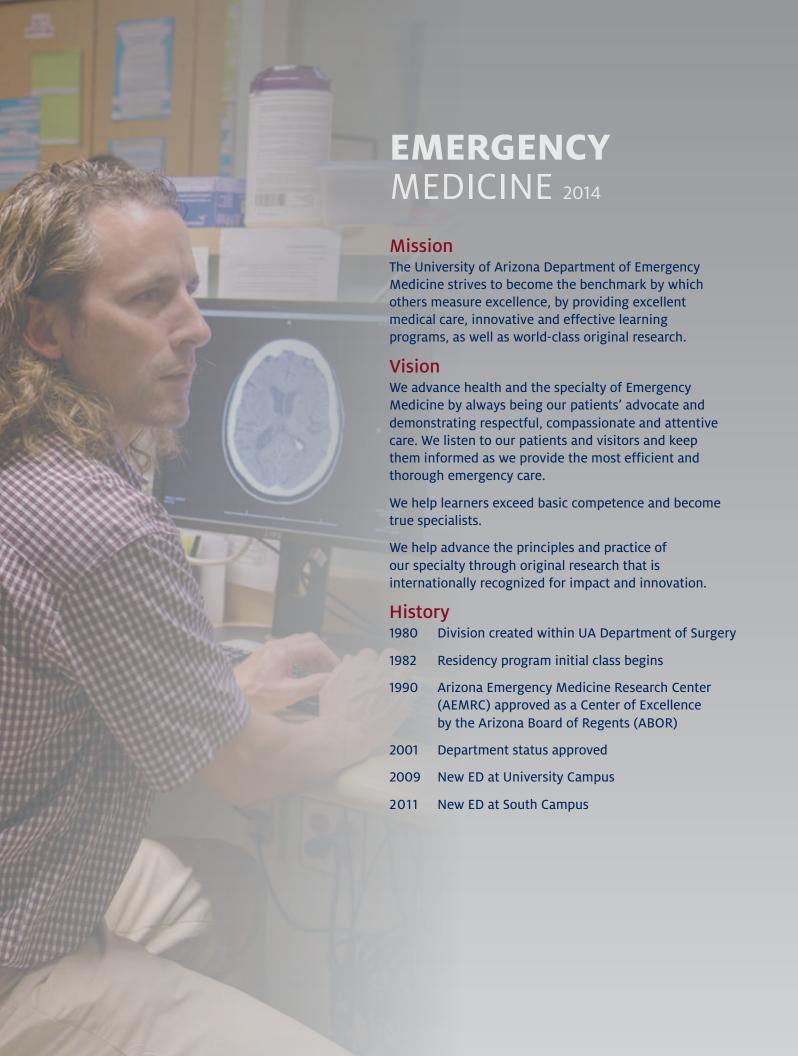


UA Department of Emergency Medicine Annual Report 2014



MESSAGE from the Chair

When I tell people about Emergency Medicine at the University of Arizona College of Medicine – Tucson, I always start with a description of the residency training program.

Clearly we have three top programs in the nation that continue to attract the top medical students and graduate the finest EM specialists each year. The three- to five-year pipeline of training here is an amazing transformation of raw talent into superb skill.

Although the amount of energy invested by the new doctors in training and by the "older" doctors who are training them is enormous, it is the positive energy emitted from this relationship that keeps us happy and thoroughly engaged. I'm very sure that this positive environment has allowed us to tackle the many challenges that have come with the recent two-system merger/acquisitions.

This was a "banner" year for the department, and this next year, Banner Health offers our UA Emergency Medicine family an opportunity to maximize patient care impact within and outside of Tucson. The nonprofit corporation is looking to us for leadership in clinical, education and research domains and we are ready and willing to provide it!

Please take a few moments to browse the amazing 2014 milestones chronicled in this annual report and contact me if I can provide additional information.

Samuel M. Keim, MD, MS

ennen Keur

Professor and Chair
UA Department of Emergency Medicine
Director, Arizona Emergency Medicine Research Center



FAST **STATS**

Funding

As the only Level I trauma center south of Phoenix, Banner - University Medical Center Tucson's emergency department handles patients with the most serious injuries.

\$60 million
Annual Gross Charges

Education

Clerkships

Electives in toxicology, wilderness medicine, emergency ultrasound, CPR teaching and training, research, EM/critical care and an acting internship in Emergency Medicine (EM).

