

CURRICULUM VITAE

MARK G. ROBACK, M.D.

PROFESSIONAL ADDRESS:

13123 East 16th Avenue
Box 251
Aurora, CO 80045
Office: 303-724-7414
Fax: 720-777-7317
Email: Mark.Roback@childrenscolorado.org

IDENTIFYING INFORMATION

Education:

Degree	Institution	Date Degree Granted
B.S.	University of Minnesota, College of Biological Sciences, MN Microbiology	1983
M.D.	University of Minnesota, School of Medicine, MN	1988
Intern in Pediatrics	University of Minnesota, School of Medicine, MN	1988-1989
Resident in Pediatrics	University of Minnesota, School of Medicine, MN	1989-1991
Chief Resident in Pediatrics	University of Minnesota, School of Medicine, MN	1991-1992
Fellow in Pediatric Emergency Medicine	Children's Hospital, Harvard Medical School, Boston, MA	1992-1994

Certifications, Licenses

Licensure:

Minnesota (MD #33335)	1989-1998, 2006-present
Colorado (MD #33817)	1994-2008, 2019
Massachusetts (MD # 75651)	1992-1994

Certification:

Basic Life Support	1988
Provider, Pediatric and Neonatal Advanced Life Support	1989
National Board of Medical Examiners	1989
Instructor, Pediatric Advanced Life Support	1991
Provider, Advanced Trauma Life Support	1992
Pediatrics, American Board of Pediatrics	1992

Pediatric Emergency Medicine, American Board of Pediatrics	1996
Advanced Cardiac Life Support	1997
Instructor, Pediatric Education for Prehospital Professionals	2001
Course Director, Pediatric Advanced Life Support	2005
Regional Faculty, Pediatric Advanced Life Support	2007

Academic Appointments:

University of Colorado School of Medicine, Denver, Colorado (2019) Visiting Professor of Pediatrics	2019-
University of Minnesota Medical School, Twin Cities Campus (2006-2019) Professor, Department of Pediatrics	2006-2019
Professor, Department of Emergency Medicine	2007-2019
Instructor, Department of Pediatrics	1991-1992
University of Colorado School of Medicine, Denver, Colorado (1994-2006) Associate Professor of Pediatrics	2000-2006
Assistant Professor of Pediatrics	1994-2000
Harvard Medical School, Boston, MA (1992-1994) Clinical Fellow in Pediatrics	1992-1994

Academic Administrative Appointments

University of Minnesota Medical School Director, Division of Pediatric Emergency Medicine, University of Minnesota Masonic Children's Hospital	2007-2019
Interim Director, Division of Pediatric Pulmonary and Critical Care, University of Minnesota Children's Hospital – Fairview	2006-2007
Associate Director, Division of Pediatric Emergency Medicine, University of Minnesota Children's Hospital – Fairview	2006-2007
University of Colorado School of Medicine, Denver, Colorado Director of Fellowship in Pediatric Emergency Medicine	2000-2006
Director of Clinical Research, Pediatric Emergency Medicine	1999-2005
Medical Student Mentor Program	1995-2001

Clinical Appointments:

Attending Physician, Emergency Department, Children's Hospital Colorado and the Network of Care	2019
Attending Physician, Emergency Department, University of Minnesota Masonic Children's Hospital	2006-2019
Pediatric Emergency Physician, The Children's Hospital at Parker Adventist Hospital, Parker, Colorado	2004-2006
Pediatric Emergency Physician, Provenant St. Anthony Hospital-North, Westminster, Colorado	1995-2002
Attending Physician, Emergency Department, The Children's Hospital, Denver, Colorado	1994-2006

Memberships in Professional Societies:

2017-	Pediatric Emergency Medicine North American Chiefs, AAP
2011-	World Society of Intravenous Anesthesia International Sedation Task Force
2007-	Society for Pediatric Sedation
1996-	Section on Emergency Medicine, American Academy of Pediatrics
1995-	Academic Pediatric Association
1988-	American Academy of Pediatrics

HONORS AND AWARDS FOR RESEARCH WORK, TEACHING, PUBLIC ENGAGEMENT, AND SERVICE

University of Minnesota

1991-1992	Chief Resident, Department of Pediatrics, University of Minnesota
2018	Department of Pediatrics Leadership Award, University of Minnesota

