health Services Research, Northwestern University</td>
</tr>
<tr>
<td>Danielle McGee, MD</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>University of Chicago</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>Emergency Ultrasound, Cook County Hospital</td>
</tr>
<tr>
<td>Kenneth S. Pearman, MD</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>Illinois Region XI</td>
</tr>
<tr>
<td>Matthew Pirotte, MD</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>Loyola University Chicago</td>
<td>Northwestern University</td>
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<tr>
<td>Emilie Powell, MD, MBA, MS</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>Indiana University</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>Health Services Research, Northwestern University</td>
</tr>
<tr>
<td>Christopher Richards, MD, MS</td>
<td>Instructor of Emergency Medicine</td>
<td>Stanford University</td>
<td>Northwestern University</td>
<td>EMS, Northwestern University</td>
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</tr>
<tr>
<td>David Salzman, MD, MEd</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
<td>University of Cincinnati</td>
<td>Simulation, Northwestern University</td>
</tr>
<tr>
<td>Michael J. Schmidt, MD</td>
<td>Assistant Professor of Emergency Medicine</td>
<td>University of Chicago</td>
<td>Northwestern University</td>
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<tr>
<td>Benjamin Schnapp, MD</td>
<td>Instructor of Emergency Medicine</td>
<td>Brown University</td>
<td>Brown University</td>
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<tr>
<td>Robert Turelli, MD</td>
<td>Instructor of Emergency Medicine</td>
<td>Tulane University</td>
<td>Yale University</td>
<td>Administration, Northwestern University</td>
<td></td>
</tr>
<tr>
<td>David N. Zull, MD</td>
<td>Professor of Emergency Medicine</td>
<td>Northwestern University</td>
<td>Barnes Jewish Hospital</td>
<td>Northwestern University</td>
<td></td>
</tr>
</tbody>
</table>
The People - Lurie Children’s Hospital Teaching Faculty

Mark Adler, MD
Associate Professor of Pediatrics
Associate Professor of Medical Education
Medical School: University of Pittsburgh
Residency: Johns Hopkins University
Fellowship: Pediatric Emergency Medicine, Johns Hopkins University

Jacqueline B. Corboy, MD
Assistant Professor of Pediatrics
Site Director - Pediatric Emergency Department at Northwest Community Hospital
Medical School: UMDNJ - New Jersey
Residency: Columbia University
Fellowship: Pediatric Emergency Medicine, Children’s Hospital Boston

Walter Eppich, MD, MEd
Associate Professor of Pediatrics
Associate Professor of Medical Education
Medical School: University of Heidelberg
Residency: Duke University
Graduate: University of Cincinnati
Fellowship: Pediatric Emergency Medicine, Yale University

Susan Fuchs, MD
Professor of Pediatrics
Associate Division Head, Pediatric Emergency Medicine
Medical School: UMDNJ - New Jersey
Residency: Columbia University
Fellowship: Pediatric Emergency Medicine, Children’s Hospital Boston

Russ Horowitz, MD
Assistant Professor of Pediatrics
Medical School: SUNY Downstate
Residency: Children’s National Medical Center
Fellowship: Pediatric Emergency Medicine, Northwestern University
Fellowship: Emergency Ultrasound, Cook County Hospital

Yiannis Katsogridakis, MD, MPH
Assistant Professor of Pediatrics
Associate Medical Director, Pediatric Emergency Department
Medical School: SUNY Brooklyn
Residency: Albert Einstein Medical Center
Graduate: Harvard University
Fellowship: Pediatric Emergency Medicine, Children’s Hospital Boston

Steven Krug, MD
Professor of Emergency Medicine
Division Head, Pediatric Emergency Medicine
Medical School: Tulane University
Residency: Yale University

Karen Mangold, MD
Assistant Professor of Pediatrics
Medical School: University of Rochester
Residency: Yale University
Fellowship: Pediatric Emergency Medicine, Northwestern University

Elizabeth C. Powell, MD, MPH
Professor of Pediatrics
Director, Fellowship Program
Medical School: Indiana University
Residency: Northwestern University
Graduate: University of Illinois at Chicago
Fellowship: Pediatric Emergency Medicine, Northwestern University

Sally Reynolds, MD
Associate Professor of Pediatrics
Medical Director, Pediatric Emergency Department
Medical School: Loyola University Chicago
Residency: Northwestern University
Fellowship: Pediatric Emergency Medicine, Northwestern University

