

Principal Investigator	Davis, Daniel, P.
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BIOGRAPHICAL SKETCH

NAME	POSITION TITLE
Daniel Paul Davis, MD, FACEP	Associate Clinical Professor of Medicine

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	YEAR(s)	FIELD OF STUDY
University of California, Los Angeles	B.S.	1986-1991	Psychobiology
University of California, San Diego	M.D.	1991-1995	Medicine
Mercy Hospital and Medical Center, San Diego	Internship	1995-1996	Transitional Internship
University of California, San Diego	Residency	1996-1999	Emergency Medicine
University of California, San Diego	Fellowship	2001-2003	Neuroanesthesia research

A. Positions and Honors:

1986-1991 National Merit Scholar, UCLA Regents Scholar, UCLA Alumni Scholar;
1988-1991 Assistant Editor, *Clinical Transplants*;
1988-1991 Research Associate, UCLA Tissue Typing Laboratory;
1991 Phi Beta Kappa;
1991 Magna Cum Laude;
1994-1995 UCSD Preventative Medicine Grant Recipient;
1996 Runner-up, Mercy Housestaff Research Award;
1997-1998 House Officer of the Year, UCSD Medical Center;
1998-1999 Chief Resident, UCSD Emergency Medicine;
1998-1999 Council of Residency Directors, National Academic Achievement Award;
1998-1999 UCSD Outstanding Emergency Medicine Resident;
1999-present Assistant Clinical Professor of Medicine, UCSD Department of Emergency Medicine;
1999-2001 Co-Director, UCSD Emergency Medicine Ultrasound Program;
1999-2003 Medical Student Director, UCSD Emergency Medicine;
2001-2002 SAEM Scholarly Sabbatical Grant;
2002-2003 Rosen Research Faculty Development Grant;
2001-present Assistant Director, UCSD Neuroanesthesia Laboratory;
2002-Present Director, UCSD Emergency Medicine Research Associate Program;
2002-present Section Editor, *Journal of Emergency Medicine* "Difficult Airways";
2003 SAEM Young Investigator Award;
2003 SAEM Young Investigator Research Paper of the Year;
2003 Fellow of the American College of Emergency Physicians;
2003-present Regional Medical Director, Mercy Air Medical Services;
2003-present UCSD Base Hospital EMS Medical Director;
2003-present Assistant Director and Co-Founder, UCSD/San Diego Resuscitation Research Institution;
2003-present Chair, San Diego County EMS Airway Interest Group;
2004-present Resuscitation Outcomes Consortium EMS Operations Committee Chair;
2004 SAEM Young Investigator Research Paper of the Year;
2004 Conference Director, Brain Trauma Foundation, Prehospital Management of Traumatic Brain Injury;
2004-present Founder Air Medical Research Collaborative;
2004-present Vice Chair Association of Air Medical Services Research Committee;
2005-present Director UCSD/San Diego Resuscitation Training Center.