External Sources

1999	“ <i>Best poster presentation</i> ”, Wathen J, Roback MG Adverse effects of ketamine sedation in the pediatric emergency department., Rocky Mountain Conference on Emergency Medicine, Breckenridge CO
1999	“ <i>Best over-all oral presentation</i> ”, Fastle RK, Roback MG . Pediatric intubations: is pretreatment with atropine required? Rocky Mountain Conference on Emergency Medicine, Snowmass, CO
2000	“ <i>Outstanding oral presentation by a faculty member</i> ”, Roback MG , Wathen J. Comparison of the efficacy and safety of sedation drugs used in a pediatric emergency department. 27 th Annual Rocky Mountain Trauma and Emergency Medicine Conference, Steamboat, CO
2006	“ <i>Top Docs</i> ”, 5280 Magazine, Denver, Colorado
2007	“ <i>Best over-all presentation</i> ”, Roback MG , Wathen JE, Bajaj L. Emergence reactions in children receiving emergency department ketamine sedation. Section on Emergency Medicine Platform Session, AAP National Convention and Exhibits, San Francisco, CA
2008, 2009	“ <i>Top Doctors</i> ”, Minneapolis / St. Paul Magazine, Minneapolis, MN
2011-2019	
2014-2018	“ <i>Best Doctors</i> ”, Minnesota Monthly Magazine, Minneapolis, MN

RESEARCH AND SCHOLARSHIP

Current Research Projects:

Primary research and education interests are pediatric sedation and resuscitation.

1. Impact of pre-sedation opioids on outcomes of Emergency Department procedural sedation: A PERC multi-centered study, PI: Maala Bhatt, Co-I **Mark Roback**
2. Feasibility and Outcomes of a Rapid Emergency Department Evaluation before Children’s Hospital Admission Process. PI: Jeff Louie, Co-I: **Mark Roback**

3. Procedural challenges in children with Autism Spectrum Disorders. PI: James Gray (Cincinnati Children's Hospital) Co-I: **Mark Roback**
4. Regulatory challenges in procedural sedation: A multidisciplinary consensus practice guideline. American College of Emergency Physicians (ACEP) writing group. PI: Steven Green, Co-I: **Mark Roback**
5. Fasting and aspiration prevention for procedural sedation: An international, multidisciplinary practice guideline. International Committee for the Advancement of Procedural Sedation (ICAPS). PI: Steven Green, Co-I: **Mark Roback**
6. Presentation, Treatment, and Outcomes of Emergency Department Visits of Children After Hematopoietic Cell Transplant. PI: Ron Furnival, Co-I: **Mark Roback**

Past Grants and Contracts

External Sources

- 2017 Hubbard Broadcasting Foundation Patient Safety Grants Program. - \$150,000. *Simulation Education in the Emergency Department, annual Pediatric Safety Conference*
- 2002 The Children's Hospital Research Institute - Quality/Systems Improvement Award – \$5000. *Reducing the Incidence of Vomiting Occurring During Procedural Sedation: Does Ondansetron Work?"*
- 2002 The Children's Hospital Research Institute - Pilot Grant - \$30,000
Comparison of Ketamine Sedation Administered IV vs. IM in a Pediatric Emergency Department.

University Sources

- 2009 Office of the Vice President of Research, University of Minnesota - Grant-in-Aid of Research, Artistry and Scholarship, - \$15,247
Advancing the Care of Children Through Collaborative Multicenter Research: Minnesota Emergency Research for Children.
- 2009 University Pediatrics Foundation - WineFest Equipment Grant - \$19,200
Pediatric Emergency Medicine Research Network Communication Equipment
- 1992 Minneapolis Medical Research Foundation Research - Hennepin Faculty Associates Grant Award - New Investigator Program - \$7439.00,
Delayed incubation of blood culture bottles: Effect on recovery rate of Streptococcus pneumoniae and Haemophilus influenzae type B

Publications

Peer-reviewed journal articles

1. Mason KP, **Roback MG**, Chrisp D, et al. Results from the adverse events sedation reporting tool: a global anthology of 7952 records derived from >160,000 procedural sedation encounters. *J Clin Med*. Epub ahead of print, December 1, 2019; doi:10.3390/jcm8122087