Suzanne Schmidt, MD
Assistant Professor of Pediatrics
Site Director, NU EM Residency
Medical School: University of Chicago
Residency: Children’s Hospital of Philadelphia
Fellowship: Pediatric Emergency Medicine, Northwestern University

Karen Sheehan, MD, MPH
Professor of Pediatrics
Professor of Preventative Medicine
Medical School: Northwestern University
Residency: Northwestern University
Graduate: University of Illinois at Chicago
# The People - Methodist Hospital Teaching Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Medical School</th>
<th>Residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geoffrey Bauer, MD</td>
<td>Instructor of Emergency Medicine Assoc. Medical Director, Emergency Medical Services Vice President of Financial Operations, NEA Physicians Group</td>
<td>Northwestern University</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Nicholas Johnson, MD</td>
<td>Vice President of Operations, Methodist Hospitals Emergency Medicine Assoc. Medical Director, Emergency Medical Services Vice President, NEA Physicians Group</td>
<td>Loyola University Chicago</td>
<td>University of Chicago</td>
</tr>
<tr>
<td>Michael McGee, MD, MPH</td>
<td>Chief and Medical Director, Methodist Hospitals Emergency Medicine Medical Director, Indiana University Student Health Center President and CEO, NEA Physicians Group</td>
<td>Rush Medical College</td>
<td>New York Medical Center</td>
</tr>
<tr>
<td>Cynthia Galvan, MD</td>
<td>Site Director, Indiana University Clerkship Director, Medical Education</td>
<td>University of Chicago</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Ruby Long-Tousnel, MD</td>
<td>Quality Assurance Director Medical Director, Methodist Hospitals Advanced Life Support Courses</td>
<td>Indiana University</td>
<td>Summa Health System</td>
</tr>
<tr>
<td>Airron Richardson, MD, MBA</td>
<td>Director of Customer Service Vice Chief and Assoc. Director, Emergency Medical Services</td>
<td>Vanderbilt University</td>
<td>University of Chicago</td>
</tr>
<tr>
<td>Michael Peters, MD</td>
<td>Health System Clinician Director, Emergency Medical Services</td>
<td>University of Illinois at Chicago</td>
<td>Northwestern University</td>
</tr>
</tbody>
</table>

# The People - Northwestern Lake Forest Hospital Teaching Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Medical School</th>
<th>Residency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steve Edelstein, MD</td>
<td>Health System Clinician Assistant Medical Director, Northwestern Grayslake Emergency Center</td>
<td>University of Michigan</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Trevor Hamilton, MD</td>
<td>Health System Clinician Vice Chief, Northwestern Lake Forest Hospital Department of Emergency Medicine</td>
<td>Creighton University</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Amy Kiraly, MD</td>
<td>Health System Clinician Site Director, NU EM Residency</td>
<td>University of Connecticut</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Aaron Epstein, MD</td>
<td>Health System Clinician Medical Director, Northwestern Lake Forest Hospital Department of Emergency Medicine</td>
<td>Rush Medical College</td>
<td>Resurrection Medical Center</td>
</tr>
<tr>
<td>Steve Hodges, MD</td>
<td>Health System Clinician Assistant Medical Director, Northwestern Lake Forest Hospital Department of Emergency Medicine</td>
<td>University of Kansas</td>
<td>Northwestern University</td>
</tr>
<tr>
<td>Michael Peters, MD</td>
<td>Health System Clinician Director, Emergency Medical Services</td>
<td>University of Illinois at Chicago</td>
<td>Northwestern University</td>
</tr>
</tbody>
</table>
Contracts, Stipends, and Benefits

The McGaw Medical Center of Northwestern University is a diverse consortium of hospitals in the Chicagoland area recognized for excellence in patient care. McGaw is the 16th largest provider of Graduate Medical Education in the US. The combined resources of all McGaw locations provide a dynamic learning environment for over 1,000 graduate medical education trainees.

McGaw administers contracts, stipends, and benefits for all Northwestern residents. Benefits include overnight meal allowances, medical, dental, and vision insurance, a 401(k) plan, a USMLE Savings Program, as well as life, short-term disability, and long-term disability insurance. Optional benefits include Flexible Spending Accounts, Employee Assistance Program, on-site childcare, discounted health club memberships, software discounts, and more.

The Department of Emergency Medicine provides residents with ACLS, PALS, NRP, and ATLS certifications. In addition, the Department covers dues for SAEM and AAEM, and subscriptions to Academic Emergency Medicine and Rosh Review. All PGY3 residents attend the SAEM Annual Meeting.