Fellowship Programs

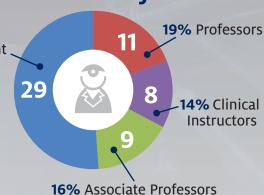
- Academic Research Fellowship
- **W** Clinical Informatics Fellowship
- Critical Care Fellowship
- **EMS** Fellowship
- Emergency Ultrasound Fellowship
- Medical Toxicology Fellowship
- Sports Medicine Fellowship

Hospice and Palliative Medicine Fellowship 51% Assistant **Professors**



Faculty Distribution by Rank

57 Faculty

















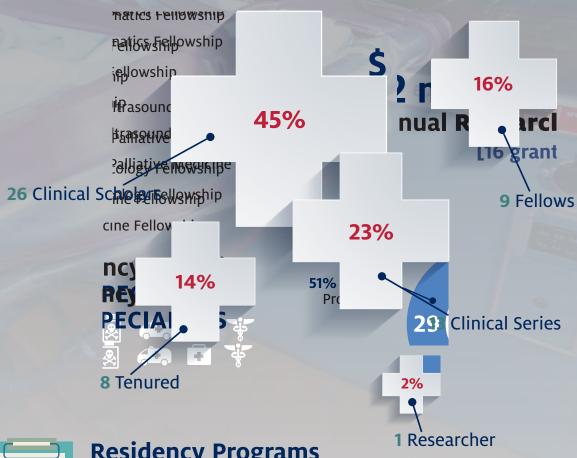


Number of Patient Visits

\$20 million All Funds Budget

\$2 million **Annual Research Funding** [16 grants in 2014]

Faculty Distribution by Academic Track





Residency Programs

45 residents UA at Banner - University Medical Center Tucson Residency **18** residents UA at Banner – University Medical Center South Residency 14 residents UA Combined Emergency Medicine - Pediatric Residency

OUR CLINICAL PRACTICE

Academic emergency medicine at the University of Arizona began in September 1980 with four full-time faculty caring for less than 20,000 patients per year at the then-named University Medical Center (UMC) Emergency Department. Emergency Medicine received academic department status on July 1, 2001.

Today, 57 clinical faculty members practice at Banner - University Medical Center Tucson and Banner - University Medical Center South Emergency Departments, with a combined annual census of 120,000 patient visits. More than 70 percent of admissions for both hospitals originate in these two EDs. DEM faculty members serve as medical directors for both hospital EDs, the Tucson Fire Department and Pima County EMS agencies. Two faculty members are in the prestigious Institute of Medicine of the National Academies.

The UA Department of
Emergency Medicine strives to
be interdisciplinary-minded and
highly integrated within modern
health-care networks. EMS
personnel, trained and directed
by EM physicians, initiate
life-saving resuscitations.
Evidence-based diagnostics
and interventions, once only
performed in ICUs, now are
initiated at those very sites
and are leading to dramatically
improved outcomes. Minimally

interrupted CPR for cardiac arrest, early goal-directed therapy for traumatic brain injury, prehospital diagnosis of acute myocardial infarction and rapid split-flow evaluation and triage of ambulatory patients are examples of proven patient-care interventions that even 10 years ago were merely hypotheses. Academic emergency departments, like ours, serve as proving grounds for these new clinical innovations.

Clinical Highlights New Faculty



Charles B. Cairns, MD, FACEP, FAHA, a nationally recognized leader in emergency and critical care

research, joined the Department of Emergency Medicine as professor. He also serves as interim dean of the UA College of Medicine – Tucson and assistant vice president for clinical research and clinical trials at the University of Arizona Health Sciences Center.

Prior to joining the UA, Dr.
Cairns was professor and chair
of the Department of Emergency
Medicine at the University
of North Carolina at Chapel
Hill, where he also served as
consulting faculty for the Duke
Clinical Research Institute at
Duke University Medical Center.

Dr. Cairns' research interests include the host response to acute infections, acute asthma, trauma and cardiac resuscitation and regionalization of emergency and critical care. He has published more than 160 scientific articles and reviews.

Dr. Cairns is an honors graduate of Dartmouth College and was a Holderness Medical Fellow at the University of North Carolina, where he received the Medical Faculty Award as the outstanding graduating medical student. He completed an emergency medicine residency and EMF Research Fellowship at the Harbor-UCLA Medical Center. He received postgraduate training in the Program in Genetics of Complex Diseases at the Jackson Laboratory in Bar Harbor, Maine, and the Health Care Leadership Academy at the Kenan-Flagler School of Business at the University of North Carolina.



Bentley J. Bobrow, MD, FACEP, FAHA, internationally recognized for his contributions to the field of

resuscitation science and emergency medical care, has been appointed distinguished professor in the UA Department of Emergency Medicine at the University of Arizona College of Medicine – Tucson, and co-director of EMS research and associate director of the



Arizona Emergency Medicine Research Center – Phoenix. Dr. Bobrow also serves as the medical director for the Arizona Department of Health Services' Bureau of Emergency Medical Services (EMS) and Trauma System.