2. Green SM, Leroy PL, **Roback MG**, et al. Fasting and aspiration prevention for procedural sedation in patients of all ages: An international, multidisciplinary consensus statement. Accepted for publication in *Anaesthesia* 2019.
3. Green SM, **Roback MG**, Krauss BS, et al. Unscheduled procedural sedation: A multidisciplinary consensus practice guideline. *Ann Emerg Med.* 2019;7(5):e51-e65. doi: 10.1016/j.annemergmed.2019.02.022.
4. Asmundsson AS, Arms J, Kaila R, **Roback MG**, et al. Hospital course of croup after emergency department management. *Hosp Pediatr.* 2019;9(5):326-332. doi: 10.1542/hpeds.2018-0066.
5. Green SM, **Roback MG**. Is the Mallampati score useful for emergency department airway management or procedural sedation? *Ann Emerg Med.* 2019;74:251-259
6. Brown JJ, Gray JM, **Roback MG**, Sethuraman U, Farooqi A, Kannikeswaran N. Procedural sedation in children with autism spectrum disorders in the emergency department. In press: *Amer J Emerg Med.* 2018 Oct 16. pii: S0735-6757(18)30839-8. doi: 10.1016/j.ajem.2018.10.025. [Epub ahead of print]
7. Cullen KR, Amatya P, **Roback MG**, et al. Intravenous ketamine for adolescents with treatment-resistant depression: an open-label study. *J Child Adolesc Psychopharmacol.* 2018;28(7):437-444.
8. Bhatt M, Johnson DW, Chan J, Taljaard M, Barrowman N, Farion KJ, Ali S, Beno S, Dixon A, McTimoney CM, Dubrovsky AS, Sourial N and **Roback MG**; Sedation Safety Study Group of Pediatric Emergency Research Canada (PERC). Impact of preprocedural fasting on outcomes of emergency department sedation in children. *JAMA Pediatr.* 2018;172(7):678-685.
9. Ward DS, Williams MR, Berkenbosch JW, Bhatt M, Carlson D, Chappell P, Clark RM, Constant I, Conway A, Cravero J, Dahan A, Dexter F, Dionne R, Dworkin RH, Gan TJ, Gozal D, Green S, Irwin MG, Karan S, Kochman M, Lerman J, Lightdale JR, Litman RS, Mason KP, Miner J, O'Connor RE, Pandharipande P, Riker RR, **Roback MG**, Sessler DI, Sexton A, Tobin JR, Turk DC, Twersky RS, Urman RD, Weiss M, Wunsch H, Zhao-Wong A. Evaluating Patient-Centered Outcomes in Clinical Trials of Procedural Sedation, Part 2 Safety: Sedation Consortium on Endpoints and Procedures for Treatment, Education, and Research Recommendations. *Anesth Analg* 2018 May 17. doi: 10.1213/ANE.0000000000003409. [Epub ahead of print]
10. Green SM, **Roback MG**, Krauss BS. The newest threat to emergency department procedural sedation. *Ann Emerg Med* 2018; 72(2):115-119. doi: 10.1016/j.annemergmed.2017.12.008. Epub 2018 Feb 8.
11. **Roback MG**, Green SM, Andolfatto G, et al. Tracking and reporting outcomes of procedural sedation (TROOPS): standardized quality improvement and research tools from the international committee for the advancement of procedural sedation. *B J Anaesth.* 2018;120(1):164-172
12. Ronning MM, Gaillard P, Wey A, **Roback MG**. Comparison of emergency department visits for complications of gastrostomy vs. gastrojejunostomy tubes in children. *Pediatr Emerg Care.* 2017;33(10):e71-e74.
13. Bhatt M, Johnson DW, Chan J, Taljaard M, Barrowman N, Farion KJ, Ali S, Beno S, Dixon A, McTimoney CM, Dubrovsky AS, Sourial N and **Roback MG**; Sedation Safety Study Group of Pediatric Emergency Research Canada (PERC). Risk factors for adverse events in emergency department procedural sedation for children. *JAMA Pediatr.* 2017;171(10):957-964.
14. Grunwell J, Travers C, Stormorken AG, Scherrer PD, Chumpitazi CE, Stockwell JA, **Roback MG**, Cravero J, Kamat PP. Pediatric procedural sedation using the combination of ketamine and

