
Marc Eckstein MD MPH FACEP FAEMS

Professor of Emergency Medicine

Keck School of Medicine of the University of Southern California

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[LinkedIn](#)

Education

Undergraduate education:

Cornell University, Ithaca, New York

Bachelor of Science (with distinction) - 1985

Medical School:

Mount Sinai School of Medicine, New York, New York

Doctor of Medicine – 1989

Post Graduate Education:

American Public University, Manassas, Virginia

Master of Public Health (with a concentration in Homeland Security) – 2007

Medical Residency

Emergency Medicine:

Los Angeles County/University of Southern California Medical Center, Los Angeles, California

Dates of residency: 1989 – 1993

Awards and Honors

- Chief Resident 1992 – 1993
- Highest score ever achieved at USC in Emergency Medicine In-Service exam
- Top score in the nation among fourth year residents on 1993 Emergency Medicine In-Service exam
- Academic Achievement Award 1993
- EMS Achievement Award – California Chapter of the American College of Emergency Medicine (CAL-ACEP) 2006
- EMS Medical Director of the Year – National Metropolitan EMS Medical Directors Consortium 2009

- Meritorious Service Award for Exceptional Leadership and Contributions in EMS – California State EMS Authority 2013
- EMS Innovator Award – Selected as one of the world’s Top 10 EMS Innovators by the J Emerg Med Services
- EMS Authority State of California Clinical Excellence Award 2017
- 2018 Healthcare Leadership Award – Los Angeles Business Journal
- Thomas Carr Community Service Leadership Award – Firehouse Expo 2018
- American College of Emergency Physicians (ACEP) 30 Year Continuous Board Certification Recognition

Professional Experience

Emergency Physician:

- Los Robles Regional Medical Center, Thousand Oaks, California (2023 - present)
- Los Angeles County/USC Medical Center, Los Angeles, California (1993 - 2023)
- Good Samaritan Hospital, Los Angeles, California (2018 - 2020)
- West Hills Medical Center, West Hills, California (2011 - 2015)
- Centinela Hospital Medical Center, Inglewood, California (2009 – 2012)
- Pomona Valley Hospital Medical Center, Pomona, California (1992 - 2009)
- Hollywood Presbyterian Hospital, Hollywood, California (2003 – 2004)
- California Medical Center, Los Angeles, California (1993 - 1994)
- Verdugo Hills Hospital, Glendale, California (1991 - 1993)
- Providence-Holy Cross Medical Center, Mission Hills, California (1997 – 1998)

Paramedic:

New York City EMS Paramedic (1987 - 1989)

First paramedic ever certified in the City of New York after completion of only a two-week “paramedic refresher course” in lieu of a complete 1000-hour program

Emergency Medical Technician:

New York City EMS Emergency Medical Technician (1986 –1987)

Founder – Tele911 Inc. (Venture-backed telemedicine start-up):

- CEO – 2020 - 2022
- CMO – 2022 – 2023

Board Certification

- Diplomate of the American Board of Emergency Medicine, 1994
- Fellow of the American Board of Emergency Medicine, 1996
- Subspecialty Boarded in Emergency Medical Services, 2013

Medical Licensure

California, Florida, Texas, and Arizona

Academic Appointment

- Professor of Emergency Medicine and Clinical Scholar, Keck School of Medicine of the University of Southern California, 2009
- Associate Professor of Emergency Medicine, Keck School of Medicine of the University of Southern California, 2002
- Assistant Professor of Emergency Medicine, University of Southern California School of Medicine, 1993

Professional Certifications

- Advanced Cardiac Life Support (ACLS) Instructor
- Advanced Trauma Life Support (ATLS) Instructor
- Advanced Burn Life Support (ABLS) Provider
- Pediatric Advanced Life Support (PALS) Instructor
- Neonatal Advanced Life Support (NALS) Provider
- California Base Station Physician Certification Course Director
- Hazardous Materials “HAZ-MAT” First Responder - Operational Certification

- Nuclear Biological and Chemical Weapons Emergency Responder - Hospital Technician and EMS Instructor
- Confined Space Rescue Certification – California Office of Emergency Services
- Rescue Systems 1 - Urban Search and Rescue Certification - California OES
- Peace Officer - State of California Commission on Peace Officer Standards and Training

Community Service

- Medical Director – Automated External Defibrillator (AED) Program – City of Los Angeles
- Medical Director – Automated External Defibrillator (AED) Program – Los Angeles International Airport
- Medical Director – Automated External Defibrillator (AED) Program – City of San Fernando Police Department
- Reserve Police Officer – City of San Fernando Police Department
- Federal Emergency Management Agency (FEMA) Disaster Medical Assistance Team Member (CA-DMAT # 9)
- Medical Team Manager - FEMA Urban Search and Rescue Team (CA-TF#1)

EMS-Related Activities (1996 – present)

EMS Liaison Physician – Los Robles Medical Center (2023 – Present)

- Serving as the Base Hospital Medical Director and the EMS Physician Liaison for the hospital, working with multiple EMS stakeholders throughout Ventura County.

EMS Division Chief – Department of Emergency Medicine, Keck School of Medicine, USC (2017 – 2022)

- Oversaw the operation of the base station at the Los Angeles County/USC Medical Center, the busiest base station in Los Angeles County.
- Developed continuing education programs, quality improvement studies, and supervised off-line and on-line medical control, disaster planning, and clinical research studies.
- Supervised faculty members within the EMS Division and served as the liaison between the Dept. of Emergency Medicine and the EMS community.

- Taught emergency medicine residents about all aspects of prehospital care, including direct supervision, a formal continuing education didactic program, and an annual base station physician certification course.

Fellowship Director – EMS Fellowship, Department of Emergency Medicine, Keck School of Medicine, USC (2012 – 2022)

- Directed the highly competitive ACGME-accredited EMS Fellowship at LAC/USC Medical Center and LAFD.

EMS Bureau Commander and Medical Director - Los Angeles Fire Department (1996 - 2022)

- Oversaw the EMS activities of the Los Angeles Fire Department, the nation’s second-largest EMS system.
- Supervised EMS activities, including dispatch, deployment models, surge planning, policies, protocols, quality improvement, continuing education, EMS training programs, emergency resource dispatch algorithms, disaster preparedness, introduction of new equipment, clinical research, patient care treatment protocols, and emergency response for on-scene medical direction and patient care at multiple casualty incidents.
- Served on county-wide EMS committees as the liaison between the fire service and the medical community.

Professional Activities

Committee Service:

- Commissioner - representing the LA County Medical Association Los Angeles County EMS Commission, 2017 - 2019
- Chairman Base Hospital Advisory Committee Los Angeles County EMS Agency, 2017 - 2019
- Chairman EMS Section ACEP(ACEP), 2009 – 2011
- Steering Committee Member National EMS Project Initiative – Department of Homeland Security George Washington University, 2006 - 2007
- Board of Directors Member National Assn of Emergency Medical Services Physicians (NAEMSP), 2005 - 2008

- Peer review member Grant Review Consortium American Heart Association, 2005 - 2009
- Member-at-Large EMS Section ACEP(ACEP), 2003 - 2009
- Member – National Institute of Neurological Disorders and Stroke (NINDS) Public Recognition of Stroke Task Force, 2002 - 2005
- Member – CDC Bioterrorism Advisory Committee County of Los Angeles Department of Health Services, 2002 - 2006
- Member - College of Fellows National Academy of Emergency Medical Dispatch, 2001 - 2014
- Member - Committee on Anti-Terrorism NAEMSP(NAEMSP), 2001 - 2010
- Member - Metropolitan Medical Response Anti-Terrorism Group Los Angeles Regional Unified Response System, 2001 - 2017
- Member – EMS Subcommittee Los Angeles Fire Commission, 2000 - 2015
- Member – Operation Heartbeat Committee American Heart Association, 2000 - 2017
- Los Angeles County Biological Terrorism Advisory Committee Los Angeles County Department of Health Services, 2000 - 2015
- Chairman - EMS Steering Committee Los Angeles Fire Department, 1997 - 1999
- Chairman - Medical Advisory Committee Los Angeles Fire Department, 1996 - 2005
- Chairman - Infectious Disease Control Committee Los Angeles Fire Department, 1996 - 2005
- Provider Agency Committee Los Angeles County EMS Agency, 1996 - 2022
- Faculty Recruitment Committee Department of Emergency Medicine Los Angeles County/USC Medical Center, 1996 - 2022
- Member – Medical Advisory Committee Los Angeles County EMS Agency, 1994 - 2022
- Base Station Reconfiguration Committee Los Angeles County EMS Agency, 1994 - 1996
- Prehospital Care Committee Los Angeles County EMS Agency, 1993 - 1996
- Trauma Quality Assurance Committee Los Angeles County/USC Medical Center, 1993 - 2022
- Emergency Medicine Quality Assurance Committee Los Angeles County/USC Medical Center, 1993 - 2020