Dr. Bobrow is renowned for his work on implementing and measuring systems of care aimed at improving outcomes for time-sensitive emergency medical conditions, such as out-of-hospital cardiac arrest (OHCA), ST-Elevation myocardial infarction (STEMI) and traumatic brain injury (TBI).

Dr. Bobrow is the principal investigator for the HeartRescue Program – Arizona, which implements and measures system-wide resuscitation interventions for OHCA in the state. This includes the integration of OHCA care across multiple 9-1-1 centers, 120 EMS agencies and 40 hospitals. He is the technical advisor for the HeartRescue Global Project, which implements best practices for acute cardiac care in several nations, including China and India. Dr. Bobrow is the medical director of a Clinton Global Health Initiative to implement and measure Telecommunicator-CPR across the United States and in 11 countries in Asia.

Dr. Bobrow is co-investigator with **Daniel Spaite**, **MD**, UA distinguished professor of emergency medicine, for the National Institutes of Health (NIH) Ro1 study "Excellence in

Prehospital Injury Care (EPIC)
Traumatic Brain Injury" and is
a member of the Institute of
Medicine (IOM) Committee
on Treatment of Cardiac
Arrest: Current Status & Future
Directions. He is chairman of the
advisory board for the Cardiac
Arrest Registry to Enhance
Survival (CARES) Program and
past chair of the American Heart
Association Basic Life Support
Subcommittee.

A graduate of the UA, Dr.
Bobrow received his medical
degree from Jefferson Medical
College in Philadelphia and his
emergency medicine residency
training at Maricopa Medical
Center in Phoenix. He has
published more than 80 peerreviewed articles and more than
100 abstracts.

THE **BEST** TRAIN HERE

Undergraduates

The UA Department of Emergency Medicine developed the Emergency Medical Services course (EMD 350) for undergraduate students interested in out-of-hospital patient care. This course provides a broad overview of medical care provided by EMS services, the science behind EMS operations and the legal framework under which out-of-hospital medical care is provided. The course is directed by DEM faculty members Joshua B. Gaither, MD, and Hans Bradshaw, MD.

Medical Students

In addition to electives in toxicology, emergency ultrasound, CPR training and research, wilderness medicine and emergency medical services, the **UA Department of Emergency Medicine offers** two outstanding fourth-year clinical EM rotations. The EM/critical care rotation is a four-week EM experience, designed not only for career-bound students, but also students looking for exposure to the ED as well as the ICU. The acting internship in EM is intended for EM-bound students who already have completed at least one EM rotation. It is a rigorous four-week experience, during which students have additional responsibility and autonomy. The DEM faculty members are heavily involved in teaching medical students. Many serve as society block mentors and associate block directors in the UA College of Medicine - Tucson. In addition, ongoing teaching efforts are held on the UA main campus.

Residency & Fellowship Programs

The department has three residency programs with 77 total slots. This includes categorical emergency medicine programs based at Banner – University Medical Center Tucson and Banner – University Medical Center South hospitals and a combined emergency medicine/ pediatrics program. With more than 50 applicants for every residency opening, DEM attracts some

of the truly best and brightest medical student graduates in the country to Tucson. The 25-year accreditation record is nearly citation-free.

The department has highly effective fellowship programs in Academic Research, Critical Care, EMS, Emergency Ultrasound, Medical Toxicology, Sports Medicine, Clinical Informatics, and Hospice and Palliative Medicine. The department also anchors a very successful two-year post-fellowship Clinician Scientist Program.

Faculty members play leading roles in the American Board of Emergency Medicine, the ACGME Residency Review Council, multiple academic journals, the Arizona Department of Health Services and numerous University of Arizona and College of Medicine committees. The DEM is proud to have an extremely active faculty teaching role in ArizonaMed.

Education Highlights

Residency Subspecialty Tracks

The Emergency Medicine Residency Program implemented an elective track program that allows residents the opportunity to obtain more in-depth exposure to a subspecialty area while in training. Residents participating in this optional track have been paired with a faculty mentor with expertise in their EM subspecialty, and are tailoring their second- and third-year electives to align with their track and with their ScholarQuest research project.