- propofol outside the emergency department: a report from the pediatric sedation research consortium. Accepted for Publication *Pediatr Crit Care Med*. 2017;18(8):e356-e363.
15. Grunwell JR, Travers C, McCracken CE, Scherrer PD, Stormorken AG, Chumpitazi CE, **Roback MG**, Stockwell JA, Kamat PP. Procedural sedation outside the operating room using ketamine in 22,645 children: A report from the pediatric sedation research consortium. *Pediatr Crit Care Med*. 2016;17(12):1109-1116.
 16. McDonnell W, Lawton M, **Roback MG**. A misdirected patient transfer raises EMTALA liability issues. *Pediatr Emerg Care* 2016;32:529-531.
 17. Kannikeswaran N, Lieh-Lai M, Malian M, Wang B, Farooqi A, **Roback MG**. Optimal dosing of intravenous ketamine for procedural sedation in children in the ED – a randomized controlled trial. *Amer J Emerg Med*. 2016;34(8):1347-53.
 18. **Roback MG**, Carlson DW, Babl FE, Kennedy RM. Update on pharmacological management of procedural sedation for children. *Curr Opin Anaesthesiol*. 2016;Suppl 1:S21-35.
 19. Donoghue AC, **Roback MG**, Cullen KR. Remission from behavioral dysregulation in a child with PTSD after receiving procedural ketamine. *Pediatrics*. 2015;136(3):e694-6.
 20. Bhatt M, **Roback MG**, Joubert G, Farion KJ, Ali S, Beno S, McTimoney M, Dixon A, Dubrovsky AS, Barrowman N, Johnson DW. The design of a multi-centre Canadian surveillance study of sedation safety in the pediatric emergency department. *BMJ Open*. 2015;5(5):e008223. doi: 10.1136/bmjopen-2015-008223.
 21. Doctor K, **Roback MG**, Teach SJ. An update on pediatric hospital-based sedation. *Curr Opin Ped*. 2013;25(3):310-316.
 22. Mandt MJ, **Roback MG**, Bajaj L, et al. Etomidate for short pediatric procedures in the emergency department. *Pediatr Emerg Care* 2012;28(9):898-904.
 23. Hendrickson MA, Furnival RA, Anderson BJ, Renaker AM, Philippe R Gaillard PR, **Roback MG**. Emergency department usage and medical care needs of adolescents in a high-intensity wrestling camp. *Sports Health* 2012;4(3):258-60. Published online before print March 21, 2012, doi: 10.1177/1941738112438528
 24. Mason KP, Green SM, Piacevoli Q. Averse event reporting tool to standardize the reporting and tracking of adverse events during procedural sedation: a consensus document from the World SIVA International Sedation Task Force. *Br J Anaesth*. 2012;108(1):13-20.
 25. Green SM, **Roback MG**, Kennedy RM, et al. Clinical practice guideline for emergency department ketamine dissociative sedation: 2011 update. *Ann Emerg Med*. 2011;57:449-461. Epub ahead of print Jan 18, 2011.
 26. Green SM, **Roback MG**, Krauss B. Laryngospasm during emergency department ketamine sedation: A case-control study. *Pediatr Emerg Care*. 2010;26(11):798-802. Epub 2010 Oct 11.
 27. Green SM, **Roback MG**, Krauss B. Anticholinergics and ketamine sedation in children: An observational analysis of atropine versus glycopyrrolate. *Aca Emerg Med*. 2010;17:157-162.
 28. Green SM, **Roback MG**, Krauss B, et al. Predictors of emesis and recovery agitation with emergency department ketamine sedation: an individual- patient data meta-analysis of 8,282 children. *Ann Emerg Med*. 2009;54(2):171-80.e1-4. Epub 2009 Jun 6.
 29. Pharisa C, Lutz N, **Roback MG**, Gerhi M. Neck complaints in the Pediatric Emergency Department: a consecutive case series of 170 children. *Pediatr Emerg Care*. 2009;25(12):823-6