B. Selected peer-reviewed publications (in chronological order):

1. Davis DP, Bramwell KJ, Hamilton RS, Williams SR: Ethylene glycol poisoning: Case report of a record-high level and a review. *J Emerg Med* 1997;15(5):653-667.
2. Bramwell KJ, Davis DP: Ludwig's angina. *J Emerg Med* 1998;16(3):481.
3. Davis DP, Gash-Kim TL, Heffernan EJ: Toxic shock syndrome: Case report of a postpartum female and a literature review. *J Emerg Med* 1998;16(4):607-614.
4. Davis DP, Hamilton RS, Webster TH: Reversal of midazolam-induced laryngospasm with flumazenil. *Ann Emerg Med* 1998;32(2):263-265.
5. Davis DP, Bramwell KJ, Vilke GM, Cardall TY, Yoshida E, Rosen P: Cricothyrotomy technique: Standard versus the rapid four-step technique. *J Emerg Med* 1999;17(1):17-21.
6. Davis DP, Stephen KAC, Vilke GM: Inaccuracy in endotracheal tube verification using a Toomey syringe. *J Emerg Med* 1999;17(1):35-38.
7. Davis DP, McCaslin RI: Nonaccidental trauma. *J Emerg Med* 1999;17(1):111-112.
8. Davis DP, Bruffey JD, Rosen P: Coccygeal fracture and Paget's disease presenting as acute cauda equina syndrome. *J Emerg Med* 1999;17(2):251-254.
9. Davis DP, Bramwell KJ: Ludwig's angina (Reply to letter to the editor). *J Emerg Med* 1999;17(2):347.
10. Bramwell KJ, Davis DP, Cardall TY, Yoshida E, Vilke GM, Rosen P: Use of the Trousseau dilator in cricothyrotomy. *J Emerg Med* 1999;17(3):433-436.
11. Davis DP, Williams SR: *Amanita muscaria*. *J Emerg Med* 1999;17(4):739.
12. Moore JA, Schmitt J, Davis DP, Rosen P: Pelvic abscess on plain radiograph. *J Emerg Med* 1999;17(4):741-742.
13. Chan TC, Vilke GM, Bramwell KJ, Davis DP, Hamilton RS, Rosen P: Comparison of wire-guided cricothyrotomy versus standard surgical cricothyrotomy technique. *J Emerg Med* 1999;17(6):957-962.
14. Davis D, Bramwell K: Cricothyrotomy technique: Standard versus the rapid four-step technique (Reply to letter to the editor). *J Emerg Med* 1999;17(6):1072-1073.
15. Khanna S, Davis D, Peterson B, Fisher B, Tung H, O'Quigley J, Deutsch R: Use of hypertonic saline in the treatment of severe refractory posttraumatic intracranial hypertension in pediatric traumatic brain injury. *Crit Care Med* 2000;28(4):1144-1151.
16. Davis DP, Bramwell KJ, Hamilton RM, Chan TC, Vilke GM: Safety and efficacy of the rapid four-step technique for cricothyrotomy using a Bair Claw. *J Emerg Med* 2000;19(2):125-129.
17. Davis DP: Technical improvisation in emergency medicine. *J Emerg Med* 2000;19(3):279-280.
18. Gerling MC, Davis DP, Hamilton RS, Morris GF, Vilke GM, Garfin SR, Hayden SR: Effects of cervical spine immobilization technique and laryngoscope blade selection on an unstable cervical spine in a cadaver model of intubation. *Ann Emerg Med* 2000;36(4):293-300.
19. Deitch S, Davis D: Hypokalemic thyrotoxic periodic paralysis. *Am J Emerg Med* 2001; 19(1):85-86.
20. Gerling MC, Davis DP, Hamilton RS, Morris GF, Vilke GM, Garfin SR, Hayden SR: Effect of surgical cricothyrotomy on the unstable cervical spine in a cadaver model of intubation. *J Emerg Med* 2001;20(1):1-5.
21. Bair AE [20(3):301] / Davis D: Safety and efficacy of the rapid four-step technique for cricothyrotomy using a Bair Claw (Reply to letter to the editor). *J Emerg Med* 2001; 20(3):302.
22. DiGiacomo JC, Angus LDG, Simpkins CO, Shaftan GW [20(3):303] / Davis DP, Bramwell KJ: Safety and efficacy of the rapid four-step technique for cricothyrotomy using a Bair Claw (Reply to letter to the editor). *J Emerg Med* 2001;20(3):304-305.
23. Doyle JA, Davis DP, Hoyt DB: The use of hypertonic saline in the treatment of traumatic brain injury. *J Trauma* 2001;50(2):367-383.