Details about benefits and contracts, as well as stipend rates, are available online at: http://mcgaw.northwestern.edu.

Second Looks

A “second look” visit is an opportunity for you to shadow a Northwestern resident in our emergency department. The second look is not required and we do not rank applicants based on whether or not they return for a second look visit. Please use this time only to help your decision-making process.

All second look visits require notification. Contact Jill Craig at 312-926-9512 or emedres@northwestern.edu to schedule your visit. You are also welcome to participate in any residency activities in conjunction with your visit, including conferences, journal clubs, and Adams Clubs.

When arranging your second look, please keep the following in mind:
• As dictated by hospital policy, second looks must be limited to a maximum of 3 hours.
• Please dress appropriately in business casual attire. You MUST bring your white coat and a photo ID badge which must be worn at all times during your visit.
• Candidates typically have a more accurate and informative visit during the afternoon and evening hours, as the department tends to be slower in the morning.
### Grand Rounds

#### 2015-2016

<table>
<thead>
<tr>
<th>Guest Faculty</th>
<th>Affiliation</th>
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</thead>
<tbody>
<tr>
<td>Alden Landry, MD, MPH</td>
<td>Beth Israel Deaconess Medical Center</td>
</tr>
<tr>
<td>Sarah Williams, MD</td>
<td>Stanford University</td>
</tr>
<tr>
<td>Larissa Velez, MD</td>
<td>University of Texas Southwestern</td>
</tr>
<tr>
<td>Jennifer Wiler, MD, MBA</td>
<td>University of Colorado</td>
</tr>
<tr>
<td>Hilarie Cranmer, MD, MPH</td>
<td>Harvard University</td>
</tr>
<tr>
<td>Lalena Yarris, MD, MCR</td>
<td>Oregon Health &amp; Science University</td>
</tr>
<tr>
<td>Erik Hess, MD, MS</td>
<td>Mayo Medical School</td>
</tr>
<tr>
<td>Frederick Korley, MD, PhD</td>
<td>Johns Hopkins University</td>
</tr>
</tbody>
</table>

#### 2014-2015

<table>
<thead>
<tr>
<th>Guest Faculty</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Drew Fuller, MD, MPH</td>
<td>Emergency Medicine Associates</td>
</tr>
<tr>
<td>Joshua Broder, MD</td>
<td>Duke University</td>
</tr>
<tr>
<td>Benjamin Sun, MD, MPH</td>
<td>Oregon Health &amp; Science University</td>
</tr>
<tr>
<td>Jeremiah Schuur, MD</td>
<td>Harvard University/Brigham &amp; Women's Hospital</td>
</tr>
<tr>
<td>Kevin Biese, MD, MAT</td>
<td>University of North Carolina</td>
</tr>
<tr>
<td>Jan Shoenberger, MD</td>
<td>LAC/University of Southern California</td>
</tr>
<tr>
<td>Erik Laurin, MD</td>
<td>University of California, Davis</td>
</tr>
<tr>
<td>Sean Bryant, MD</td>
<td>Stroger Hospital of Cook County</td>
</tr>
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#### 2013-2014

<table>
<thead>
<tr>
<th>Guest Faculty</th>
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<tbody>
<tr>
<td>Paul Biddinger, MD</td>
<td>Harvard University/Massachusetts General Hospital</td>
</tr>
<tr>
<td>Ronald D. Stewart, MD</td>
<td>Dalhousie University</td>
</tr>
<tr>
<td>Stacey Chamberlain, MD, MPH</td>
<td>University of Illinois at Chicago</td>
</tr>
<tr>
<td>Kip Benko, MD</td>
<td>University of Pittsburgh</td>
</tr>
<tr>
<td>Robert Hendrickson, MD</td>
<td>Oregon Health &amp; Science University</td>
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<tr>
<td>Alex Manini, MD, MS</td>
<td>Mount Sinai Hospital</td>
</tr>
<tr>
<td>Damon Kuehl, MD</td>
<td>Virginia Tech School of Medicine</td>
</tr>
<tr>
<td>Jeffrey Klein, MD</td>
<td>Indiana University</td>
</tr>
<tr>
<td>Joel Geiderman, MD</td>
<td>UCLA/Cedars-Sinai Medical Center/ ABEM</td>
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<tr>
<td>Linda Regan, MD</td>
<td>Johns Hopkins University</td>
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### 2012-2013

