



## FAST FACTS

THE UNIVERSITY OF ARIZONA

# Arizona Emergency Medicine Research Center

The **Arizona Emergency Medicine Research Center (AEMRC)** is a collaborative statewide Center of Excellence dedicated to improving the health-care outcomes of patients with acute illness and injuries. The center's research focus extends from the prehospital environment, including 911 and emergency medical services (EMS) care, through the emergency department and critical-care settings.

### *History*

AEMRC was founded in 1990 to dramatically improve emergency systems and the care of patients with emergent problems in the emergency department or in the field. Today, the center is a national leader in emergency medicine research and training, including the application of new resuscitation techniques and hazardous event-preparedness medical training.

### *Areas of Emphasis*

The center brings together collaborative teams of multidisciplinary experts to achieve critical impact in areas affecting lives in Arizona today. Current areas of emphasis include improving outcomes in prehospital cardiac arrest, prehospital traumatic brain injury, emergency preparedness, prehospital systems, pediatrics, clinical-translational medicine and sepsis.

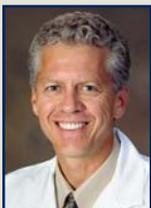
### *Impact*

AEMRC, together with the University of Arizona Department of Emergency Medicine, ranks 18th in National Institutes of Health (NIH) funding among U.S. academic centers and emergency departments.

The faculty of the UA Department of Emergency Medicine and the center regularly contribute research presentations at top scientific meetings in the United States and internationally. In addition, UA Department of Emergency Medicine residents participate in mentored research leading to national presentations and publications.

The center has established a statewide clinical research network that conducts numerous studies, including clinical trials investigating neurological emergencies and cardiac arrest. The center has formed research collaborations with many UA colleges and departments and with other universities in Arizona, the Southwest region and internationally. In addition, AEMRC has developed innovative collaborations with major and rural hospitals in Arizona serving diverse populations.

CONTINUED ON REVERSE



**Samuel M. Keim, MD, MS**  
Director

# Arizona Emergency Medicine Research Center Fast Facts



The following studies and programs exemplify the center's ongoing dedication to improving emergent care:

- **PECARN**

The Pediatric Emergency Care Applied Research Network (PECARN) is the first federally funded multi-institutional network for research dedicated to the prevention and management of acute illness and injuries in children. AEMRC is home to the Southwest Research Node Center (SW-RNC), one of PECARN's six Research Node Centers in the U.S. The SW-RNC builds on an existing innovative clinical trials infrastructure to conduct PECARN-approved, multi-institutional research.

- **SIREN**

The University of Arizona College of Medicine – Tucson is one of a team of six national institutions selected for the Strategies to Innovate EmergENcy Care Clinical Trials Network (SIREN), a new initiative of the NIH to advance critical emergency medicine research. SIREN provides infrastructure for large multi-site clinical trials to improve outcomes for patients with neurologic, heart, lung, blood and trauma emergencies, in all stages of emergency care, from pre-hospital emergency medical services to hospital EDs, trauma systems and emergency operative interventions. SIREN will allow rigorous comparative effectiveness studies and assessments of novel therapies.

- **EPIC**

The Excellence in Prehospital Injury Care (EPIC) Project is a comprehensive effort to evaluate and train Arizona paramedics and first responders on the national standards for prehospital best practices for victims of traumatic brain injury. To date, more than 90 percent of Arizona traumatic brain injury sufferers now receive care from EPIC-trained providers. EPIC is funded by grants from the NIH.

- **SHARE**

The Save Hearts in Arizona Registry & Education (SHARE) Program is a partnership with the center and the Arizona Department of Health Services, as well as many other groups to collect and analyze data related to all aspects of out-of-hospital cardiac arrest care. Working together, the program promotes evidence-based treatment and improve survival from out-of-hospital cardiac arrest.

- **CPRU**

CPR University is a program that builds on more than a decade of cardiac resuscitation research performed within and beyond Arizona. CPRU is an immersive experience in a state-of-the-art simulation center, teaching best practice resuscitation skills to prehospital providers and physicians from around the world.

- **POINT**

The Platelet-Oriented Inhibition in New Transient Ischemic Attack and Minor Ischemic Stroke Trial (POINT) is a nationwide, NIH-sponsored clinical trial to determine the safety and effectiveness of the combination of low-dose aspirin and a medication called clopidogrel, also known by the brand name Plavix®, in reducing the risk of stroke, heart attacks and other complications in patients who have just had a transient ischemic attack or minor ischemic stroke.

- **CPSC**

AEMRC collaborates with the U.S. Consumer Product Safety Commission in various national consumer-safety studies, including tracking every emergency visit at Banner – University Medical Center Tucson involving an injury associated with a consumer product. The center also provides training on consumer product safety on behalf of the commission.