

Clinical Practice and Cases in Emergency Medicine

In Collaboration with the *Western Journal of Emergency Medicine*

Rick A. McPheeters, DO, Editor-in-Chief
Kern Medical

Manish Amin, DO, Associate Editor
Kern Medical

Mark I. Langdorf, MD, MHPE, Associate Editor
University of California, Irvine School of Medicine

Shadi Lahham, MD, MS, Associate Editor
University of California, Irvine School of Medicine

Shahram Lotfipour, MD, MPH, Managing Associate Editor
University of California, Irvine School of Medicine

Editorial Board

Erik D. Barton, MD, MBA
University of California, Irvine

Peter A. Bell, DO, MBA
*Ohio University, Heritage
College of Osteopathic Medicine*

Barry E. Brenner, MD, MPH
Case Western Reserve University

David F.M. Brown, MD
*Massachusetts General Hospital/
Harvard Medical School*

Francis Counselman, MD
Eastern Virginia Medical School

Robert W. Derlet, MD
University of California, Davis

Daniel J. Dire, MD
*University of Texas Health
Sciences Center San Antonio*

Steven Gabaeff, MD
Clinical Forensic Medicine

Brent King, MD, MMM
University of Texas, Houston

Edward Michelson, MD
Texas Tech University

Linda S. Murphy, MLIS
*University of California, Irvine
School of Medicine Librarian*

Jonathan Olshaker, MD
Boston University

Edward Panacek, MD, MPH
University of South Alabama

Niels K. Rathlev, MD
*University of Massachusetts
Baystate School of Medicine*

Robert M. Rodriguez, MD
*University of California, San
Francisco*

Scott Rudkin, MD, MBA
University of California, Irvine

Peter Sokolove, MD
*University of California, San
Francisco*

Samuel J. Stratton, MD, MPH
Orange County, CA, EMS Agency

Robert Suter, DO, MHA
UT Southwestern Medical Center

Scott Zeller, MD
University of California, Riverside

Leslie Zun, MD, MBA
Chicago Medical School

Advisory Board

Peter A. Bell, DO, MBA
*American College of Osteopathic
Emergency Physicians
Ohio University, Heritage
College of Osteopathic Medicine*

John B. Christensen, MD
*California Chapter Division of
AAEM*

Amal Khalil, MBA
UC Irvine Health SOM

Mark I. Langdorf, MD, MHPE
UC Irvine Health SOM

Elena Lopez-Gusman
*California ACEP
American College of Emergency
Physicians*

Shahram Lotfipour, MD, MPH
UC Irvine Health SOM

Trevor Mills, MD, MPH
*California Chapter Division of
AAEM
LSU Medical Center*

Aimee Moulin, MD
*California ACEP
American College of Emergency
Physicians
University of California, Davis*

Nicholas T. Sawyer, MD, MBA
*California ACEP
American College of Emergency
Physicians
University of California, Davis*

Robert Suter, DO, MHA
*American College of Osteopathic
Emergency Physicians
UT Southwestern Medical Center*

Jan Wachtler
*American College of Osteopathic
Emergency Physicians*

International Editorial Board

Pablo Aguilera, MD
*Pontificia Universidad Catolica
de Chile, Santiago, Chile*

Anwar Al-Awadhi, MD
*Mubarak Al-Kabeer Hospital,
Jabriya, Kuwait*

Arif A. Cevik, MD
*Eskisehir Osmangazi University
Medical Center, Eskisehir, Turkey*

Francesco Dellacorte, MD
*Azienda Ospedaliera
Universitaria "Maggiore della
Carità," Novara, Italy*

Abhinandan A. Desai, MD
*University of Bombay Grant
Medical College, Bombay, India*

Gayle Galleta, MD
*Sørlandet Sykehus HF, Akershus
Universitetssykehus, Lorenskog,
Norway*

Vijay Gautam, MBBS
*University of London, London,
England*

Wirachin Hoonpongsimanont,
MD, MSBATS

*Siriraj Hospital, Mahidol
University, Bangkok, Thailand*

Rosidah Ibrahim, MD
*Hospital Serdang, Selangor,
Malaysia*

Katsuhiko Kanemaru, MD
*University of Miyazaki Hospital,
Miyazaki, Japan*

Amin A. Kazzi, MAAEM, MD
*The American University of
Beirut, Beirut, Lebanon*

Steven H. Lim, MD
*Changi General Hospital, Simei,
Singapore*

Khrongwong Musikatavorn, MD
*King Chulalongkorn Memorial
Hospital, Chulalongkorn
University, Bangkok, Thailand*

Bandr Mzahim, MD
*King Fahad Medical City, Riyadh,
Saudi Arabia*

Jacob (Kobi) Peleg, PhD, MPH
*Tel-Aviv University, Tel-Aviv,
Israel*

Editorial Staff

Joyce Y. Kim, BS
Editorial Director

Usman Alam, BS
Marketing Director

June Casey, BA
Copy Editor

Maryam Farooqui, BS
Associate Editorial Director

Alissa Fiorentino
WestJEM Staff Liaison

Ahdilah Haswary, BS
Associate Publishing Director

Nancy Hernandez, BA
Associate Publishing Director

Samantha Shwe, BS
Publishing Director

Clinical Practice and Cases in Emergency Medicine

In Collaboration with the *Western Journal of Emergency Medicine*

This open access publication would not be possible without the generous and continual financial support of our society sponsors, department subscribers, and chapter subscribers.