30. Green SM, **Roback MG**, Krauss B, et al. Predictors of airway and respiratory adverse events of ketamine sedation in the emergency department: an individual-patient data meta-analysis of 8,282 children. *Ann Emerg Med.* 2009;54(2):158-68.e1-4. Epub 2009 Feb 7.
31. Bhatt M, Kennedy R, Osmond MH, Krauss B, McAllister JD, Ansermino JM, Evered LE, **Roback MG**. Consensus Panel on Sedation Research of Pediatric Emergency Research Canada (PERC) and the Pediatric Emergency Care Applied Research Network (PECARN) Consensus-based recommendations for standardizing terminology and reporting adverse events for emergency department procedural sedation and analgesia in children. *Ann Emerg Med.* 2009;53:426-435.e4.
32. Langston WT, Wathen JE, **Roback MG**, Bajaj L. Effect of ondansetron on the incidence of vomiting associated with ketamine sedation in children- A double-blind, randomized, placebo controlled trial. *Ann Emerg Med.* 2008;52(1):30-4.
33. Green SM, **Roback MG**, Miner JR, Burton JH, Krauss B: Fasting and emergency department procedural sedation and analgesia: A consensus-based clinical practice advisory. *Ann Emerg Med.* 2007;49:454-461.
34. **Roback MG**, Wathen JE, Mackenzie T, Bajaj L. A randomized, controlled trial of iv vs. im ketamine for sedation of pediatric patients receiving emergency department orthopedic procedures. *Ann Emerg Med.* 2006;48:605-612.
35. **Roback MG**, Wathen JE, Bajaj L, Bothner JP. Adverse events associated with procedural sedation and analgesia in a pediatric emergency department: A comparison of common parenteral drugs. *Acad Emerg Med.* 2005;12:508-513.
36. Murone AJ, Stucki P, **Roback MG**, Gehri M, Severe methemoglobinemia due to food intoxication in infants. *Ped Emerg Care* 2005;21:536-538.
37. **Roback MG**, Bajaj L, Wathen J, Bothner J. Preprocedural fasting and adverse events in procedural sedation and analgesia in a pediatric emergency department – are they related? *Ann Emerg Med.* 2004 ;44:454-459.
38. Fastle, R, **Roback MG**, Pediatric Rapid Sequence Intubation: Incidence of Reflex Bradycardia and Effects of Pretreatment with Atropine. *Ped Emerg Care.*2004;20:651-655.
39. Bajaj L, **Roback MG**. Post Reduction Management of Intussusception: Practice Patterns and the Safety of Outpatient Management. *Pediatr* 2003;112:1302-7.
40. Marcin JP, Glaser N, Barnett P, McCaslin I, Nelson D, Trainor J, Louie J, Kaufman F, Quayle K, **Roback M**, Malley R, Kuppermann N: Factors associated with adverse outcomes in children with diabetic ketoacidosis-related cerebral edema. *J Pediatr.* 2002 Dec;141(6):793-7N.
41. Rewers A, Chase P, MacKenzie T, Walravens P, **Roback M**, Rewers M, Hamman RF, Klingensmith G, Predictors of Acute Complication in Children with Type 1 Diabetes. *JAMA* 2002;287:2511-2518.
42. N Glaser, P Barnett, I McCaslin, D Nelson, J Trainor, J Louie, F Kaufman, K Quayle, **M Roback**, Richard Malley, N Kuppermann, for the Pediatric Emergency Medicine Collaborative Research Committee of the American Academy of Pediatrics. Biochemical and Therapeutic Factors Associated with the Development of Cerebral Edema in Children with Diabetic Ketoacidosis. *N Engl J Med.* 2001;344:264-269.
43. Wathen JE, **Roback MG**, MacKenzie T, Bothner JP. Does midazolam alter the clinical effects of intravenous ketamine sedation in children? A double-blind, randomized, controlled emergency department trial. *Ann Emer Med.* 2000;36:579-588.

44. **Roback MG**, America's tragedy: pediatric trauma. *Emerg Med Serv.* 2000;29(4):61-5.
45. Rittichier KK, **Roback MG**, Bassett KE: Are signs and symptoms associated with persistent corneal abrasions in children? *Arch Pediatr Adol Med.* 2000;154:370-374.
46. Slack CL, Allen GC, Morrison JE, Garren KC, **Roback MG**: Post-varicella epiglottitis and necrotizing fasciitis. *Pediatr* 2000;105(1):110.
47. **Roback MG**, Dreitlein DA: Chest radiograph in the evaluation of first time wheezing episodes: Review of current clinical practice and efficacy. *Ped Emerg Care* 1998;14(3):181-4.
48. **Roback MG**, Stack AM, Thompson C, Brugnara C, Schwarz HP, Saladino RA: Activated protein C concentrate for the treatment of meningococcal endotoxin shock in rabbits. *SHOCK* 1998;9:138-142.
49. **Roback MG**, Baskin MN: Failure of oxygen saturation and clinical assessment to predict which patients with bronchiolitis discharged from the emergency department will return requiring admission. *Ped Emerg Care* 1997;13(1):9-11.
50. **Roback MG**, Battan, FK, Koyle M, et al: Acute scrotal swelling after blunt thoracoabdominal trauma. *J of Trauma* 1996;40(1):155-6.
51. **Roback MG**, Tsai AK, Hanson KL: Delayed incubation of blood culture bottles: Effect on recovery rate of Streptococcus pneumoniae and Haemophilus influenzae type B. *Ped. Emerg. Care* 1994;10(5):268-272.