- Emergency Medicine Peer Review Committee Los Angeles County/USC Medical Center, 1993 - 2022
- Disaster Preparedness Committee Los Angeles County/USC Medical Center, 1993 - 2018
- EMS Committee California Chapter American College of Emergency Physicians, 1992 – 2019

Publications

Peer-Reviewed Articles

1. **Eckstein M**, Hutson R. Drive-by shootings: A case report. Ann Emerg Med 1995; 25: 107-111.
2. Salvucci A, **Eckstein M**, Iscovich A. Submental administration of naloxone. Ann Emerg Med 1995; 25: 719-720.
3. Hutson R, **Eckstein M**, Anglin D. Drive-by shootings in Los Angeles: A five-year trend analysis. Acad Emerg Med 1996; 3: 300-303.
4. **Eckstein M**. The prehospital and emergency department management of penetrating head injuries. Neurosurgery Clinics of North America 1995; 6: 741-751.
5. Demetriades D, Chan L, Cornwell EE, **Eckstein M**, et al. Paramedic versus private transportation of trauma patients: Effect on outcome. Arch of Surgery 1996; 131: 133-138.
6. Pepe P, **Eckstein M**. Re-appraising the prehospital care of the patient with major trauma. Emergency Medicine Clinics of North America 1998; 16: 1-15.
7. **Eckstein M**, Cowen AR. Scene safety in the face of automatic weapons fire: A new dilemma for EMS? Prehosp Emerg Care 1998; 2:117-122.
8. **Eckstein M**, Suyehara D. Prehospital needle thoracostomy. Prehosp Emerg Care 1998;2:132-135.
9. Kidwell C, Saver J, Schuber G, **Eckstein M**, Starkman S. A tool for prehospital stroke diagnosis: Design and retrospective validation of the Los Angeles Prehospital Stroke Screen (LAPSS). Prehosp Emerg Care 1998;2:267-273.
10. Kidwell CS, Saver JL, **Eckstein M**, et al. Improving paramedic recognition of stroke in the field: A Los Angeles Prehospital Stroke Screen (LAPSS) training program. Neurology 1998;50:157-158.

11. Cornwell EE, Velmahos GC, Berne TV, Belzberg H, **Eckstein M**, Murray JA, Asensio JA, Demetriades D. Lethal abdominal gunshot wounds at a level I trauma center: Analysis of TRISS (Revised Trauma Score and Injury Severity Score) fallouts. *J Amer Col Surg* 1998;187:123-129.
12. **Eckstein M**, Alo K. The effect of a quality improvement program on paramedic on-scene times for patients with penetrating trauma. *Acad Emerg Med* 1999;6:191-196.
13. **Eckstein M**. The medical response to modern terrorism: Why the “rules of engagement” have changed. *Ann Emerg Med* 1999;34:219-221.
14. **Eckstein M**, Henderson S, DeLaCruz P, Newton E. GHB: Report of a mass intoxication and a review of the literature. *Prehosp Emerg Care* 1999;4:357-361.
15. **Eckstein M**, Serna M, DeLaCruz P, Mallon WK. Prehospital and emergency department management of epidemic scombroid poisoning. *Acad Emerg Med* 1999;6:619-621.
16. **Eckstein M**. EMS Turnaround Times. *Ann Emerg Med* 1999;33:354.
17. **Eckstein M**. Prehospital use of succinylcholine. *Prehosp Emerg Care* 1999;4:399.
18. Kidwell C, Starkman S, **Eckstein M**, Weems K, Saver J. Identifying stroke in the field: Prospective validation of the Los Angeles Prehospital Stroke Screen (LAPSS). *Stroke* 2000;31:71-76.
19. **Eckstein M**, Chan L, Schneir A, Palmer R. The effect of prehospital advanced life support on outcomes of major trauma patients. *J Trauma* 2000;48:643-648.
20. **Eckstein M**. Out-of-hospital endotracheal intubation of children. *JAMA* 2000;283:2790.
21. Thomsen TW, Sayah AT, **Eckstein M**. Emergency medical services providers and weapons in the prehospital setting. *Prehosp Emerg Care* 2000;4:209-216.
22. **Eckstein M**. Implementation of standing field treatment protocols (SFTPs) in an urban EMS system. *Amer J Emerg Med* 2001;19:280-283.
23. **Eckstein M**. Heart to Heart Talk: Ask the Experts. *J Emerg Medical Services* 2001;26.
24. Saver JL, Kidwell CS, **Eckstein M**, Starkman S. Emerging Applications of the Los Angeles Prehospital Stroke Screen (LAPSS) A Validated Tool for Prehospital Care. *The Stroke Interventionalist* April 2001.
25. **Eckstein M**. Termination of Resuscitative Efforts: Medical Futility for Trauma Patient. *Current Opinion in Critical Care*. 2001; 7:450-454.
26. **Eckstein M**, Suyehara D. Ability of Paramedics to Treat Patients with Congestive Heart Failure Using Standing Field Treatment Protocols. *Amer J Emerg Med* 2002;20:23-25.

27. **Eckstein M**, Jantos T, Kelly N, Cardillo A. Helicopter transport of pediatric trauma patients in an urban EMS system: A critical analysis. *J Trauma*. 2002;53:340-344.
28. **Eckstein M**. A prehospital GCS < 14 accurately predicts the need for full trauma team activation and patient hospitalization after motor vehicle collisions. *J Trauma* 2003;5:628.
29. Morgenstern LB, Rosamond W, Alberts MJ, Bartholemew LK, Callahan AS, **Eckstein M**, et al. Increasing Public Recognition and Rapid Response to Stroke. A NINDS Symposium: Improving the Chain of Recovery for Acute Stroke in Your Community. National Institutes of Health pp 1-11 September 2003.
30. **Eckstein M**, Chan LS. The impact of emergency department crowding on paramedic ambulance availability. *Ann Emerg Med* 2004;43:100-105.
31. Llanes JN, Kidwell CS, Starkman S, Leary MC, **Eckstein M**, Saver JL. The Los Angeles Motor Scale (LAMS): A new measure to characterize stroke severity in the field. *Prehosp Emerg Care* 2004;8:46-50.
32. Saver JL, Kidwell CS, **Eckstein M**, Starkman S. Prehospital neuroprotective therapy for acute stroke: Results of the field administration of stroke therapy – magnesium (FAST-MAG) pilot trial. *Stroke*: 2004;35:106-108.
33. **Eckstein M**. Primum non nocere -first do no harm: an imperative for emergency medical services. *Prehosp Emerg Care* 2004;8:444-446.
34. Bledsoe BE, **Eckstein M**, Gandy GE, et al. JEMS Case Conference: The Misplaced Endotracheal Tube. 2004:29.
35. **Eckstein M**. Cyanide as a chemical terrorism weapon. *J Emerg Med Services* 2004;29:22-31.
36. **Eckstein M**, Stratton SJ, Chan LS. Termination of resuscitative efforts for out-of-hospital cardiac arrests. *Acad Emerg Med*: 2005;12:65.
37. Benson P, **Eckstein M**. Pulseless electrical activity: A Case Conference. *Prehosp Emerg Care* 2005;9:231-235.
38. **Eckstein M**, Stratton SJ, Chan LS. Cardiac arrest resuscitation evaluation in Los Angeles: CARE-LA. *Ann Emerg Med* 2005;45:504-509.
39. Heightman AJ, Mohlenbrok S, **Eckstein M**. Disaster on the rails. *J Emerg Med Services* 2005;30:46-67.
40. **Eckstein M**. The pregnant trauma patient. *J Emerg Med Services* 2005;30:110-127.