24. Davis DP, Kimbro TA, Vilke GM: The use of midazolam for prehospital rapid-sequence intubation may be associated with a dose-related increase in hypotension. *Prehosp Emerg Care* 2001;5(2):163-168.
25. Davis DP, Videen JS, Marino A, Vilke GM, Dunford JV, Van Camp SP, Maharam LG: Exercise-induced hyponatremia in marathon runners: A two-year experience. *J Emerg Med* 2001;21(1):47-57.
26. Ochs M, Davis D, Hoyt D, Bailey D, Marshall L, Rosen P: Paramedic-performed rapid sequence intubation of patients with severe head injuries. *Ann Emerg Med* 2002;40(2):159-167.
27. Chew GS, Vilke GM, Davis DP, Chan TC: ToomeyTM syringe aspiration may be inaccurate in detecting esophageal intubation following gastric insufflation. *J Emerg Med* 2002;23(4): 337-340.
28. Davis DP, Hoyt DB, Ochs M, Fortlage D, Holbrook T, Marshall LK, Rosen P: The effect of paramedic rapid sequence intubation on outcome in patients with severe traumatic brain injury. *J Trauma* 2003;54(3):444-453.
29. Davis DP, Marino A: Acute cerebellar ataxia in a toddler: Case report and literature review. *J Emerg Med* 2003;24(3):281-284.
30. Ochs M, Davis DP, Hoyt DB: Lessons learned during the San Diego paramedic RSI trial (Reply to letter to the editor). *J Emerg Med* 2003;24(3):343-344.
31. Wilson M, Davis DP, Coimbra R: Diagnosis and monitoring of hemorrhagic shock during the initial resuscitation of multiple trauma patients: A review. *J Emerg Med* 2003; 24(4):413-422.
32. Deitch S, Davis DP, Schatteman J, Chan TC, Vilke GM: The use of etomidate for prehospital rapid-sequence intubation. *Prehosp Emerg Care* 2003;7(3):380-383.
33. Davis DP, Ochs M, Hoyt DB, Bailey D, Marshall LK, Rosen P: Paramedic-administered neuromuscular blockade improves prehospital intubation success in severely head-injured patients. *J Trauma* 2003;55(4):713-9.
34. Ho C, Adema G, Davis D, Stinson M: A seven-year experience in expedition medicine: The Juneau icefield research program. *J Emerg Med* 2003;25(3):257-264.
35. Davis DP, Dunford JV, Ochs M, Park K, Hoyt DB: The use of quantitative end-tidal capnometry to avoid inadvertent severe hyperventilation in head-injured patients following paramedic rapid sequence intubation. *J Trauma* 2004; 56(4):808-14.
36. Davis DP, Valentine C, Ochs M, Vilke GM, Hoyt DB: The Combitube as a salvage airway device for paramedic rapid sequence intubation. *Ann Emerg Med* 2003; 42(5):697-704.
37. Dunford JV, Davis DP, Ochs M, Doney M, Hoyt DB: Incidence of transient hypoxia and pulse rate reactivity during paramedic rapid sequence intubation. *Ann Emerg Med* 2003; 42(6):721-8.
38. Davis DP, Wold RM, Patel RJ, Tran AJ, Tokhi RN, Chan TC, Vilke GM: The clinical presentation and impact of diagnostic delays on emergency department patients with spinal epidural abscess. *J Emerg Med* 2004; 26(3):285-91.
39. Davis DP, Campbell CJ, Poste JC, Ma G: The association between operator confidence and accuracy of ultrasonography performed by novice emergency physicians [in press]. *J Emerg Med*.
40. Davis DP, Patel PM. Ischemic preconditioning in the brain. *Current Opinion in Anaesthesiology* 2003; 16(11):447-52.
41. Davis DP: Acute cerebellar ataxia (Reply to letter to the editor). *J Emerg Med* 2004; 26(2):243-4.
42. Davis DP, Inoue S, Kelly PJ, Poste JC, Corbeil J, Cole DJ, Drummond JC, Patel PM: The use of microarray analysis to isolate a group of genes responsible for mediating ischemic preconditioning. *J Neuroscience Res*, submitted.
43. Davis DP, Inoue S, Kelly PJ, Poste JC, Cole DJ, Drummond JC, Patel PM: A potential role for decoy molecules in neuronal ischemic preconditioning. *Neuroreport*, submitted.
44. Inoue S, Davis DP, Drummond JC, Cole DJ, Patel PM: Combination of isoflurane and caspase 8 inhibition results in sustained neuroprotection in rats subjected to focal cerebral ischemia [in press]. *Anesthesiology*.