Non-Peer-Reviewed Publications

Letters to the Editor:

1. **Roback MG**, Wathen JE, MacKenzie TA, et. al. [Do we know the best dose for ketamine administered IV or IM for pediatric sedation?](#) *Ann Emerg Med.* 2007;49:825.
2. **Roback MG**: *Ped Emerg Care* 1998;14(6):452

Review Articles

1. Mandt M, **Roback MG**. Assessment and monitoring of pediatric procedural sedation. *Clin Ped Emerg Med.* 2007;8(4):268-278.

Book and Media Review

1. **Roback MG** and Jhai V. Textbook of Pediatric Emergency Procedures, 2nd Edition. *Ann Emerg Med.* 2008;52:479.

Books

1. **Roback MG**, Teach SJ, eds. Pediatric Resuscitation: A Practical Approach. American College of Emergency Physicians Publishing. Dallas, Texas. 2005.
2. **Roback MG**, Teach SJ, First LR, Fleisher GR, eds. Handbook of Pediatric Mock Codes, Mosby Year Book, St. Louis, Missouri, 1998.

Chapters in Books

1. Bhatt M, **Roback MG**: Fasting and aspiration risk in procedural sedation, In Gooden CK, Lowrie LH, Jackson BF, eds. The Pediatric Procedural Sedation Handbook. Oxford University Press, New York, NY. 2018.

2. **Roback MG:** Clinical effects and applications of ketamine, In Mason KP, Absalom A, eds. Total intravenous anesthesia and target controlled infusions: A comprehensive global anthology. Springer, New York, NY. 2017.
3. Hendrickson MA, **Roback MG:** Oral Lesions, In: Fleisher GR, Ludwig S, eds. Textbook of pediatric emergency medicine, 7th ed.: Lippincott Williams and Wilkins, Baltimore, MD. 2016.
4. **Roback MG:** Incidence and Stratification of Adverse Events Associated with Sedation. Is there a Benchmark? In Mason KP, ed. Pediatric Sedation Outside of the Operating Room: An International Multispecialty Collaboration. Springer, New York, NY. 2015.
5. **Roback MG:** Incidence and Stratification of Adverse Events Associated with Sedation. Is there a Benchmark? In Mason KP, ed. Pediatric Sedation Outside of the Operating Room: An International Multispecialty Collaboration. Springer, New York, NY. 2012.
6. Gupta S, **Roback MG:** Shock, In: Bajaj L, Hambridge S et al. eds. Berman's Pediatric Decision Making, 5th ed.: Elsevier Publishing Services. 2011
7. **Roback MG:** Oral Lesions, In: Fleisher GR, Ludwig S, eds. Textbook of pediatric emergency medicine, 6th ed.: Lippincott Williams and Wilkins, Baltimore, MD. 2010
8. **Roback MG:** Procedural Sedation for Pediatric Laceration Repair. In: Burton J and Miner J, eds. Emergency Anesthesia and Pain Management. Cambridge University Press, Cambridge, NY, 2008.
9. McDonnell W and **Roback MG.:** High Altitude Associate Illnesses. In: Baren JM, Rothrock SG, Brennan JA, Broun L, eds. Pediatric Emergency Medicine. Saunders Elsevier, Philadelphia, PA, 2008.
10. **Roback MG:** Pediatric Shock, In: UpToDate. 2007
11. **Roback MG:** How to use this book, Guidelines for conducting the mock code, Evaluation and management: airway, Respiratory distress, In Roback MG, eds. Pediatric Resuscitation: A Practical Approach. American College of Emergency Physicians Publishing, Dallas, Texas, 2005.
12. **Roback MG:** Pediatric Shock, In: UpToDate. 2005.
13. **Roback MG:** Oral Lesions, In: Fleisher GR, Ludwig S, eds. Textbook of pediatric emergency medicine, 5th ed.: Lippincott Williams and Wilkins, Baltimore, MD. 2003
14. **Roback MG:** Pediatric Shock, In: UpToDate. 2002.
15. **Roback MG:** Neonatal Sepsis. In Rosen P, Barkin RM, Hayden SR, Schaidler J, Wolfe R, eds. The 5 Minute Emergency Medicine Consult, Williams & Wilkins, Baltimore, MD, 2000
16. **Roback MG:** Oral Lesions, In: Fleisher GR, Ludwig S, eds. Textbook of pediatric emergency medicine, 4th ed.: Lippincott Williams and Wilkins, Baltimore, MD. 2000.
17. **Roback MG:** Training Programs for the Office Practitioner and Staff. In: Seidel J, Knapp J, eds. Childhood Emergencies in the Office, Hospital, and Community. American Academy of Pediatrics Committee on Pediatric Emergency Medicine, Elk Grove Village, IL. 2000
18. **Roback MG:** Febrile Seizures. In Rosen P, Barkin RM, Hayden SR, Schaidler J, Wolfe R, eds. The 5 Minute Emergency Medicine Consult, Williams & Wilkins, Baltimore, MD, 2000
19. **Roback MG:** Bleeding Disorders in Childhood. In Aghababian RV, Allison EJ, Braen GR, Fleisher GR, McCabe J, Moorhead J, eds. Emergency Medicine: The Core Curriculum, Little, Brown and Co, Boston, MA, 1998.