41. **Eckstein M**, Isaacs SM, Slovis CM, et al. Facilitating EMS turnaround intervals at hospitals in the face of receiving facility overcrowding. *Prehosp Emerg Care* 2005;9:267-275.
42. **Eckstein M**. Prehospital 12 lead ECG speeds care. *J Emerg Med Services* 2005;30:38-42.
43. Saver JL, Kidwell C, **Eckstein M**, Obviagele BV, Starkman S. Physician investigator elicitation of consent in the field: A novel method to obtain explicit informed consent for prehospital clinical research. *Prehosp Emerg Care* 2006;10:182-185.
44. Rokos IC, Larson DM, Henry TD, Koenig WJ, **Eckstein M**, French WJ, Granger CB, Roe MT. Rationale for establishing regional ST-elevation myocardial infarction receiving center (SRC) networks. *Ameri Heart Journal* 2006;152:661-667.
45. **Eckstein M**, Maniscalco PM. Focus on smoke inhalation--the most common cause of acute cyanide poisoning. *Prehospital & Dis Med* 2006;21
46. Bledsoe BE, Wesley AK, **Eckstein M**, et al. Helicopter scene transport of trauma patients with nonlife-threatening injuries: a meta-analysis. *J Trauma* 2006;60:1257-65.
47. **Eckstein M**. Specialty center boom: Is transport to the closest ED a thing of the past? *J Emerg Med Services* 2007;32:42-43.
48. Acker JE, Pancioli A, Cantwell L, Crocco TJ, **Eckstein M**, et al. Implementation strategies for EMS within stroke systems of care. Recommendations from the American Stroke Association's expert panel on EMS systems. *Stroke* 2007;116:3097-3115.
49. Myers JB, Slovis CM, **Eckstein M**, et al. Evidence-Based Performance Measures for Emergency Medical Services Systems: A Model for EMS Benchmarking. *Prehosp Emerg Care* 2008;12:141-151.
50. **Eckstein M**. Enhancing Public Health Preparedness for a Terrorist Attack Involving Cyanide. *Journal of Emergency Medicine* 2008;35:59-65.
51. Kaji A, Koenig W, **Eckstein M**. The Need for Uniform Definitions in the Regionalized Care of ST Segment Elevation Myocardial Infarction. *Acad Emerg Med*. 2008;15:759-61.
52. **Eckstein M**, Cooper E, Nguyen T. Impact of Paramedic Transport with Prehospital 12 lead ECG on Door to Balloon Times for ST Segment Myocardial Infarction (STEMI) Patients. *Prehosp Emerg Care*. 2009;13:203-206.
53. **Eckstein M**, Koenig W, Kaji A, Tadeo R. Implementation of Specialty Centers for Patients with ST Segment Elevation Myocardial Infarction: The Los Angeles STEMI Receiving Center Project. *Prehosp Emerg Care*. 2009;13:215-222.
54. Buck BH, Starkman S, **Eckstein M**, et al. Dispatcher Recognition of Stroke Using the National Academy Medical Priority Dispatch System. *Stroke* 2009;40.

55. **Eckstein M**, Heightman AJ. Trauma at the tunnel. *J Emerg Med Services* 2009;34:54-62.
56. Benson P, **Eckstein M**, Henderson S. Racial differences in bystander CPR. *Ethnicity and Disease*. 2009;19:401-406.
57. **Eckstein M**. Case of the Month: Necrotizing Fasciitis. *J Emerg Med Services* 2009;34:32-33.
58. Stone SC, Abbott J, McClung CD, Colwell CB, **Eckstein M**, Lowenstein SR. Paramedic knowledge attitudes and training in end-of-life care. *Prehosp Dis Med*. 2009;24:529-534.
59. **Eckstein M**. Disposition of the deceased. *J Emerg Med Services* 201;35:72-82.
60. **Eckstein M**, Henderson S. EMS and managed care: The Los Angeles experience. *Prehosp Emerg Care* 2010;14:245-249.
61. Cryer HG, Hiatt JR, **Eckstein M**, et al. Improved Trauma System Multi-casualty Response: Comparison of Two Train Crash Disasters. *J Trauma* 2010;68(4):783-789.
62. Brywczyński J, McKinney J, Pepe PE, **Eckstein M**, et al. EMS Transport Decisions in Post-Traumatic Circulatory Arrest: Are National Practices Congruent? *J Trauma* 2010;69:1154-1160.
63. Sanossian N, Starkman S, **Eckstein M**, et al. Intercontinental elicitation of informed consent for enrollment in stroke research. *Cerebrovas Dis* 2010;30:323-324.
64. **Eckstein M**, Hatch L, Malleck J, McClung C, Henderson SO. End-tidal CO₂ as a predictor of survival in out-of-hospital cardiac arrest. *Prehosp Dis Med* 2011;26:148-150.
65. Inaba K, Castelo B, **Eckstein M**, Shatz DV, et al. Optimal Positioning for Emergent Needle Thoracostomy: A Cadaver Based Study. *J Trauma* 2011;71:1099-1103.
66. **Eckstein M**. The Los Angeles Public Access Defibrillator (PAD) Program: Ten Years After. *Resuscitation* 2012;83:1411-1412.
67. Watson DL, Sanoff R, Macintosh JE, Saver JL, Ford GA, Price P, **Eckstein M**, Murtagh MJ. Evidence from the scene: paramedic perspectives on involvement in out-of-hospital research. *Ann Emerg Med* 2012;60:641-650.
68. Inaba K, Ives C, McClure K, Branco B, **Eckstein M**, et al. Radiologic evaluation of alternative sites for needle decompression of tension pneumothorax. *Arch Surg* 2012;174:813-818.
69. **Eckstein M**. The Ambulance Industry Struggles to Go the Distance. *Health Affairs* 2013;32:2067-2068.

70. Saver JL, Starkman S, **Eckstein M**, et al. Methodology of the Field Administration of Stroke Therapy-Magnesium (FAST-MAG) phase 3 trial: Part 1 – Rationale and general methods. *Intern J Stroke*. 2014;9:215-219.
71. Saver JL, Starkman S, **Eckstein M**, et al. Methodology of the Field Administration of Stroke Therapy-Magnesium (FAST-MAG) phase 3 trial: Part 2 – Prehospital study methods. *Int J Stroke*. 2014;9:220-225.
72. Gausche-Hill M, **Eckstein M**, Horeczko T, et al. Paramedics accurately apply the pediatric assessment triangle to drive management. *Prehosp Emerg Care* 2014;18:1-11.
73. Bosson N, Kaji AH, Niemann JT, **Eckstein M**, et al. Survival and neurologic outcome after cardiac arrest: Results one year after regionalization of post-cardiac arrest care in a large metropolitan area. *Prehosp Emerg Care* 2014;18:217-223.
74. Gausche-Hill M, **Eckstein M**, Horeczko T, et al. Paramedics Accurately Apply the Pediatric Assessment Triangle to Drive Management. *Prehosp Emerg Care* 2014;18:520-530.
75. Saver JL, Starkman S, **Eckstein M**, et al. Prehospital Magnesium Sulfate as Neuroprotection for Acute Stroke. *NEJM* 2015;372:528-536.
76. **Eckstein M**, Schlesinger SA, Sanko S. Interfacility Transports Utilizing the 911 Emergency Medical Services System. *Prehosp Emerg Care* 2015;19:490-495.
77. Levine M, Sanko S, **Eckstein M**. Assessing the risk of prehospital administration of naloxone with subsequent refusal of care. *Prehosp Emerg Care* 2016;20:566-569.
78. Bosson N, Kaji AH, Niemann JT, Squire B, **Eckstein M**, French W, et al. The Utility of prehospital ECG transmission in a large EMS system. *Prehosp Emerg Care* 2015;19:496-503.
79. Inaba, Karamanos E, Skiada D, Grabo, Hammer P, Martin M, Sullivan M, **Eckstein M**, Demetriades D. Cadaveric Comparison of The Optimal Site For Needle Decompression Of Tension Pneumothorax By Prehospital Care Providers. *J Trauma* 2015;79:1044-1088.
80. Sanossian N, Liebeskind DS, **Eckstein M**, Starkman S, et al. Routing ambulances to designated centers increases access to stroke center care and enrollment in prehospital research. *Stroke* 2015;46:2886-2890.
81. Sung G, Bosson N, Kaji AH, **Eckstein M**, Shavelle D, et al. Therapeutic hypothermia after resuscitation from a non-shockable rhythm improves outcomes in a regionalized system of cardiac arrest care. *Neurocrit Care* 2016;24:90-96.
82. Saver JL, Starkman S, **Eckstein M**, et al. Enrollment Yield and Reasons for Screen Failure in a Large Prehospital Stroke Trial. *Stroke* 2016;47:232-235.