45. Inoue S, Drummond JC, Davis DP, Cole DJ, Patel PM: Combination of isoflurane and caspase inhibition reduces cerebral injury in rats subjected to focal cerebral ischemia. *Anesthesiology* 2004; 101(1):75-81.
46. Davis DP, Stern J, Ochs M, Sise MJ, Hoyt DB: A follow-up analysis of factors associated with head-injury mortality following paramedic rapid sequence intubation. *J Trauma*, submitted.
47. Davis DP, Dunford J, Poste JC, Ochs M, Hoyt DB: The impact of hypoxia and hyperventilation on outcome following paramedic rapid sequence intubation of patients with severe traumatic brain injury. *J Trauma* 2004; 57(1):1-10.
48. Vilke GM, Jin A, Davis DP, Chan TC: Prospective randomized study of viscous Lidocaine versus Benzocaine in a GI cocktail for dyspepsia. *J Emerg Med* 2004; 27(1):7-9.
49. Davis DP, Poste JC, Kelly D: The UCSD research associate program: A recipe for successfully integrating undergraduates with emergency medicine research [in press]. *J Emerg Med*.
50. Davis DP, Heister R, Dunford J, Poste JC, Ochs M, Hoyt D: Ventilation patterns in patients with severe traumatic brain injury following paramedic rapid sequence intubation [in press]. *Neuro Crit Care*.
51. Davis DP, Grossman K, Kiggins DK, Vilke GM, Chan TC: Inadvertent administration of anticoagulants to emergency department patients with aortic dissection [in press]. *Amer J Emerg Med*.
52. Davis DP: Bimanual laryngoscopy. *J Emerg Med*, submitted.
53. Vilke GM, Chan TC, Dunford JV, Metz M, Ochs G, Smith A, Fisher R, Poste JC, McCallum-Brown L, Davis DP. The three-phase model of cardiac arrest as applied to ventricular fibrillation in a large, urban emergency medical services system [in press]. *Resuscitation*.
54. Wish JR, Davis DP. Auto launch/early activation: a survey of AAMS members and literature review [in press]. *Air Med J*.
55. Wang HE, Davis DP, Wayne MA, Delbridge T. Prehospital rapid sequence intubation: what does the evidence show? *Prehosp Emerg Care* 2004; 8(4):366-77.
56. Poste JC, Davis DP, Ochs M, Vilke GM, Castillo EM, Stern J, Hoyt DB: Air medical transport of severely head-injured patients undergoing paramedic rapid sequence intubation. *Air Med J* 2004; 23(4):36-40.
57. Davis DP, Vadeboncoeur TF, Ochs M, Poste JC, Vilke GM, Hoyt DB: The predictive value of paramedic Glasgow Coma Scale calculations prior to rapid sequence intubation. *J Emerg Med*, submitted.
58. Vadeboncoeur TF, Davis DP, Ochs M, Poste JC, Hoyt DB, Vilke GM: The predictive value of paramedic assessment of aspiration in patients undergoing prehospital rapid sequence intubation. *J Emerg Med*, submitted.
59. Davis DP, Robertson T. Diffusion-weighted magnetic resonance imaging versus computed tomography in the diagnosis of acute stroke [in press]. *J Emerg Med*
60. Davis DP, Wiesner C, Chan TC, Vilke GM: The efficacy of nebulized albuterol/ipratropium bromide versus albuterol alone in the prehospital treatment of suspected reactive airways disease. *Prehosp Emerg Care*, submitted.
61. Davis DP: The Combitube as a rescue device: recommended use of the small adult size for all patients six feet tall or shorter (Reply to letter to the editor). *Ann Emerg Med* 2004; 44(1):92-3.
62. Davis DP, Pettit K, Rom CD, Poste JC, Sise MJ, Hoyt DB, Vilke GM. The safety and efficacy of prehospital needle and tube thoracostomy by aeromedical personnel [in press]. *Prehosp Emerg Care*.
63. Davis DP. Difficult airways: introduction to the section. *J Emerg Med* 2004; 27(4):379.
64. Daniel DP, Peay J, Serrano JA, Buono C, Vilke GM, Sise MJ, Kennedy F, Eastman AB, Velky T, Hoyt DB. The Impact of Aeromedical Response to Patients with Moderate-to-Severe Traumatic Brain Injury [in press]. *Ann Emerg Med*.
65. Davis DP, Idris AH, Sise MJ, Kennedy F, Eastman AB, Velky T, Vilke GM, Hoyt DB. Early ventilation and outcome in patients with moderate-to-severe traumatic brain injury [in press]. *Crit Care Med* 2005.

66. Davis DP, Douglas DJ, Smith W, Sise MJ, Vilke GM, Holbrook TL, Kennedy F, Eastman AB, Velky T, Hoyt DB. Outcomes from moderate-to-severe traumatic brain injury in pre- and post-menopausal females versus age-matched males [in press]. J Neurotrauma 2005.

C. Research Support.

Ongoing Research Support

- 2004- Microarray Analysis of Neuronal Ischemic Preconditioning (Co-PI), NIH R01
2004- UCSD/San Diego Resuscitation Research Center [Resuscitation Outcomes Consortium] (Co-PI), NIH U01

Completed Research Support

- 2004-2005 Brief Intervention to Reduce At-Risk Alcohol Use in ED Patients (Co-PI), NIH R25
2003-2004 Use of a new, cuffed, percutaneous emergency cricothyrotomy kit (Co-Investigator), Cook Medical Inc.
2002-2003 Gene Expression in Neuronal Ischemic Preconditioning (PI), UCSD Emergency Medicine
2001-2002 Excitotoxicity and Apoptosis as Mediators of Neuronal Death during Cerebral Ischemia (PI), SAEM
1996-1997 Nutrition Education in Junior High and High School (PI), UCSD School of Medicine