Subspecialty tracks available:

- Critical Care
- EMS
- · Medical Education/Simulation
- Sports Medicine
- Emergency Ultrasound
- · Pediatric Emergency Medicine
- · Rural, Border, Global Health



Tucson Campus Track Directors:

Jarrod Mosier, MD; Aaron Leetch, MD; Terry Valenzuela, MD; Kathy Hiller, MD; Vivienne Ng, MD; Anna Waterbrook, MD; and Srikar Adhikari, MD.

South Campus Track Directors:

Hans Bradshaw, MD, and Bradley Dreifuss, MD.

New Fellowships

🐶 Clinical Informatics Fellowship

The Department of Emergency Medicine is one of a few emergency departments in the country to offer a Clinical Informatics Fellowship, a two-year training program designed to create outstanding active clinical leaders with expertise in health information technology. The program aims to provide fellows the knowledge and skills needed to transform the practice of emergency medicine by analyzing, designing, implementing and evaluating information systems to improve patient care and enhance clinician productivity.

Lisa Chan, MD, professor of emergency medicine, who recently earned board certification in clinical informatics, a new subspecialty approved by the American Board of Medical Specialties, and Kevin Reilly, MD, are directing the UA Department of Emergency Medicine's newly formed Division of Clinical Informatics and Clinical Informatics Fellowship.

* Hospice and Palliative Medicine

The Department of Emergency Medicine, in partnership with the Department of Medicine Division of Geriatrics, General and Palliative Medicine, now offers an accredited one-year fellowship program preparing fellows for the Hospice and Palliative Medicine Board Examination.

Emergency medicine physicians often see patients with advanced and end-stage disease. Once in the hospital acute-care setting, the patient's objectives and goals may be in direct contrast to the ED strategies of life-prolonging treatment. Training in palliative care in the emergency department increasingly is being recognized as important in providing the best care to these patients.

Emergency medicine hospice and palliative fellows train with a palliative medicine team of experts from internal medicine, critical care medicine, psychiatry, oncology, anesthesia/pain, emergency medicine, surgery and trauma, social work and the chaplaincy at Banner - University Medical Center Tucson. Together, the team works to maximize quality of life while addressing the physical, psychological, social and spiritual needs of both patient and family.

Michelle Rhodes, MD, assistant professor of emergency medicine, is one of only a few emergency medicine physicians in Arizona to receive fellowship training and board certification in palliative medicine. She also serves as the assistant director of the department's fellowship program.

Resident Research Forum 2014

The 2014 UA Department of Emergency Medicine Research Forum featured keynote speaker William Barsan, MD, professor and former chair of the Department of Emergency Medicine at the University of Michigan Medical School.

Winners of the Maria C. Mandell Award for the outstanding ScholarQuest project at the annual forum were Ashley Tran, MD (current PGY2), Amar Vira, MD (graduated, currently an ultrasound fellow at The Ohio State University), and John Rosell, MD (current PGY3) for their project: "Implementing a Ventilator-Associated Pneumonia Bundle in an Academic Emergency Department."

Mentors were: Lawrence DeLuca, Jr. EdD, MD; Lisa Stoneking, MD; Kristi J.H. Grall, MD, MPHE; Wanda Larson, RN; Angela Westergard, RN, MSN, MBA, CEN; Kurt Denninghoff, MD. Other contributors: Jessica Gonzaga; Brendan Munzer, MD; Donald Davidson, MD; Erik Gerlach; Laurel Yan.

More Resident Research Presented at 2014 Forum:

Does Ketamine Plus Morphine Improve Pain Control Compared to Morphine Alone In the Emergency Department, A Randomized Controlled Trial — Jennifer Smith, MD; Jaiva Larsen, MD.

Mentors: Matthew Berkman, MD; Uwe Stolz, PhD, MPH; Daniel Hays; PharmD, BCPS, FASHP; Anna Waterbrook, MD

Retrospective Educational Analysis of Emergency Medicine Resident Experience on Orthopedic and Sports Medicine Rotations — Robert McAtee, MD; Jessica Prior, MD. Mentors: Anna Waterbrook, MD; Allison Lane, MD; Lisa Stoneking, MD; Alice Min, MD; Kristi J.H. Grall, MD, MHPE

Bystander Compression Quality following an Ultrabrief CPR Instructional Video: A Simulation Study
— Michael Pleasants, MD

A Comparison of the Reusable Standard GlideScope to the Disposable Cobalt GlideScope for Adult ED Intubations — Nathan Holman, MD. Mentors: John C. Sakles, MD; Asad E. Patanwala, PharmD; Jarrod M. Mosier, MD; Mari Cosentino, MD; John Dicken, BS

Rapid Sequence Intubation Compared to Non-RSI for Out-of-OR Intubations with Video Laryngoscopy — River Bouska, MD. Mentors: John C. Sakles, MD; Uwe Stolz, PhD, MPH; Jarrod Mosier, MD