83. Sanossian N, Apibunyopas KC, Liebeskind DS, Starkman S, Burgos AM, Conwit R, **Eckstein M**, Pratt F, Stratton S, Hamilton S, Saver JL; FAST-MAG (Field Administration of Stroke Therapy-Magnesium) Investigators and Coordinators. Characteristics and Outcomes of Very Elderly Enrolled in a Prehospital Stroke Research Study. *Stroke* 2016;47:2737-2741.
84. Bosson N, Sanko S, Strickney R, **Eckstein M**. Causes of Prehospital Misinterpretations of ST Elevation Myocardial Infarction. *Prehosp Emerg Care* 2017;283-290.
85. Kim JT, Chung PW, Starkman S, Sanossian N, Stratton SJ, **Eckstein M**, Pratt FD, Conwit R, Liebeskind DS, Sharma L, Restrepo L, Tenser MK, Valdes-Sueiras M, Gornbein J, Hamilton S, Saver JL. Field Validation of the Los Angeles Motor Scale as a Tool for Paramedic Assessment of Stroke Severity. *Stroke* 2017;48:298-306.
86. Levine M, Flores J, Seabury SA, Sanko S, **Eckstein M**. Impact of the Use of Regional Poison Control Centers in an Urban EMS Dispatch System. *J Med Toxicol* 2017;13:47-51.
87. Sanossian N, Rosenberg L, Liebeskind DS, Starkman S, **Eckstein M**, et al. A Dedicated Spanish Language Line Increases Enrollment of Hispanics Into Prehospital Clinical Research. *Stroke* 2017;48:1389-1391.
88. Shkrikova K, Starkman S, Sanossian N, **Eckstein M**, et al. Paramedic initiation of neuroprotective agent infusions: Successful achievement of target blood levels and attained level effects on clinical outcomes in the FAST-MAG pivotal field trial. *Stroke* 2017;48:1901-1907.
89. Chung PW, Kim JT, Sanossian N, Starkman S, Hamilton S, Bornbein J, Conwit R, **Eckstein M**. Association between hyperacute stage blood pressure variability and outcome in patients with spontaneous intracerebral hemorrhage. *Stroke* 2018;49:348-354.
90. Noorian A, Sanossian N, Shkirkova K, Liebeskind DS, **Eckstein M**, et al. Los Angeles Motor Scale to Identify Large Vessel Occlusion: Prehospital Validation and Comparison With Other Screens. *Stroke* 2018;49:565-572.
91. Sanossian N, Rosenberg L, Liebeskind DS, Starkman S, **Eckstein M**, et al. A dedicated Spanish language line increases enrollment of Hispanics into prehospital clinical research. *Stroke* 2017;48:1389-1391.
92. Noorian AR, Sanossian N, Shkirkova K, Liebeskind DS, **Eckstein M**, et al. Los Angeles Motor Scale to identify large vessel occlusion. *Stroke* 2018;49:565-572.
93. Chung PW, Kim JT, Sanossian N, Starkman S, Hamilton S, Gornbein J, Conwit R, **Eckstein M**, et al. Association between hyperacute stage blood pressure variability and outcome in patients with spontaneous intracerebral hemorrhage. *Stroke* 2018;49:348-354.
94. Kashani S, Sanko S, **Eckstein M**. The critical role of dispatch. *Cardiology Clinics* 2018;36:343-350.

95. Shirkova K, Saver JL, Starkman S, Wong G, Weng J, Hamilton S, Liebeskind DS, **Eckstein M**, et al. Frequency predictors and outcomes of prehospital and early post arrival neurological deterioration in acute stroke. *JAMA Neurology* 2018;1893.
96. Staats K, Mercer MP, Bosson N, Donofrio JJ, Schlesinger SS, Sanko S, Kazan C, Brown J, Gomez A, **Eckstein M**, et al. The digital EMS California academy of learning: One state's innovative approach to EMS fellow education. *Acad Emerg Med* 2018;96-99.
97. Rosell BJ, Shirkova K, Saver JL, Liebeskin DS, Starkman S, Kim-Tenser M, **Eckstein M**, et al. Subject retention in prehospital stroke research using a telephone-based physician investigator driven enrollment method. *Cerebrovasc Diseases* 2019;9:72-76.
98. Sanko S, Kashani S, Ito T, Guggenheim A, Fei S, **Eckstein M**. Advanced practice providers in the field: Implementation of the Los Angeles Fire Department Advanced Provider Response Unit. *Prehosp Emerg Med* 2019;24:1-11.
99. Abramson TM, Sanko S, Kashani S, **Eckstein M**. Safety of tiered dispatch for 911 calls for abdominal pain. *West J Emerg Med* 2019;20:957-961.
100. Whitfield D, Bosson N, Habrat D, Telmos J, Watson G, **Eckstein M**, et al. Critical medication shortages: Effective strategies to maintain continuous medication availability for EMS. *Prehosp Emerg Care* 2019;23:290-296.
101. Abramson TM, Sanko S, Kashani S, **Eckstein M**. Prime the Line! A case report of air embolism from a peripheral IV line in the field. *Prehosp Emerg Care* 2019;23:1-4.
102. Sanko S, Lane C, **Eckstein M**. Impact of a new 911 dispatch system on call-processing times for time-critical emergencies in the City of Los Angeles. *Prehosp Emerg Care* 2020;24:537-543.
103. Sanko S, Lane C, **Eckstein M**. Effect of a new 911 system on efficiency of initial resource assignment. *Prehosp Emerg Care* 2020;24:1-10.
104. Shirkova K, Schulberg S, Balouzian E, Starkman S, **Eckstein M**, et al. Paramedic global impression of change during prehospital evaluation and transport for acute stroke. *Stroke* 2020;51:784-791.
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106. Bechler K, Shkrikova K, Saver JL, Starkman S, Hamilton S, Liebeskind DS, **Eckstein M**, et al. The effect of early treatment with intravenous magnesium sulfate on the incidence of cardiac comorbidities in hospitalized stroke patients. *Cardiovasc Therap.* 2020 doi.org/10.1155/2020/1494506.