Professional Society Sponsors

AMERICAN COLLEGE OF OSTEOPATHIC EMERGENCY PHYSICIANS

CALIFORNIA ACEP

CALIFORNIA CHAPTER DIVISION OF

AMERICAN ACADEMY OF EMERGENCY MEDICINE

Academic Department of Emergency Medicine Subscriber

Allegheny Health Network Pittsburgh, PA	INTEGRIS Health Oklahoma City, OK	Oklahoma University Norman, OK	University of Illinois at Chicago Chicago, IL
American University of Beirut Beirut, Lebanon	Kaweah Delta Health Care District Visalia, CA	Oregon Health and Science University Portland, OR	University of Iowa Iowa City, IA
Arrowhead Regional Medical Center Colton, CA	Kennedy University Hospitals Turnersville, NJ	Penn State Milton S. Hershey Medical Center Hershey, PA	University of Louisville Louisville, KY
Baystate Medical Center/Tufts University Springfield, MA	Kern Medical Bakersfield, CA	Presence Resurrection Medical Center Chicago, IL	University of Maryland Baltimore, MD
Beaumont Hospital Royal Oak, MI	Lakeland HealthCare St. Joseph, MI	Regions Hospital/ Health Partners Institute for Education and Research St. Paul, MN	University of Massachusetts Medical School Worcester, MA
Beth Israel Deaconess Medical Center Boston, MA	Lehigh Valley Hospital and Health Network Allentown, PA	Robert Wood Johnson Hospital New Brunswick, NJ	University of Michigan Ann Arbor, MI
Boston Medical Center Boston, MA	Loma Linda University Medical Center Loma Linda, CA	Southern Illinois University Carbondale, IL	University of Missouri Columbia, MO
Brigham and Women's Hospital Boston, MA	Louisiana State University Health Sciences Center New Orleans, LA	Stanford University Palo Alto, CA	University of Nebraska Medical Center Omaha, NE
Brown University Providence, RI	Madigan Army Medical Center Tacoma, WA	SUNY Upstate Medical Center Syracuse, NY	University of Nevada Las Vegas, NV
California Chapter Division of AAEM Milwaukee, WI	Maimonides Medical Center Brooklyn, NY	Temple University Philadelphia, PA	University of Oklahoma Norman, OK
California State University Fresno Fresno, CA	Maricopa Medical Center Phoenix, AZ	University of Alabama, Birmingham Birmingham, AL	University of South Alabama Mobile, AL
Carl R. Darnall Army Medical Center Fort Hood, TX	Massachusetts General Hospital Boston, MA	University of Arizona Tucson, AZ	University of Southern California/ Keck School of Medicine Los Angeles, CA
Eastern Virginia Medical School Norfolk, VA	Mayo Clinic College of Medicine Rochester, MN	University of California, Davis Medical Center Sacramento, CA	University of Tennessee, Memphis Memphis, TN
Emory University Atlanta, GA	Medical College of Wisconsin Milwaukee, WI	University of California, San Francisco San Francisco, CA	University of Texas Houston, TX
Florida Hospital Medical Center Orlando, FL	Mt. Sinai Medical Center Miami Beach, FL	University of California Irvine Orange, CA	University of Warwick Library Coventry, United Kingdom
Good Samaritan Hospital Medical Center West Islip, NY	National University Hospital Singapore, Singapore	University of California, Los Angeles Los Angeles, CA	University of Washington Seattle, WA
Hennepin County Medical Center Minneapolis, MN	North Shore University Hospital Manhasset, NY	University of California San Diego La Jolla, CA	University of Wisconsin Hospitals and Clinics Madison, WI
Henry Ford Medical Center Detroit, MI	Northwestern Medical Group Chicago, IL	University of Chicago Chicago, IL	York Hospital York, ME
Highland Hospital Oakland, CA	Ohio State University Medical Center Columbus, OH	University of Colorado & Denver Health Denver, CO	Wake Forest University Winston-Salem, NC
		University of Florida Jacksonville, FL	Wright State University Dayton, OH

State Chapter Subscriber

ARIZONA CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

CALIFORNIA CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

FLORIDA CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

GREAT LAKES CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

TENNESSEE CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

UNIFORMED SERVICES CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

VIRGINIA CHAPTER DIVISION OF THE
AMERICAN ACADEMY OF EMERGENCY MEDICINE

International Society Partners

SOCIEDAD ARGENTINA DE EMERGENCIAS
SOCIEDAD CHILENO MEDICINA URGENCIA
MEDITERRANEAN SOCIETY OF EMERGENCY MEDICINE

THAI ASSOCIATION FOR EMERGENCY MEDICINE
EMERGENCY MEDICINE ASSOCIATION OF TURKEY

NORWEGIAN SOCIETY FOR EMERGENCY MEDICINE
LEBANESE ACADEMY OF EMERGENCY MEDICINE

Alissa Fiorentino
CPC Emergency Medicine Staff Liaison
Phone: 1-800-884-2236