<table>
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<tbody>
<tr>
<td>Adam Singer, MD</td>
<td>Stony Brook University Health Center</td>
</tr>
<tr>
<td>Amy Zosel, MD, MSCS</td>
<td>Medical College of Wisconsin</td>
</tr>
<tr>
<td>Britney Anderson, MD</td>
<td>University of Colorado, Denver</td>
</tr>
<tr>
<td>Javier Gonzalez del Rey, MD, MEd</td>
<td>University of Cincinnati</td>
</tr>
<tr>
<td>David Schriger, MD</td>
<td>University of California, Los Angeles</td>
</tr>
<tr>
<td>Zachary Meisel, MD, MPH, MS</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Edward Callahan, MD, MS</td>
<td>Medical College of Wisconsin</td>
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<tr>
<td>Colleen Roche, MD</td>
<td>George Washington University</td>
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<tr>
<td>O. John Ma, MD</td>
<td>Oregon Health &amp; Sciences University</td>
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<tr>
<td>Janis Tupesis, MD</td>
<td>University of Wisconsin, Madison</td>
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<tr>
<td>Brian Zink, MD</td>
<td>Brown University</td>
</tr>
<tr>
<td>Richard Levitan, MD</td>
<td>Thomas Jefferson University</td>
</tr>
<tr>
<td>Laura Hopson, MD</td>
<td>University of Michigan</td>
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### 2011-2012

<table>
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<tbody>
<tr>
<td>Udo Hoffmann, MD, MPH</td>
<td>Harvard University/Massachusetts General Hospital</td>
</tr>
<tr>
<td>Edward Jauch, MD, MS</td>
<td>Medical University of South Carolina</td>
</tr>
<tr>
<td>Kerry Broderick, BSN, MD</td>
<td>Denver Health Medical Center; ABEM</td>
</tr>
<tr>
<td>Erik Kulstad, MD</td>
<td>Advocate Christ Medical Center</td>
</tr>
<tr>
<td>Alan Jones, MD</td>
<td>University of Mississippi</td>
</tr>
<tr>
<td>N. Ewan Wang, MD</td>
<td>Stanford University</td>
</tr>
<tr>
<td>Greg Henry, MD</td>
<td>Past President, American College of Emergency Physicians</td>
</tr>
<tr>
<td>Mark Myczyk, MD</td>
<td>Toxikon Consortium/Stroger Hospital of Cook County</td>
</tr>
<tr>
<td>Scott Weingart, MD</td>
<td>Mount Sinai School of Medicine</td>
</tr>
<tr>
<td>Gene Hern, MD</td>
<td>Alameda County-Hichland General Hospital</td>
</tr>
<tr>
<td>Bentley Bobrow, MD</td>
<td>Maricopa Medical Center/Arizona Department of Health Services</td>
</tr>
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### 2010-2011

<table>
<thead>
<tr>
<th>Guest Faculty</th>
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<tbody>
<tr>
<td>Derek Robinson, MD, MBA</td>
<td>Center for Medicare and Medicaid Services</td>
</tr>
<tr>
<td>Vicki Noble, MD</td>
<td>Harvard University/Massachusetts General Hospital</td>
</tr>
<tr>
<td>Gus Carmel, MD</td>
<td>Stanford University/Kaiser Santa Clara</td>
</tr>
<tr>
<td>Jessie Pines, MD</td>
<td>George Washington University</td>
</tr>
<tr>
<td>Henry Epino, MD</td>
<td>Harvard University/Massachusetts General Hospital</td>
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<tr>
<td>Phil Fontanarosa, MD, MBA</td>
<td>Executive Deputy Editor, JAMA</td>
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<tr>
<td>Fracis DeRoos, MD</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Chad Kessler, MD</td>
<td>UIC/Jesse Brown VA Medical Center</td>
</tr>
<tr>
<td>Brent King, MD</td>
<td>University of Texas, Houston</td>
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### 2009-2010