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Textbook Chapters

1. Newton E, **Eckstein M**. Medical Complications of Pregnancy. (Book chapter) In Rosen P, Baker FJ, Barkin RM, et al (eds.): Emergency Medicine: Concepts and Clinical Practice. St. Louis MO; Mosby 4th edition: 1997; pp. 2404-2417.
2. **Eckstein M**, Stratton S. Prehospital Trauma Care. (Book chapter) In: Trauma Secrets. Naude G, Bongard F, Demetriades D (eds.) Philadelphia PA; Hanley and Belfus 1998; pp.1-8.
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Invited Lectures and Abstract Presentations

1. **“The increasing role of firearms in gang related homicides in Los Angeles.”**
Society of Acad Emerg Med Annual meeting, Washington DC (May 1994)
2. **“EMS: Past present and future.”**
EMS Week Annual Conference, Pasadena, California (May 1994)
3. **“Current Controversies in EMS.”**
The 12th annual EMS Conference, Santa Barbara, California (November 1994)
4. **“Medical Direction of Emergency Medical Technicians.”**
California State EMS Authority - EMT Workshop, Sacramento, San Francisco, and Beverly Hills, California (March 1995)
5. **“Personal safety and ownership of firearms among emergency physicians.”**
Society of Acad Emerg Med (SAEM) annual meeting, San Antonio, Texas (May 1995)
6. **“Medications and illnesses during pregnancy.”**
ACEP National Scientific Assembly, Washington DC (September 1995)
7. **“Outcomes of major trauma patients with prehospital airway intervention.”**
ACEP Annual Research Forum, Cincinnati, Ohio (February 1996)
8. **“Trauma ‘96: An Update for Prehospital Providers.”**
1996 Annual EMS Expo, Atlanta, Georgia (April 1996)

9. **“Prehospital airway management of the major trauma patient.”**
University of Southern California Annual Trauma/Critical Care Symposium, Pasadena, California (May 1996)
10. **“EMS: Tomorrow and Beyond.”**
California State Firefighter’s Association’s Annual EMS Seminar, Northridge, California (October 1996)
11. **“Current Controversies in EMS.”**
USC Department of Emergency Medicine Grand Rounds, Los Angeles, California (April 1996)
12. **“Paramedic Base Station EMS Run Review.”**
Monthly presentation at Emergency Medicine Department Grand Rounds, Los Angeles County/University of Southern California Medical Center, Los Angeles, California (1993 - 2020)
13. **Keynote speaker. Paramedic Training Institute Graduation Ceremony.**
Torrance, California (March 1997)
14. **“The Role of Prehospital Intubation in the Major Trauma Patient.”**
University of Southern California Annual Trauma/Critical Care Symposium, Pasadena, California (May 1997)
15. **“Prehospital triage and treatment of stroke.” “Emergency Department triage and treatment of stroke.”**
American Academy of Neurology Acute Stroke Management Workshops, San Diego, California (May 1997)
16. **“The Role of Intravenous Fluids in Prehospital Care of the Trauma Patient.”**
Los Angeles County Annual EMS Seminar, Los Angeles, California (September 1997)
17. **“Needle Thoracostomy in the Prehospital Setting.”**
ACEP Annual Research Forum, San Francisco, California (October 1997)
18. **“A Comparison of Metered Dose Inhalers versus Nebulizers for the Treatment of Acute Asthma in the Prehospital Setting.”**
ACEP Annual Research Forum, San Francisco, California (October 1997)
19. **“Impact of a focused quality improvement program on paramedic on-scene times with major trauma patients.”**
ACEP Annual Research Forum, San Francisco, California (October 1997)
20. **“Trauma Update.”**
Santa Barbara County Health Care Services Annual EMS Conference, Santa Barbara, California (October 1997)

21. **“Prehospital Airway Management in the Major Trauma Patient.”**
Sharp Memorial Medical Center Trauma Grand Rounds, San Diego, California (December 1997)
22. **“Introduction to Anti-terrorism: The Nerve Agents.”**
USC Department of Emergency Medicine Grand Rounds, Los Angeles, California (January 1998)
23. **“Paramedic On-Scene Times for Major Trauma Patients.”**
University of Southern California Annual Trauma/Critical Care Symposium, Pasadena, California (May 1998)
24. **“Stroke for the Primary Care Physician: ER Management of Stroke.”**
American Heart Association Multidisciplinary Stroke Symposium, Los Angeles, California (May 1998)
25. **“On-Scene Termination of Resuscitation Efforts for the Trauma Patient.”**
Society for Acad Emerg Med Annual Meeting, Chicago, Illinois (May 1998)
26. **“Automatic external defibrillators.”**
Meeting of the City of Los Angeles Fire Commission, Los Angeles, California (June 1998)
27. **“Implementation of standing field treatment protocols in Los Angeles.”**
ACEP Annual Research Forum, San Diego, California (October 1998)
28. **“Prehospital Management of Burns.”**
Torrance Memorial Medical Center Burn Conference, Torrance, California (November 1998)
29. **“Air Ambulance Utilization for Pediatric Patients in an Urban EMS System.”**
SAEM Western Regional Research Forum, Redondo Beach, California (March 1999)
30. **“Paramedic Evaluation of Patients with Suspected Stroke.”**
SAEM Western Regional Research Forum, Redondo Beach, California (March 1999)
31. **“Prehospital Identification of Acute Stroke.”**
AEM Western Regional Research Forum, Redondo Beach, California (March 1999)
32. **“Prehospital Management of Burns: A Case-Based Review.”**
Torrance Memorial Medical Center 2nd Annual Burn Conference, Torrance, California (May 1999)
33. **“Air Ambulances: Lessons Learned from the LA Experience.”**
USC Annual Trauma/Critical Care Symposium, Pasadena, California (June 1999)
34. **“Introduction to Anti-Terrorism: The Nerve Agents.”**
USC CA Annual Medicine Refresher Course, Maui, Hawaii (August 1999)

35. **“Update in Trauma Management for Primary Care Providers.”**
USC Annual Medicine Refresher Course, Maui, Hawaii (August 1999)
36. **“New Emergency Airway Adjuncts.”**
USC Annual Medicine Refresher Course, Maui, Hawaii (August 1999)
37. **“Emergency Recognition and Management of Acute Stroke.”**
USC Annual Medicine Refresher Course, Maui, Hawaii (August 1999)
38. **“EMS Literature Update.”**
USC Annual Medicine Refresher Course, Maui, Hawaii (August 1999)
39. **“Prehospital identification of acute stroke.”**
ACEP Annual Research Forum, Las Vegas, Nevada (October 1999)
40. **“Paramedic evaluation of patients with suspected stroke.”**
ACEP Annual Research Forum, Las Vegas, Nevada (October 1999)
41. **“Air ambulance utilization for pediatric patients in an urban EMS system.”**
ACEP Annual Research Forum, Las Vegas, Nevada (October 1999)
42. **“EMS System Showcase: Los Angeles City.”**
NAEMSP Annual Meeting, Dana Point, California (January 2000)
43. **“Prehospital Airway Management of the Trauma Patient.”**
USC Annual Trauma/Critical Care Symposium, Los Angeles, California (June 2000)
44. **Keynote Speaker. UCLA Paramedic School Graduation Ceremony.**
Los Angeles, California (November 2000)
45. **“Termination of Field Resuscitation of Traumatic Arrests.”**
EMS State of the Science: A Gathering of Eagles Conference, Dallas, Texas (February 2001)
46. **“Use of tPA in acute stroke patients identified by paramedics utilizing the Los Angeles prehospital stroke screen.”**
Society for Acad Emerg Med Western Regional Research Forum, Newport Beach, California (March 2001)
47. **“Air versus ground transportation for trauma patients.”**
USC/US Naval Medical Center Trauma/Critical Care Symposium, Pasadena, California (April 2001)
48. **“Disaster Medicine.”**
American Academy of Physician Assistants Annual Conference, Anaheim, California (May 2001)

49. **Cardiac Arrest Resuscitation Evaluation in Los Angeles: CARE-LA.**
NAEMSP Annual Meeting, Tucson, Arizona (January 2002)
50. **“Field Termination of Out-of-Hospital Cardiac Arrests.”**
NAEMSP Annual Meeting, Tucson, Arizona (January 2002)
51. **“EMS Medical Direction: Pearls and Pitfalls.”**
NAEMSP Annual Meeting, Tucson, Arizona (January 2002)
52. **“Reflections from Ground Zero: The World Trade Center Tragedy.”**
EMS State of the Science: A Gathering of Eagles Conference, Dallas, Texas (February 2002)
53. **“EMS and Politics: The LA Story.”**
EMS State of the Science: A Gathering of Eagles Conference, Dallas, Texas (February 2002)
54. **“Urban Search and Rescue.”**
CA State Firefighters Association Annual EMS Seminar, Northridge, California (April 2002)
55. **“Disaster Medicine.”**
MLK/Drew Medical Center Emergency Medicine Grand Rounds, Los Angeles, California (April 2002)
56. **“Paramedic Identification of Congestive Heart Failure.”**
Florida EMF Clinical Conference on Prehospital Care, Orlando, Florida (July 2002)
57. **“Current Controversies in EMS.”**
Florida EMF Clinical Conference on Prehospital Care, Orlando, Florida (July 2002)
58. **“Introduction to Nerve Agents.”**
Good Samaritan Disaster Medicine Symposium, Los Angeles, California (September 2002)
59. **“Multiple Casualty Incidents.”**
LAFD Chief Officer Training Symposium, Los Angeles, California (December 2002)
60. **“CHF: A Protocol for EMS Providers.”**
EMS State of the Science: A Gathering of Eagles Conference, Dallas, Texas (February 2003)
61. **“Ambulance Diversion.”**
EMS State of the Science: A Gathering of Eagles Conference, Dallas, Texas (February 2003)
62. **Implementation of a Public Access AED Program.**
American Heart Association PAD Conference, Los Angeles, California (March 2003)