The Impact of Obesity on First Pass Success for Entrochacheal Intubation — Daniel Falvey, MD; Nicholas Stea, MD

Are Discharge Instructions for Concussions from the Emergency Department Adequate — Taylor Shekell, MD; Lauren Barnett, MD; Michael Bouska, MD; David Verbunker, MD; Alexandra Gruner Keogh, MD. Mentors: Anna Waterbrook, MD; Allison Lane, MD

Spanish Language Immersion Training for Residents

The UA Department of Emergency Medicine received a grant from the Academic Insurance Funding, Limited (AIFL) Risk Management Process Improvement Fund to support a medical Spanish immersion curriculum for emergency medicine residents and staff at Banner – University Medical Center South (BUMCS).

BUMCS treats a high volume of Hispanic Spanishspeaking patients. The goal of the training is to improve quality of care received by Spanishspeaking patients by having medical professionals able to communicate in the patients' native language. Studies have shown that language barriers are an important detriment to quality health care, said **Lisa Stoneking**, **MD**, associate professor of emergency medicine and residency program director at BUMCS. In an emergency situation, when timing is most critical, limited English-proficient (LEP) patients may be at greater risk of serious medical errors due to communication problems.

Leading the Spanish language training effort are members of the UA Departments of Emergency Medicine, Surgery, Family and Community Medicine, Spanish and Portuguese and Mexican American Studies.

Into the Wild: New Wilderness Medicine Program

A new Wilderness Medicine and Advanced Wilderness Life Support Class is offered by the Department of Emergency Medicine. The College provides certification and training for graduating medical students, residents and faculty to draw from their medical expertise and apply it in the great outdoors. The new medical student elective is intended to instill a lifelong appreciation for wilderness medicine, both as a practical tool for future forays into the wild and as a legitimate academic pursuit.

Two weeks of lectures and in-class training is led by **Christopher G. Williams, MD**, UA Department of Emergency Medicine clinical assistant professor of wilderness medicine. Initiated by Dr. Williams, the elective teaches medical students how to plan, organize, triage, diagnose and treat patients and how to improvise and provide the best medical treatment possible outside of the traditional clinical setting.

The true test of their skills is through simulated emergency medical situations in the field at Madera Canyon, in the Coronado National Forest, 25 miles southeast of Tucson.

An additional benefit of the class is the opportunity to earn Advanced Wilderness Life Support certification.

ADVANCING **THE SCIENCE** OF EMERGENCY MEDICINE

The UA Department of Emergency Medicine, along with its research center of excellence, the Arizona Emergency Medicine Research Center (AEMRC) in Tucson and Phoenix, brings together collaborative teams of multidisciplinary experts to achieve critical impact in areas affecting lives in Arizona.

Department of Emergency
Medicine faculty members are
national leaders in emergency
medicine scholarly activity,
regularly contributing state-ofthe-art research presentations
at the top scientific meetings
in the United States and
internationally. In addition,
most residents participate in
mentored research leading to
national presentations and the
publication of original scientific
manuscripts.

The National Institutes of Health (NIH) ranked the Department of Emergency Medicine and AEMRC 17th among emergency medicine departments nationwide in health-funded research in 2014. Successful research initiatives, such as clinical research nurses stationed around the clock for clinical trial enrollment, as well as expansion of NIH-funded prehospital research in Phoenix, position the department to rank in the top 10 of NIH funding.

The department is committed to aligning its research focus

with the University of Arizona Health Sciences Center areas of biomedical research excellence: Health Disparities, Population Health & Health Outcomes, Precision Health and Neuroscience.

Research Highlights

Cardiology – DEM faculty partnered in the creation of minimally interrupted CPR for cardiac arrest that now has been proven to dramatically improve survival. Continued research activity, including extramural grant submissions, are ongoing. Collaborators include more than 80 EMS agencies, the UA Sarver Heart Center, the Arizona Department of Health Services and the biomedical industry.

Neuroscience – DEM faculty are conducting NIH-funded clinical research in traumatic brain injury that is making dramatic improvements in mortality and neurological outcomes. Continued research efforts include additional multiple extramural grant applications. Collaborations involve more than 80 EMS agencies, Phoenix Children's Hospital and the Arizona Department of Health Services.

Aging – DEM faculty are creating clinical areas specifically focused on the elderly (geri-friendly ED), as well as pursuing original research in collaboration with the Arizona Center on Aging.

TAC

Behavioral Health – Patients with mental health crises usually come through the emergency department on their way to stabilization.