20. **Roback MG:** Altered mental status – shaken baby syndrome, Trauma – closed head injury, Blunt abdominal trauma, Blunt thoracic trauma, Burns and smoke inhalation, Initial approach to airway obstruction, Initial approach to Respiratory distress, Neurologic emergencies, and Trauma, In Roback MG, Teach SJ, First LR, Fleisher GR, eds. Handbook of Pediatric Mock Codes. Mosby Year Book, St. Louis, Missouri, 1998.
21. **Roback MG:** How to use this book, Guidelines for conducting the mock code, Common interventions and complications, Respiratory distress – coarctation of the aorta, Diabetic ketoacidosis, In Roback MG, Teach SJ, First LR, Fleisher GR, eds. Handbook of Pediatric Mock Codes. Mosby Year Book, St. Louis, Missouri, 1998.
22. **Roback MG:** Pediatric Procedures. In Merenstein GB, Kaplan DW, Rosenberg AA, eds. Handbook of Pediatrics, Appleton & Lange, Norwalk, Connecticut, 1996.

Peer-Reviewed, Online Publications

1. Cravero JP, **Roback MG.** Preparation for pediatric procedural sedation outside of the operating room. UpToDate 2019
2. **Roback MG,** Cravero JP. Procedural sedation in children outside of the operating room. UpToDate 2019
3. Cravero JP, **Roback MG.** Selection of medications for pediatric procedural sedation outside of the operating room. UpToDate 2019
4. **Roback MG,** Cravero JP. Pharmacologic agents for pediatric procedural sedation outside the operating room. UpToDate 2019
5. Pomerantz WJ, **Roback MG.** Hypovolemic shock in children: Initial evaluation and management. UpToDate 2018
6. Pomerantz WJ, **Roback MG.** Pathophysiology and classification of shock in children. UpToDate 2017

Presentations

Grand Rounds – Visiting Professor Presentations

1. January 9, 2018. Department of Pediatrics Grand Rounds. Hassenfeld Children’s Hospital of New York at NYU Langone, New York, NY. *Procedural Sedation for Children: How Safe is it?*
2. March 3, 2017. Department of Pediatrics Grand Rounds. Omaha Children’s Hospital and Medical Center, Omaha, NE. *Impact of Preprocedural Fasting on Outcomes of Sedation for Children.*
3. November 19, 2015. Department of Pediatrics Grand Rounds. Randall Children’s Hospital, Portland, OR. *Ketamine: “To Dissociation and Beyond”.*
4. April 5, 2013, Department of Pediatrics Grand Rounds. Medical University of South Carolina, Charleston, SC. *Sedation for Children Outside the OR.*
5. April 4, 2013, Emergency Medicine Grand Rounds. Medical University of South Carolina, Charleston, SC. *Sedation for Children in the ED.*
6. April 19, 2012, Regions Hospital Emergency Medicine Residency Conference, St. Paul, MN. *Update on Pediatric Sedation.*