63. **“Helicopter Transport: Bang for our Buck?”**
USC Trauma/Critical Care Symposium, Pasadena, California (May 2003)
64. **“Prehospital Care of the Trauma Patient.”**
Hawaiian Islands Trauma Symposium, Honolulu, Hawaii (July 2003)
65. **“Paralytic Agents in the Prehospital Setting.”**
Hawaiian Islands Trauma Symposium, Honolulu, Hawaii (July 2003)
66. **“Risk Management in EMS.”**
Hawaiian Islands Trauma Symposium, Honolulu, Hawaii (July 2003)
67. **“Disaster Medicine.”**
USC Essentials of Emergency Medicine Course, Las Vegas, Nevada (November 2003)
68. **“Trauma in Pregnancy.”**
USC Essentials of Emergency Medicine Course, Las Vegas, Nevada (November 2003)
69. **“Magnesium for Acute Stroke: FAST-MAG.”**
EMS State of the Science: A Gathering of Eagles Conference, Dallas, Texas (February 2004)
70. **“2 for 1: Trauma in Pregnancy.”**
EMS Today – JEMS Annual Conference, Salt Lake City, Utah (March 2004)
71. **“Prehospital Trauma Care: More or Less?”**
EMS Today – JEMS Annual Conference, Salt Lake City, Utah (March 2004)
72. **“Chemical Weapons.”**
EMS Today – JEMS Annual Conference, Salt Lake City, Utah (March 2004)
73. **“Cyanide as a Chemical Weapon.”**
Fire-Rescue Med 2004, Las Vegas, Nevada (April 2004)
74. **“New Methods of Prehospital Airway Management.”**
USC Trauma and Critical Care Symposium, Pasadena, California (May 2004)
75. **“Paramedic Initiation of Neuroprotective Agents in the Field: The FAST-MAG Study.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2004)
76. **“The Impact of ED Overcrowding on EMS Availability.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2004)
77. **“Airway management in the patient with cervical spine injury.”**
USC Airway Management Course, Los Angeles, California (September 2004)

78. **“Controversies in Prehospital Care: Aeromedical Transport and Other Hot Topics.”**
ACEP 2004 Scientific Assembly, San Francisco, California (October 2004)
79. **“Advice for the New and Not So New EMS Medical Director.”**
ACEP 2004 Scientific Assembly, San Francisco, California (October 2004)
80. **“Blood Products – When What How?”**
USC Essentials Course 2004, Las Vegas, Nevada (November 2004)
81. **“Apparently Minor MVA - A Work-Up and Treatment Algorithm.”**
USC Essentials Course 2004, Las Vegas, Nevada (November 2004)
82. **“EMS Scope of Practice: Is More Good or is Less More?”**
NAEMSP Annual Conference, Naples, Florida (January 2005)
83. **“Tracheal Debate: Whether to Intubate.”**
EMS State of the Science-A Gathering of Eagles, Dallas, Texas (February 2005)
84. **“Salt Water or Hemoglobin: Blood Substitutes in the Prehospital Setting.”**
EMS Today – JEMS Annual Conference, Philadelphia, Pennsylvania (March 2005)
85. **“Diagnosis & Treatment of Cyanide Toxicity - New & Improved.”**
EMS Today – JEMS Annual Conference, Philadelphia, Pennsylvania (March 2005)
86. **“Trauma in Pregnancy.”**
EMS Today – JEMS Annual Conference, Philadelphia, Pennsylvania (March 2005)
87. **“Los Angeles Paramedic Staffing Shortage: Crisis to Solution.”**
IAFC Fire Rescue Med Annual Conference, Las Vegas, Nevada (April 2005)
88. **“Is Air Ambulance Transport Worth the Cost?”**
USC Annual Trauma/Critical Care Symposium, Pasadena, California (May 2005)
89. **“Current Controversies in EMS.”**
FDIC West Annual Conference, Los Angeles, California (June 2005)
90. **“Prehospital Trauma Care: What Works and What Doesn't?”**
International Interdisciplinary Conference on Emergencies, Montreal, Canada (June 2005)
91. **“Termination of resuscitative efforts in the prehospital setting: recognizing futility.”**
International Interdisciplinary Conference on Emergencies, Montreal, Canada (June 2005)
92. **“Disaster Preparedness in a Large Urban Area: Keys for Success.”**
International Interdisciplinary Conference on Emergencies, Montreal, Canada (June 2005)

93. **“EMS Scope of Practice Controversies.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2005)
94. **“Current Controversies in EMS.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2005)
95. **“Prehospital Airway Management of the Trauma Patient.”**
Cottage Hospital Annual Trauma Conference, Santa Barbara, California (July 2005)
96. **“Controversies in EMS.”**
Santa Barbara Annual EMS Conference, Santa Barbara, California (October 2005)
97. **“Current Topics in EMS.”**
Prehosp Emerg Care and Crisis Intervention Conference, Salt Lake City, Utah (November 2005)
98. **“Disaster Medicine.”**
Prehosp Emerg Care and Crisis Intervention Conference, Salt Lake City, Utah (November 2005)
99. **“Salt Water or Blood: Hemoglobin Substitutes.”**
Prehospital Emergency Care and Crisis Intervention Conference, Salt Lake City, Utah (November 2005)
100. **“The LA Train Disaster: Lessons Learned.”**
USC Essentials of Emergency Medicine 2005, Las Vegas, Nevada (November 2005)
101. **“The Role of Capnography in EMS.”**
EMS State of the Science-A Gathering of Eagles, Dallas, Texas (February 2006)
102. **“Healthcare System Capacity During an Influenza Pandemic.”**
National Disaster Medical System (NDMS) Annual Conference, Reno, Nevada (April 2006)
103. **“Termination of Resuscitation in the Field: Recognizing Futility.”**
CA EMS Authority EMS Conference, San Diego, California (May 2006)
104. **“Cardiac Care/Cardiac Arrest 2006: State of the Art.”**
FL Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2006)
105. **“Hemophilia and Sickle Cell Anemia.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2006)

106. **“EMS Staffing Models: All ALS vs. A Tiered Model.”**
Floria Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida
(July 2006)
107. **“Minor Abdominal Trauma – CT and Home?”**
USC Essentials of Emergency Medicine 2006, Las Vegas, Nevada (November 2006)
108. **“Blunt Cardiac Arrest: An Algorithm.”**
USC Essentials of Emergency Medicine 2006, Las Vegas, Nevada (November 2006)
109. **“Toxic Inhalations.”**
Institute for Emergency Medical Education Annual Conference, Maui, Hawaii (December
2006)
110. **“Disaster Medicine.”**
NAEMSP Medical Director’s Course, Naples, Florida (January 2007)
111. **“ED Overcrowding.”**
NAEMSP Medical Director’s Course, Naples, Florida (January 2007)
112. **“Challenging Past Practice in EMS.”**
NAEMSP Annual Conference, Naples, Florida (January 2007)
113. **“Is Transport to the Closest Hospital a Thing of the Past?”**
EMS State of the Science-A Gathering of Eagles, Dallas, Texas (February 2007)
114. **“The Paramedic Shortage: Feast or Famine.”**
EMS State of the Science-A Gathering of Eagles, Dallas, Texas (February 2007)
115. **“The New Cyanide Antidote: Ready for Primetime?”**
EMS State of the Science-A Gathering of Eagles, Dallas, Texas (February 2007)
116. **“Cardiac Care and Cardiac Arrest Resuscitation: State of the Art.”**
EMS Today Annual Conference, Baltimore, Maryland (March 2007)
117. **“ALS vs BLS: Is more ALS really better?”**
EMS Today Annual Conference, Baltimore, Maryland (March 2007)
118. **“Trauma Care 2007.”**
EMS Today Annual Conference, Baltimore, Maryland (March 2007)
119. **“New Treatments for Smoke Inhalation.”**
Nevada Rural EMS Conference, Elko, Nevada (April 2007)
120. **“Plain Films for Trauma: Obsolete?”**
USC Trauma and Critical Care Symposium, Pasadena, California (May 2007)

