State-of-the-art care

- Impact: More than 290,000 patient visits annually in five metro Atlanta emergency departments
- Pre-hospital and disaster care: Provide medical direction of (1) metro Atlanta 911 communications (ambulance and helicopter EMS agencies responding to more than 200,000 calls and transporting 150,000 patients annually), (2) fire department first responders in four local cities with a combined population of 181,000, and (3) Emory University Office of Critical Event Preparedness and Response (CEPAR)
- Toxicology: Co-direct Georgia Poison Center at Grady Hospital (third busiest poison center in the nation)
- Observation units: More than 12,000 annual admissions to outpatient observation units in three hospitals with a total of 46 beds; lengths of stay average 15 hours and discharge rates average 80%, setting national benchmarks.
- Bedside ultrasound: With 12 ultrasound machines across clinical sites, clinicians perform more than 6,500 ultrasound studies annually to improve and expedite care in Emory’s hospital emergency departments.
- Palliative care: Provide system-wide consultation services and inpatient hospice care for Emory Healthcare and Grady Health System

Improving care, reducing costs

Emory is documenting the value of using dedicated observation units in hospital emergency departments (EDs). **Michael Ross**, professor of emergency medicine and director of Observation Medicine at Emory, reported in *Health Affairs* that broader use of such units could shorten patient stays, decrease inpatient admissions, and save $5.5 billion to $8.5 billion annually in health care costs.

The type of observation unit Ross and his colleagues use is a dedicated unit where ED patients too sick for immediate discharge but too well to be admitted can remain as outpatients for up to 48 hours.

The majority of US hospitals provide observation services without using a dedicated observation unit with defined treatment protocols. “While EDs are the safety net of the health system, observation units are the safety net of the ED, providing benefits for both patients and hospitals,” report Ross and his Emory co-authors. Benefits for patients include better clinical outcomes, greater patient satisfaction, less diagnostic uncertainty, and improvements in the use of hospital resources and staff. See bit.ly/ED-observation.

To make a financial gift to the Department of Emergency Medicine, please contact **Gabrielle Stearns**, Director of Development at 404.727.2512 or email gabrielle.stearns@emory.edu.
Research and innovation

- Research focus on neuro-injury
  - 2,000 square feet of federally funded lab space
  - Clinical trials of acute treatments for traumatic brain injury, stroke, transient ischemic attack, seizure, and intracranial hemorrhage
  - Developing novel tools for concussion detection and prevention, including DETECT, a computerized helmet system that allows for testing at the time of injury, in minutes, rather than hours

- Lead CDC-funded Emory Center for Injury Control, with research on domestic partner violence, post-traumatic stress disorder, and motor vehicle accidents

- Collaborations with colleagues in public health, health services research (HIV and other infectious diseases), cardiovascular care, and quality and safety

Training in emergency care

- Largest postgraduate year 1-3 emergency medicine residency program in the nation, yielding more than two-thirds of the emergency physicians trained in Georgia

- Subspecialty physician training
  - Toxicology Residency, in partnership with CDC
  - First Emergency Medical Services Fellowship in the state
  - VA-funded Palliative Care and Hospice Medicine Fellowship
  - Administrative/Observation Medicine Fellowship focusing on emergency department operations, simulation, and curricular development
  - Education Fellowship, with advanced training in novel educational techniques, simulation, and curricular development

- Student training
  - Lead 5,000-square-foot simulation facility
  - Mandatory medical student clerkship and exposure in all four years of medical school curriculum
  - Collaboration with Emory NP and PA programs

Toxicology services, 24/7

**Brent Morgan**, professor and vice chair of emergency medicine, directs the Emergency Medicine department’s Toxicology Section, which encompasses an outpatient clinic and an inpatient consultation service at five hospitals (including two pediatric hospitals), with faculty participating in the care of more than 500 patients a year.

In addition, the section operates a two-year medical toxicology residency program and an international post-doc training program in collaboration with the CDC, the CDC’s Agency for Toxic Substances and Disease Registry, and the Georgia Poison Center.

In partnership with Emory’s Department of Pediatrics, the section co-directs the Georgia Poison Center, the third busiest poison center in the country, receiving 90,000 exposure calls a year. Toxicology faculty also train emergency medical service providers throughout the state of Georgia in care of patients requiring Advanced Hazmat Life Support.

Clinical sites in emergency medicine at Emory

- **Grady Hospital**: 125,000 annual visits, 19% admission rate, level I trauma center, full ED renovation under way. Staffed by Emory faculty, with support from PAs, NPs, and residents.

- **Emory University Hospital**: 38,000 annual visits, 34% admission rate, state-of-the-art expansion in 2013. Staffed by Emory faculty, with support from PAs, NPs, and residents.

- **Emory University Hospital Midtown**: 61,000 annual visits, 25% admission rate, state-of-the-art expansion in 2014. Staffed by Emory faculty, with support from residents.

- **Atlanta Veterans Affairs Medical Center**: 45,000 annual visits, 12% admission rate. Staffed by Emory faculty, with support from residents in internal medicine.

- **Emory Johns Creek Hospital**: 24,000 annual visits, 23% admission rate, 14% pediatric visits. Staffed by Emory Specialty Associate physicians (Emory-owned physician practice).