

Western Journal of Emergency Medicine:

Integrating Emergency Care with Population Health

Mark I. Langdorf, MD, MHPE, Editor-in-Chief
University of California, Irvine School of Medicine

Sean O. Henderson, MD, Senior Associate Editor
Keck School of Medicine, University of Southern California

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

Rick McPheeters, DO, Associate Editor
Kern Medical Center

Joel Schofer, MD, MBA, Associate Editor
Naval Medical Center Portsmouth

Niels K Rathlev, MD, Associate Editor
Tufts University Medical School and Baystate Medical Center

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

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
Case Western University

Jonathan Olshaker, MD
Boston University

Edward Panacek, MD, MPH
University of California, Davis

Niels K. Rathlev, MD

Tufts University Medical School and Baystate Medical Center

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

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

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

Thomas Terndrup, MD
Ohio State University

Scott Zeller, MD
Alameda County Medical Center

Leslie Zun, MD, MBA
Chicago Medical School

Robert Suter, DO, MHA
UT Southwestern Medical Center

Advisory Board

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

John B. Christensen, MD
Division for the California Chapter of AAEM

Amal Khalil, MBA
UC Irvine Health SOM

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

Shahram Lotfipour, MD, MPH
UC Irvine Health SOM

Elena Lopez-Gusman
California ACEP American College of Emergency Physicians

William Mallon, MD
California ACEP American College of Emergency Physicians University of Southern California Keck School of Medicine

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

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

Jan Wachtler
American College of Osteopathic Emergency Physicians

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

Editorial Staff

Meghan A. Brown, BA
Editorial Assistant

Emily DeVillers
CALAAEM WestJEM Liaison

June Casey, BA
Copy Editor

Nadia Zuabi, BS
Editorial Director

Kevin Pham, BS
Publishing Manager

Kelly C. Joy, BS
Editorial Assistant

Patrick Penalosa, BS
Associate Publishing Director

Vincent Lam, BS
Associate Publishing Director

Trang Tran, BS
Associate Editorial Director

Cameron Sumrell, BS
Website Manager

Nooreen Khan, BS
Associate Editorial Director

International Editorial Board

Arif A. Cevik, MD
Eskişehir Osmangazi University Medical Center, Eskişehir, Turkey

Francesco D. Corte, MD
Azienda Ospedaliera Universitaria "Maggiore della Carità", Novara, Italy

Vijay Gautam, MBBS
University of London, United Kingdom

Wirachin Hoonpongsimanont, MD
University of California, Irvine

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

Steven H. Lim, MD
Changi General Hospital, Singapore

Kobi Peleg, PhD, MPH
Tel-Aviv University, Israel

Rapeepron Rojsaengroeng, MD
Ramathibodi Hospital, Mahidol University, Bangkok, Thailand

Official Journal of the California Chapter of the American College of Emergency Physicians, the American College of Osteopathic Emergency Physicians, and the California Chapter of the American Academy of Emergency Medicine



Available in PubMed, PubMed Central, MEDLINE, CINAHL, SCOPUS, Google Scholar, eScholarship, Melvyl, DOAJ, EBSCO, EMBASE, Medscape, HINARI, and MDLinx Emergency Med. Members of OASPA.

Editorial and Publishing Office: *WestJEM/Department of Emergency Medicine, UC Irvine Health, 333 The City Blvd, West, Rt 128-01, Orange, CA 92866, USA*
Office: 1-714-456-6389; Email: Editor@westjem.org

Western Journal of Emergency Medicine:

Integrating Emergency Care with Population Health

Section Editors

Behavioral Emergencies

Leslie Zun, MD, MBA
Chicago Medical School

Michael P. Wilson, MD, PhD
*University of California,
San Diego*

Clinical Practice

Eric Snoey, MD
Alameda County Medical Center

Michael Abraham, MD
University of Maryland

Kenneth S. Whitlow, DO
Kaweah Delta Medical Center

Critical Care

Michael Allswede, DO
INTEGRIS Health

Allan Mottram, MD
University of Wisconsin

Disaster Medicine

Christopher Kang, MD
Madigan Army Medical Center

Gentry Wilkerson, MD
University of Maryland

Education

Michael Epter, DO
Maricopa Medical Center

Douglas Ander, MD
Emory University

Nikita Joshi
Stanford University

ED Administration

Jeffrey Druck, MD
University of Colorado

Emergency Cardiac Care

Amal Mattu, MD
University of Maryland

Michael Kurz
University of Alabama at Birmingham

Emergency Medical Services

Christopher Kahn, MD, MPH
University of California, San Diego

David E. Slattery, MD
University of Nevada

Geriatrics

Teresita M. Hogan, MD
University of Chicago

Kathleen Walsh, DO, MS
University of Wisconsin

Infectious Disease

Robert Derlet, MD
University of California, Davis

Sukhjit S. Takhar, MD
Harvard Medical School

Injury Prevention

Bharath Chakravarthy, MD, MPH
University of California, Irvine

Wirachin Hoonpongsimanont, MD
University of California, Irvine

International Medicine

Chris Mills, MD, MPH
Santa Clara Valley Medical Center

David Williams, MD
University of Southern California

Legal Medicine

Greg P. Moore, MD, JD
Madigan Army Medical Center

Methodology and Biostatistics

Craig Anderson, MPH, PhD
University of California, Irvine

Christian McClung, MD
University of Southern California

Elizabeth Burner, MD, MPH
University of Southern California

Musculo-skeletal

Juan F. Acosta DO, MS
Pacific Northwest University

Neurosciences

Edward P. Sloan, MD, MPH
University of Illinois at Chicago

William D. Whetstone, MD
University of California, San Francisco

Pediatric Emergency Medicine

Judith Klein, MD
University of California, San Francisco

Paul Walsh, MD, MSc
University of California, Davis

Public Health

Jeremy Hess, MD, MPH
Emory University

Trevor Mills, MD, MPH
Northern California VA Health Care

Chadd Kraus, DO
Lehigh Valley Health Network

Resident/Student/Fellow Forum

John Ashurst, DO
Lehigh Valley Health Network

Cecylia Kelley, DO
Inspira Health Network

Technology in Emergency Medicine

Sanjay Arora, MD
University of Southern California

Robert L. Rogers, MD
University of Kentucky

Trauma

William Paolo, MD
SUNY Upstate

David Peak, MD
*Massachusetts General Hospital/
Harvard Medical School*

Toxicology

Jeffrey R. Suchard, MD
University of California, Irvine

Brandon Wills, DO, MS
Virginia Commonwealth University

Ultrasound

Laleh Gharahbaghian, MD
Stanford University

Shane Summers, MD
Brooke Army Medical Center

Official Journal of the California Chapter of the American College of Emergency Physicians, the American College of Osteopathic Emergency Physicians, and the California Chapter of the American Academy of Emergency Medicine



Available in PubMed, PubMed Central, MEDLINE, CINAHL, SCOPUS, Google Scholar, eScholarship, Medvyl, DOAJ, EBSCO, EMBASE, Medscape, HINARI, and MDLinx Emergency Med. Members of OASPA.

Editorial and Publishing Office: *WestJEM*/Department of Emergency Medicine, UC Irvine Health, 333 The City Blvd, West, Rt 128-01, Orange, CA 92866, USA
Office: 1-714-456-6389; Email: Editor@westjem.org