DEM faculty have designed a behavioral health clinical area at Banner – University Medical Center South and are pursuing original research in behavioral emergencies. A goal is to collaborate with the UA Department of Psychiatry to create a Behavioral Emergency Fellowship.

Clinical Informatics – The department has established a **Clinical Informatics Division** to greatly enhance research, education and clinical care. Future physician scientists will be required to have clinical informatics skills to be successful in clinical research. The DEM is committed to training the future leaders in emergency medicine clinical informatics through a new fellowship led by Drs. Lisa Chan and Kevin Reilly. Research is underway in clinical decision support and quality improvement.

Critical Care – The department co-hosts one of the few emergency medicine-specific Critical Care Medicine (CCM) fellowships, in collaboration with the UA Department of Medicine Division of Pulmonary, Allergy, Critical Care and Sleep Medicine. The resulting translation of CCM knowledge and skills into the emergency department has been remarkable and is resulting in better patient outcomes. Current research focuses on sepsis, artificial oxygenation, prevention of ventilator-associated pneumonia and noninvasive central oxygenation monitoring.

Emergency Ultrasound – The department has one of the top academic emergency medicine ultrasound groups in the nation. Research studies include application to nondifferentiated shock, procedure assistance and biomechanical device development.

Sports Medicine – The department co-hosts an academic program in nonsurgical sports medicine with the UA Department of Family and Community Medicine. Faculty members assist the team physicians for the University of Arizona Athletics Department. Application of exercise programs in newly diagnosed diabetes and use of bedside ultrasound in diagnosis of sports injuries are examples of current funded research.

Medical Toxicology – Faculty members direct the Arizona Poison and Drug Information Center and conduct research on envenomation, drug overdose and hazardous materials training.



KEY ACCOMPLISHMENTS & AWARDS

Promotions



Dale P. Woolridge, MD, PhD, has been promoted to professor of emergency medicine. He joined the department in 2003, and serves as director of the Emergency Medicine/ Pediatric Emergency Medicine

Residency Program and as director of pediatric emergency medicine. He also is medical director of the Southern Arizona Children's Advocacy Center in Tucson.

He has received numerous honors, including fellowships from UA Department of Biochemistry and the American Heart Association, Achievement Rewards for College Scientists (ARCS) Scholar from the Flinn Foundation, and the Maria Mandel Research Award from the UA College of Medicine – Tucson.

Dr. Woolridge served as the chair of the American College of Emergency Physicians (ACEP) Section of Pediatrics, and now is on the faculty of the annual assembly of ACEP. In Arizona, he serves on a number of professional committees, including chair of the Arizona Department of Health Services Bureau of Emergency Medical Services advisory committee.

Author of the textbook "Emergency Medicine's Top Pediatric Clinical Problems" and co-author of three additional texts, Dr. Woolridge also has published numerous journal articles and book chapters. He is associate editor of the *Journal of Emergency Medicine*.

Dr. Woolridge is a researcher on the Health Resources and Services Administration (HRSA) grant State Partnership Regionalization of Care (SPROC) Program to expand its Pediatric Prepared Emergency Care (PPEC) program into more rural and tribal communities in the state and to integrate evidence-based guidelines into clinical decision-making for all participating facilities.



Dan Beskind, MD, MPH, has been promoted to associate professor of emergency medicine. He joined the department in 2002, coming from St. Joseph's Hospital in Tucson. He is the emergency medical services director

at Banner – University Medical Center South and is a co-developer of the educational series, "Advanced Disaster Preparedness & Response," a four-hour course for health professionals designed to improve care for disaster victims. He also is the head of the UA College of Medicine – Tucson medical student Resuscitation Education and CPR Training Group, known as REACT. The resuscitation research group, in collaboration with the UA Sarver Heart Center, pioneered the research and advocacy of chest-compression-only CPR.

Dr. Beskind served as physician evaluator and triage for victims of the Hurricane Katrina disaster for the Arizona Department of Health Services, and as a member of Disaster Preparedness Committee National Association of Emergency Medicine Service Physicians. He has published book chapters and articles in peer-reviewed publications, has been named Best Doctor for the past five years and voted best medical student educator by UA medical students in Tucson.



Matthew R. Berkman, MD, has been promoted to clinical associate professor of emergency medicine. Dr. Berkman joined the department in 2007 from the Memorial Hermann Southwest Medical Center in

Houston. He serves as associate head of clinical affairs at Banner – University Medical Center South, as well as the faculty advisor for the Emergency Medicine Interest Group.

In 2013, he received the Academy of Medical Education Scholars (AMES) Block and Clerkship Award, Clinical Medical Student Teaching Faculty (CMSTF), and the Faculty Leadership Award.