121. **“Toxic Inhalations.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2007)
122. **“Trauma Update 2007.”**
Florida Emergency Medicine Foundation Annual ClinCon Conference, Orlando, Florida (July 2007)
123. **“Challenging Past Practice in EMS.”**
Annual EMS Leadership Conference, Toronto, Canada (September 2007)
124. **“Gadgets gizmos and new devices in EMS.”**
ACEP Advanced EMS Medical Director’s Course, Seattle, Washington (October 2007)
125. **“New Approaches to treating toxic inhalation.”**
Whatcom County EMS Annual conference on Prehospital medicine, Bellingham, Washington (October 2007)
126. **“Current Controversies in EMS.”**
Whatcom County EMS Annual conference on Prehospital medicine, Bellingham, Washington (October 2007)
127. **“What’s New in Prehospital Care?”**
USC Essentials of Emergency Medicine 2007, Las Vegas, Nevada (November 2007)
128. **“End-Tidal CO₂ – Uses in the Emergency Department.”**
USC Essentials of Emergency Medicine 2007, Las Vegas, Nevada (November 2007)
129. **“What’s New in Trauma Management.”**
Institute for Emergency Medical Education Annual Conference, Maui, Hawaii (December 2007)
130. **“Fundamentals of Disaster Management.”**
NAEMSP Medical Director’s Course, Phoenix, Arizona (January 2008)
131. **“Termination of Resuscitation.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2008)
132. **“Impact of STEMI Receiving Centers.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2008)
133. **Keynote Speaker.**
Navigator Emergency Medical Dispatcher Annual Conference, Baltimore, Maryland (April 2008)
134. **“Incorporating New Devices Into Your EMS System.”**
Emergency Cardiovascular Care Conference, Las Vegas, Nevada (June 2008)

135. **“Paramedic Staffing and Deployment Strategies.”**
ACEP Advanced EMS Medical Directors’ Course, Chicago, Illinois (October 2008)
136. **“Metrolink Tragedy: Multiple Casualty Incident.”**
USC Essentials of Emergency Medicine 2008, Las Vegas, Nevada (November 2008)
137. **“Penetrating Extremity Trauma.”**
USC Essentials of Emergency Medicine 2008, Las Vegas, Nevada (November 2008)
138. **“The LA Metrolink Crash: New MCI Considerations.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2009)
139. **“The Metrolink Disaster: MCI Lessons Learned.”**
USC Trauma and Critical Care Symposium, Pasadena, California (March 2009)
140. **“Prehospital Intubation for the Major Trauma Patient: Pro or Con?”**
Cottage Hospital Annual Multiple Trauma Symposium, Santa Barbara, California (July 2009)
141. **“Can EMS Decide Who Should Be Transported?”**
ACEP Advanced EMS Medical Directors’ Course, Boston, Massachusetts (October 2009)
142. **“Implementation of STEMI Receiving Centers in Los Angeles.”**
ACEP Advanced EMS Medical Directors’ Course, Boston, Massachusetts (October 2009)
143. **“Agitated Delirium.”**
ACEP Advanced EMS Medical Directors’ Course, Boston, Massachusetts (October 2009)
144. **“Transvenous Pacemakers.”**
USC Essentials of Emergency Medicine 2009, Las Vegas, Nevada (November 2009)
145. **“Destination and Diversion Issues in EMS.”**
NAEMSP Annual Meeting, Phoenix, Arizona (January 2010)
146. **“Creation of STEMI Centers.”**
NAEMSP Advanced EMS Medical Directors Course, Phoenix, Arizona (January 2010)
147. **“H1N1 and EMS.”**
NAEMSP Annual Meeting, Phoenix, Arizona (January 2010)
148. **“Mandatory Transportation Debate.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2010)
149. **“CPR: Present Practice and Future Directions.”**
Providence Holy Cross Medical Center, Mission Hills, California (April 2010)
150. **“FAST MAG Study: EMS Role in Early Stroke Treatment.”**
Emergency Management of Stroke Conference, Houston, Texas (April 2010)

151. **“Hypothermia for Cardiac Arrest.”**
USC Essentials of Emergency Medicine, San Francisco, California (November 2010)
152. **“CPR Made Simple.”**
USC Essentials of Emergency Medicine, San Francisco, California (November 2010)
153. **“2010 Ways for Managing Strokes.”**
Emergency Cardiovascular Care Update (ECCU), San Diego, California (December 2010)
154. **“Navigating the Hurdles in Effecting STEMI System Care.”**
Emergency Cardiovascular Care Update (ECCU), San Diego, California (December 2010)
155. **“As Serious as a Heart Attack: STEMI Systems of Care.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2011)
156. **“What’s New in Prehospital Stroke Care?”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2011)
157. **“Who is a Trauma Patient?”**
Santa Barbara Annual Trauma Symposium, Santa Barbara, California (June 2011)
158. **“Preserving Neurologic Function in CPR and Acute Stroke.”**
Torrance Memorial Medical Center, Torrance, California (September 2011)
159. **“Establishing a STEMI System.”**
ACEP Advanced EMS Medical Directors’ Course, San Francisco, California (October 2011)
160. **“Trends in Out-of-Hospital Cardiac Arrest in Los Angeles.”**
ACEP Research Forum, San Francisco, California (October 2011)
161. **“Evolution of a STEMI Care System: The Los Angeles Experience.”**
ACEP Research Forum, San Francisco, California (October 2011)
162. **“Best EMS Papers of 2011.”**
USC Essentials of Emergency Medicine, San Francisco, California (November 2011)
163. **“Ten Trauma Errors to Avoid.”**
USC Essentials of Emergency Medicine, San Francisco, California (November 2011)
164. **“Confronting EMS Budget Cuts in the Era of Healthcare Reform.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2012)
165. **“The New Trauma Triage 2012.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2012)
166. **“Mechanical Devices in CPR.”**
1st Pan-Hellenic Congress on Emergency Prehospital Care, Thessaloniki, Greece (April 2012)

167. **“Organization and Funding of the Los Angeles EMS System.”**
1st Pan-Hellenic Congress on Emergency Prehospital Care, Thessaloniki, Greece (April 2012)
168. **“Paramedic Training in Los Angeles.”**
1st Pan-Hellenic Congress on Emergency Prehospital Care, Thessaloniki, Greece (April 2012)
169. **“Do Paramedics Make any Difference in Stroke Patients?”**
1st Pan-Hellenic Congress on Emergency Prehospital Care, Thessaloniki, Greece (April 2012)
170. **Keynote Speaker: “Health Reform and EMS.”**
Ohio State Annual EMS Conference, Columbus, Ohio (May 2012)
171. **“Trial and Error: Dealing with Mistakes in EMS.”**
Ohio State Annual EMS Conference, Columbus, Ohio (May 2012)
172. **“Hospital Emergency Response Teams.”**
USC Trauma and Critical Care Symposium, Pasadena, California (May 2012)
173. **“Role of Capnography as a Predictor in Cardiac Arrest.”**
EMS Administrators Leadership Conference of CA, Long Beach, California (June 2012)
174. **“Alternatives to Routine Emergency Department Transport.”**
ACEP Advanced EMS Medical Directors’ Course, Denver, California (October 2012)
175. **“The Rising Tide of Pulseless Electrical Activity.”**
Cedars Sinai Arrhythmia Conference, Los Angeles, California (December 2012)
176. **“EMS in Trauma Care: Less is More?”**
3rd Annual CA Trauma and Resuscitation Symposium, San Diego, California (Jan. 2013)
177. **“Healthcare Reform and EMS.”**
Eagles Annual EMS Conference, Dallas, Texas (February 2013)
178. **“Maximizing Care in Mass Casualty Incidents.”**
USC Trauma and Critical Care Symposium, Pasadena, California (May 2013)
179. **“Optimizing Outcomes from Traumatic Brain and Spinal Cord Injury.”**
Neurocritical Care Symposium, Los Angeles, California (June 2013)
180. **“Prehospital Spinal Immobilization: A Critical Appraisal.”**
USC Trauma and Critical Care Symposium, Pasadena, California (May 2014)
181. **“Management of Office Emergencies.”**
Orange County Dental Association, Irvine, California (October 2014)