<table>
<thead>
<tr>
<th>Guest Faculty</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td>Rob Rodgers, MD</td>
<td>University of Maryland</td>
</tr>
<tr>
<td>Teresita Hogan, MD</td>
<td>Resurrection Medical Center</td>
</tr>
<tr>
<td>Kathleen Clem, MD</td>
<td>Loma Linda University</td>
</tr>
<tr>
<td>John Prescott, MD</td>
<td>Education Chief, AAMC</td>
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<tr>
<td>Susan Stern, MD</td>
<td>University of Washington</td>
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<tr>
<td>Robert Muelleman, MD</td>
<td>University of Nebraska</td>
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<tr>
<td>Steve McLaughlin, MD</td>
<td>University of New Mexico</td>
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<tr>
<td>Stephan Bohan, MD, MS</td>
<td>Harvard University/Brigham &amp; Women’s Hospital</td>
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<tr>
<td>Vincent Verdile, MD</td>
<td>Dean, Albany Medical College</td>
</tr>
<tr>
<td>William Brady, MD</td>
<td>University of Virginia</td>
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<tr>
<td>Binh Ly, MD</td>
<td>University of California, San Diego</td>
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### 2008-2009

<table>
<thead>
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<th>Guest Faculty</th>
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<tbody>
<tr>
<td>Benjamin Abella, MD, MPhil</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Alan Kumar, MD</td>
<td>University of Chicago/Lutheran General Hospital</td>
</tr>
<tr>
<td>J. Christian Fox, MD, RDMS</td>
<td>University of California, Irvine</td>
</tr>
<tr>
<td>Alan Storrow, MD</td>
<td>Vanderbilt University</td>
</tr>
<tr>
<td>Debra Houry, MD, MPH</td>
<td>Emory University</td>
</tr>
<tr>
<td>Rita Cydulka, MD</td>
<td>Case Western Reserve University</td>
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<tr>
<td>Gail D’Onofrio, MD, MS</td>
<td>Yale University</td>
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<tr>
<td>Rachel Chin, MD</td>
<td>University of California, San Francisco</td>
</tr>
<tr>
<td>Jeff Kline, MD</td>
<td>Carolinas Medical Center</td>
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<tr>
<td>Andrew Perron, MD</td>
<td>Maine Medical Center</td>
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<tr>
<td>Trevor Mills, MD, MPH</td>
<td>Louisiana State University</td>
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## 2007-2008

<table>
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<th>Guest Faculty</th>
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<tbody>
<tr>
<td>Keith Wrenn, MD</td>
<td>Vanderbilt University</td>
</tr>
<tr>
<td>Jonathan Davis, MD</td>
<td>Georgetown University</td>
</tr>
<tr>
<td>Christopher Carpenter, MD, MSc</td>
<td>Washington University in Saint Louis</td>
</tr>
<tr>
<td>Robert Wears, MD</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Karen Cosby, MD</td>
<td>John H. Stroger, Jr. Hospital of Cook County</td>
</tr>
<tr>
<td>Laura Bontempo, MD</td>
<td>Yale University</td>
</tr>
<tr>
<td>Susan Stone, MD</td>
<td>University of Southern California</td>
</tr>
<tr>
<td>Diane Birnbaumer, MD</td>
<td>UCLA/Harbor Medical Center</td>
</tr>
<tr>
<td>Tom Scaletta, MD</td>
<td>Edward Hospital; President, AAEM</td>
</tr>
<tr>
<td>Eric Nadel, MD</td>
<td>Harvard University/Brigham &amp; Women’s Hospital</td>
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<tr>
<td>Sheryl Heron, MD, MPH</td>
<td>Emory University</td>
</tr>
<tr>
<td>Carlo Rosen, MD</td>
<td>Harvard University/Beth Israel Deaconess Medical Center</td>
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## 2006-2007

<table>
<thead>
<tr>
<th>Guest Faculty</th>
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<tbody>
<tr>
<td>David Talan, MD</td>
<td>UCLA/Olive View Medical Center</td>
</tr>
<tr>
<td>Jill Baren, MD, MBE</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>William Brady, MD</td>
<td>University of Virginia</td>
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<tr>
<td>Andra Bomkalns, MD</td>
<td>University of Cincinnati</td>
</tr>
<tr>
<td>David F. Brown, MD</td>
<td>Harvard University/Massachusetts General Hospital</td>
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<tr>
<td>Tracy Sanson, MD</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Frank Counselman, MD</td>
<td>Eastern Virginia Medical School; ACEP</td>
</tr>
<tr>
<td>Douglas Trocinski, MD</td>
<td>University of North Carolina, Chapel Hill</td>
</tr>
<tr>
<td>Brian Zink, MD</td>
<td>Brown Medical College</td>
</tr>
<tr>
<td>Katherine Heilpern, MD</td>
<td>Emory University</td>
</tr>
<tr>
<td>Wallace Carter, MD</td>
<td>Columbia/Cornell University</td>
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