He has authored and co-authored book chapters and journal articles and has been invited at national and international conferences.



Lisa R. Stoneking, MD, has been promoted to associate professor of emergency medicine. She joined the department in 2008, and currently serves as program director of Banner – University

Medical Center South Emergency Medicine Residency Program.

Dr. Stoneking completed a clinician scientist program (two-year mentored faculty development program) at the UA, as well as the Arizona Clinical Research Training Program and the Academy of Medical Education Scholars/Office of Medical Student Education Teaching Scholars Program. Since 2010, she has participated in the Pediatric Sexual Assault Examiner On-Call program for the Child Advocacy Center in Tucson.

Coauthor of journal articles and abstracts on sepsis research, quality improvement, medical education and healthcare disparities, Dr. Stoneking is a peer reviewer of the Journal of Emergency Medicine and the Journal of Internal and Emergency Medicine. She is a member of the American College of Emergency Physicians, Society for Academic Emergency Medicine, and the Emergency Medicine Residents' Association.

Public Health Service Award



Frank G. Walter, MD, FACEP, FACMT, FAACT, professor of emergency medicine, professor of pharmacy practice and science at the UA College of Pharmacy, and medical toxicologist for the Arizona

Poison and Drug Information Center, has received the 2014 Public Health Service Award, Arizona's highest award for public health service to the people of Arizona, from the Arizona Medical Association and Arizona Department of Health Services (ADHS). The award was presented "in recognition of Dr. Walter's dedication as an exceptional, energetic public health and preparedness advocate, providing guidance and expertise to ADHS' emergency preparedness work."

Dr. Walter serves as medical director for the ADHS Bureau of Public Health Emergency Preparedness and is a Governor's Appointee to the Medical Direction Commission for the Bureau of EMS (Emergency Medical Services). Recently, he was the lead member of the Clinical Work Group to develop "Crisis Standards of Care" for Arizona. He serves as subject matter expert for statewide public health incidents and exercises to test preparedness for chemical, biological, radiological and nuclear incidents.

He is co-founder and editor of the Advanced Hazmat Life Support (AHLS) Program, co-sponsored by the American Academy of Clinical Toxicology and the Arizona Emergency Medicine Research Center. Since 1999, AHLS has taught more than 15,000 interdisciplinary health-care professionals from 64 nations around the world.

AACEM Lifetime Achievement Award



Peter Rosen MD, considered the "Father of Emergency Medicine" and a clinical professor at the UA, was presented the first-ever Lifetime Achievement Award from the Association of Academic Chairs of Emergency Medicine (AACEM).



Society for Airway Management International Award



John C. Sakles, MD, professor of emergency medicine, recently was elected to the Society for Airway Management (SAM) International Airway Faculty. Dr. Sakles has spent his career focusing on the clinical,

educational and research aspects of emergency airway management, with an emphasis on the "difficult airway." He is a world-renowned airway expert and has been on the forefront of research in new technologies, particularly the role of video laryngoscopy for emergency intubation. He has published numerous articles in the field of emergency airway management, including on such topics as video laryngoscopy, airway pharmacology, surgical airway management and remotely assisted "telebation." His papers have become some of the most cited works in the field.

Best Doctors

Department of Emergency Medicine faculty were recognized by their peers as 2014 Best Doctors in America®:

Daniel L. Beskind, MD Albert B. Fiorello, MD Samuel Keim, MD Harvey W. Meislin, MD John C. Sakles, MD Arthur B. Sanders, MD Frank G. Walter, MD

Faculty Teaching Awards

Two emergency medicine faculty members, Alice A. Min, MD, and Albert Fiorello, MD,





were recognized at the 2014 UA College of Medicine – Tucson Faculty Teaching Awards for their work on "Development of a Mobile Application for Medical Education: A Question a Day Keeps Remediation Away."

Resident Excellence and Leadership Scholarship



Sean Murphy, MD, PGY-II, Banner – University Medical Center South resident, received the 2014 Resident Excellence and Leadership Scholarship, awarded by the UA Office of Graduate Medical

Education, for his research, "Validation of a PCR-based hookworm identification assay and submission of an FDA Investigational New Drug (IND) application for therapeutic administration of Necator americanus in controlled trials."

Each year, the UA's Office of Graduate Medical Education identifies residents who have a proven track record of excellence and have demonstrated potential in becoming future leaders in their chosen field. To further promote the careers of these physicians-in-training, the GME office sponsors the annual Resident Excellence and Leadership Scholarships. Funding may support the pursuit of an original research proposal (particularly if done in collaboration with a faculty mentor), participation at a national conference, leadership or advocacy training or a unique elective experience.