182. **“Collateral Advantages of Prehospital Research.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2015)
183. **“Impact and Results of the FAST MAG Study.”**
EMS Administrators of CA Annual Conference, Coronado, California (May 2015)
184. **“Pit Crew Concept in Prehospital Care.”**
Emergency Cardiovascular Care Update Conference, San Diego, California (December 2015)
185. **“Impact of a new dispatch system on cardiac arrest survival.”**
Emergency Cardiovascular Care Update Conference, San Diego, California (December 2015)
186. **“Implementation of a Nurse Practitioner Response Unit.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2016)
187. **“Helicopter Transport in an Urban Area: Saving Lives or Wasting Resources?”**
USC Trauma/Critical Care Symposium, Pasadena, California (May 2016)
188. **“Innovation in EMS.”**
CA Fire EMS and Disaster (CFED) Conference, Indian Wells, California (May 2016)
189. **“Dispatching Nurse Practitioners in the Field.”**
ACEP Advanced EMS Medical Directors’ Course, Las Vegas, Nevada (October 2016)
190. **“Dispatcher Role in Improving Cardiac Arrest Survival.”**
ACEP Advanced EMS Medical Directors’ Course, Las Vegas, Nevada (October 2016)
191. **“Research in Prehospital Care.”**
EMS Today, Salt Lake City, Utah (February 2017)
192. **“EMS and Public Health.”**
EMS State of the Science Annual Conference, Dallas, Texas (February 2016)
193. **“Implementation of a Nurse Practitioner Response Unit.”**
EMS Today, Salt Lake City, Utah (February 2017)
194. **“EMS and Public Health.”**
Fire Rescue Med – IAFC Conference, Henderson, Nevada (May 2017)
195. **“Role of Midlevel Providers in the Prehospital Setting.”**
USC Trauma/Critical Care Symposium, Pasadena, California (July 2017)
196. **“Public Health and EMS.”**
EMS State of the Science, Dallas, Texas (February 2018)

197. **“Prehospital use of tourniquets.”**
USC Trauma/Critical Care Symposium, Pasadena, California (July 2018)
 198. **“Integration of public health in EMS.”**
NAEMSP Annual Conference, Austin, Texas (January 2019)
 199. **“Mobile Integrated Health in EMS.”**
Firehouse World Expo, Los Angeles, California (March 2019)
 200. **“EMS and Public Health.”**
Firehouse World Expo, Los Angeles, California (March 2019)
 201. **“Mobile Integrated Health in EMS.”**
EMS Administrators Association Annual Conference, Yosemite, California (April 2019)
 202. **“Advanced field interventions in trauma: tourniquets TXA and REBOA.”**
USC Trauma and Critical Care Symposium, Pasadena, California (May 2019)
 203. **“New Trauma Field Interventions: What Works?”**
EMS Today 2020, Tampa Bay, Florida (March 2020)
 204. **“Telemedicine in EMS.”**
EMS State of the Science, Fort Lauderdale, Florida (June 2022)
 205. **“You Call We Haul: Time for a Paradigm Shift in EMS.”**
CFED EMS Conference, Indian Wells, California (May 2023)
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Grant Funding

1. **Department of Health and Human Services – Maternal and Child Health Bureau**
“Evaluation of the Pediatric Assessment Triangle as an Assessment Tool for Children in the Prehospital Setting”
Study Role: Co-Principal Investigator
Research Award Number: 43543
Funding Period: September 2007 – August 2010
Amount Received: \$600,000
2. **National Institutes of Health Grant for the study entitled: “Field Administration for Stroke Therapy - Magnesium (FAST-MAG)”**
Study Role: Co-Principal Investigator
NIH GRANT NUMBER: 1 U01 NS044364-01A1
Funding Period: July 2003 - June 2012
Amount Received: \$16,000,000

3. **Annenberg Foundation EMS Emergency Cardiac Care Project**
Secured donation to purchase 12 lead ECGs for all LAFD paramedic resources, provide ACLS training for all LAFD paramedics, and hire two full-time research assistants to pursue cardiac center designation in Los Angeles under the auspices of the American Heart Association
Funding Period: July 2004 – July 2006
Amount Received: \$2,910,195
4. **American Heart Association Beginning Grant-in-Aid for the study entitled: “Cardiac Arrest and Resuscitation Evaluation in Los Angeles: CARE-LA”**
Study Role: Principal Investigator
AHA GRANT NUMBER: 0060113Y
Funding period: July 2000 - July 2002
Amount Received: \$120,000
5. **EMS Prevention 2000 Block Grant from the Centers for Disease Control through the CA State EMS Authority for the study entitled: “Prehospital Identification and Rapid Treatment of Acute Stroke”**
Study Role: Principal Investigator
Funding period: July 1998 - July 2000
Amount Received: \$160,000
6. **American Heart Association Greater Los Angeles Affiliate for study entitled: “Prehospital Identification and Rapid Treatment of Acute Stroke”**
Study Role: Principal Investigator
AHA GRANT NUMBER: 1124-GI1
Funding period: July 1997 - July 1998
Amount Received: \$40,000
7. **The USC James H. Zumberge Faculty Research and Innovation Fund for study entitled: “Prehospital Identification and Rapid Treatment of Acute Stroke”**
Study Role: Principal Investigator
Funding period: July 1997 - July 1998
Amount Received: \$25,000
8. **Los Angeles County Sheriff’s Department for study entitled: “Positional Asphyxia and its Relation To Various Restraint Devices”**
Study Role: Co-Principal Investigator
Funding period: 1995
Amount Received: \$7,000

9. **Glaxo Pharmaceuticals Inc. for study entitled: “The Use of Metered Dose Inhalers for Treatment of Acute Asthma in the Prehospital Setting”**

Study Role: Principal Investigator

Funding period: 1994

Amount Received: \$5,200

Peer-Reviewed Journal Reviewer

- Academic Emerg Med
 - Prehospital Emergency Care
 - Critical Care
 - Pediatrics
 - Annals of Emergency Medicine
 - Resuscitation
-

Editorial Board Member

- 2004 - 2021: Prehospital Emergency Care
 - 2005 - 2012: Journal of Emergency Medical Services
-

Media Presentations

- Multiple television interviews discussing the COVID-19 pandemic, PCR and serology testing, contact tracing, and vulnerable populations
 - Appeared on CNN, ABC World News Tonight, KTLA Los Angeles, ABC News Los Angeles, and Spectrum News
- KTLA live TV interview: The Los Angeles Fire Dept 911 Telemedicine Program
- KCAL TV Channel 9 Los Angeles 30-minute documentary entitled “Are We Safe?” – Key person interviewed on this program discussing preparation for terrorist attacks.
- On-scene interviews at numerous emergency incidents including expanded EMS incidents, multiple casualty incidents, and physical rescues.
- Provided numerous press conferences representing LAC/USC Medical Center and LAFD
- Conducted interview regarding introduction of prehospital 12 lead ECGs on KNBC news

- Conducted interview in Spanish regarding creation of STEMI-Receiving Centers for heart attack patients on Telemundo
 - Gave numerous TV interviews regarding the COVID-19 pandemic including CNN, ABC, KCAL, KTLA, and Spectrum News
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Deputized by Los Angeles Mayor Eric Garcetti as the Physician Leader in charge of COVID-19 Testing in Los Angeles (March 2020)

Languages Spoken

- English
- Spanish