American Heart Association Best Oral Abstract Awards

Arizona Emergency Medicine Research Center (AEMRC) – Phoenix researchers received best oral abstract awards for both cardiac and trauma resuscitation science sessions at the November American Heart Association meeting in Chicago:

"Statewide Implementation of Standardized Pre-arrival Telephone CPR Program Is Associated with Increased Bystander CPR and Survival from Out-of-Hospital Cardiac Arrest" Session III: Best of the Best Oral Abstract Presentations and Presentation of the Best Abstract Awards for Cardiac and Trauma Resuscitation Science

"The Effect of Prehospital Hypoxia and Hypotension on Outcome in Major Traumatic Brain Injury: A Deadly Combination" Session III: Best of the Best Oral Abstract Presentations and Presentation of the Best Abstract Awards for Cardiac and Trauma Resuscitation Science

Wilderness Medical Society Education Award



Kenneth V. Iserson, MD, emergency medicine professor emeritus, received the Wilderness Medical Society Education Award at its annual meeting in August in Jackson Hole. The award is given

in recognition of outstanding contributions to education of students, members, or the public in the field of wilderness medicine.

INDUS-EM Summit 2014 Grant Award



Parisa Javedani, MD, PGY-3, emergency medicine resident, received a grant to attend the conference 10th INDUS-EM Summit 2014 in Lucknow, Uttar Pradesh, India. Her research,

"Videolaryngoscopy Reduces the Incidence of Esophageal Intubations Performed by Emergency Medicine Residents Compared to Direct Laryngoscopy," was presented during the conference.

Dr. Javedani was one of 15 U.S. emergency medicine residents to receive a grant to attend the 2014 conference sponsored by the University of South Florida Emergency Medicine Program. The conference, funded by Team Health, focuses on the development of emergency medicine as a specialty in India.

The UA Department of Emergency Medicine has an endowment fund of \$5 million, which helps fund several distinguished faculty salaries and recruit nationally recognized faculty members. The department also has a senior faculty researcher, partially funded with an endowment from the Virginia Piper Fund at the University of Arizona College of Medicine – Phoenix.



PHILANTHROPY

Philanthropy Highlights

The Click Family Foundation donated funds to the **Arizona Emergency Medicine Research Center** to purchase a new resuscitation mannequin to conduct research and provide training to the general public on chest-compression-only CPR.

Daniel Beskind, MD, MPH, the Emergency Medical Services director of the Base Hospital at Banner – University Medical Center South, is the head of the UA College of Medicine Tucson medical student Resuscitation Education and CPR Training Group, (REACT.) The Resuscitation Research Group, in collaboration with the UA Sarver Heart Center, pioneered the research and advocacy of chest-compression-only CPR.

REACT conducts free training in lifesaving skills, such as chest-compression-only CPR, to members of the general public. Last year, the REACT group taught 3,004 people compression-only CPR.

The donation helps to enhance the program's training capabilities and serves to monitor and evaluate the effectiveness of community members performing chest compression only CPR in saving lives.

How Gifts Help

Giving to the General Emergency Medicine Fund is extremely helpful to the department, or tax-deductible gifts can be directed to specific programs and faculty to:

- Support research
- Support education and training
- Support excellent clinical care

Gifts also can be made in honor or memory of a loved one or mentor. All donations are acknowledged; progress reports on initiatives and programs made possible by these contributions are available to donors.

Anyone can be involved in making lives better through supporting Emergency Medicine at the University of Arizona. For more information, please contact:

Marianne Capp Hadden, MS, MBA
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Tucson, AZ 85724-5018
Office: 520-626-4557
mariannehadden@email.arizona.edu



PUBLICATIONS

Srikar Adhikari; **Albert Fiorello**; **Lori Stolz**; Travis Jones; **Richard Amini**; Austin Gross; Kathleen O'Brien; **Jarrod Mosier**; Michael Blaivas

Ability of emergency physicians with advanced echocardiographic experience at a single center to identify complex echocardiographic abnormalities.

American Journal of Emergency Medicine. 2014;32(4):363-366.

Jared T. Marx; Michael Blaivas; **Srikar Adhikari** Airway and thoracic ultrasound. *Ultrasound Clinics*. 2014;9(2):211-216.

Srikar Adhikari; Wesley Zeger; Michael Wadman; Richard Walker; Carol Lomneth Assessment of a human cadaver model for training emergency medicine residents in the ultrasound diagnosis of pneumothorax.

BioMed Research International. 2014.

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