7. April 28, 2011, 13th Annual Michigan State University Emergency Medicine Conference. Grand Rapids, MI. *Measuring the Quality of Emergency Department Sedation*
8. April 28, 2011, 13th Annual Michigan State University Emergency Medicine Conference. Grand Rapids, MI. *What's the latest on Ketamine for kids?*
9. October 29, 2009, Grand Rounds, Mayo Clinic Rochester. *Emergency Department Procedural Sedation For Children: What We've Learned*
10. November 17, 2008, Grand Rounds, Fairview Northland Medical Center. *Pediatric Trauma: From Here to There*
11. November 7, 2007, Grand Rounds, Children's Hospital of Philadelphia. *Emergency Department Procedural Sedation and Analgesia.*
12. May 2, 2007. Grand Rounds, University of Minnesota Children's Hospital, Fairview. *Emergency Department Pediatric Sedation: Answering Some of the Questions*
13. December 7, 2006. Grand Rounds, St. Paul Children's Hospital. *Emergency Department Pediatric Sedation: Answering Some of the Questions*
14. December 5, 2006. Grand Rounds, Minneapolis Children's Hospital. *Emergency Department Pediatric Sedation: Answering Some of the Questions*
15. September 20, 2006. Pediatric Grand Rounds, University of Minnesota Children's Hospital, Fairview. *One Size Does Not Fit All: Preparing for the Pediatric Emergency Department.*
16. February 17, 2006. Pediatric Grand Rounds, UCDHSC-The Children's Hospital. *Emergency Department Pediatric Sedation: Answering Some of the Questions*

Invited Oral Presentations at International Professional Meetings, Conferences, etc.

1. November 29, 2018. PROSA2018. 1st European Conference on Pediatric Procedural Sedation and Analgesia. Maastricht, The Netherlands. *Developing and Starting a Pediatric Sedation Program.*
2. November 29, 2018. PROSA2018. 1st European Conference on Pediatric Procedural Sedation and Analgesia. Maastricht, The Netherlands. *Intravenous Sedatives: A Practical Overview.*
3. November 29, 2018. PROSA2018. 1st European Conference on Pediatric Procedural Sedation and Analgesia. Maastricht, The Netherlands. *Goal-Directed Procedural Care: Defining Quality, Efficacy and Patient-Centered Outcomes*
4. November 30, 2018. PROSA2018. 1st European Conference on Pediatric Procedural Sedation and Analgesia. Maastricht, The Netherlands. *Ketamine.*
5. November 30, 2018. PROSA2018. 1st European Conference on Pediatric Procedural Sedation and Analgesia. Maastricht, The Netherlands. *Pre-Sedation Fasting: What is the Evidence?*
6. September 18, 2015. Pediatric Sedation Outside the OR Conference. Cancun, Mexico. *Pediatric Sedation: Getting Started.*
7. September 18, 2015. Pediatric Sedation Outside the OR Conference. Cancun, Mexico. *RESCUE: Managing Sedation Adverse Events.*
8. September 18, 2015. Pediatric Sedation Outside the OR Conference. Cancun, Mexico. *Pediatric Sedation. Cases*
9. September 20, 2015. Pediatric Sedation Outside the OR Conference. Cancun, Mexico. *NPO Status: A Necessity or a Luxury? Debunking the Truth through Recent Literature.*

10. March 25, 2011, Black Lion Hospital (Tikur Abessa Specialized Hospital) and Addis Ababa University, Addis Ababa, Ethiopia. *Pediatric Emergency Department Cases.*
11. March 23, 2011, Black Lion Hospital (Tikur Abessa Specialized Hospital) and Addis Ababa University, Addis Ababa, Ethiopia. *Altered Mental Status.*
12. March 22, 2011, Black Lion Hospital (Tikur Abessa Specialized Hospital) and Addis Ababa University, Addis Ababa, Ethiopia. *Pediatric Trauma.*
13. November 15, 2006. Centre Hospitalier Universitaire Vaudois et Hôpital de l'Enfance, Lausanne, Switzerland. *Emergency Department Cases.*
14. November 15, 2006. Centre Hospitalier Universitaire Vaudois et Hôpital de l'Enfance, Lausanne, Switzerland. *PALS Instructor Course Update.*
15. November 25, 2004. Centre Hospitalier Universitaire Vaudois et Hôpital de l'Enfance, Lausanne, Switzerland. *Pediatric Trauma.*
16. November 24, 2004. Centre Hospitalier Universitaire Vaudois et Hôpital de l'Enfance, Lausanne, Switzerland. *Emergency Department Cases.*
17. November 4-8, 2002 Pediatric Advanced Life Support Provider Course, Lausanne, Switzerland, *Course Director, Pediatric Trauma.*
18. November 26-30, 2001 Pediatric Advanced Life Support Provider Course, Lausanne, Switzerland, *Course Director, Pediatric Trauma.*
19. October 23-24, 2000 Pediatric Advanced Life Support Provider Course, Lausanne, Switzerland, *Course Director, Neonatal Resuscitation, I.V. Access.*

Invited Oral Presentations at National Professional Meetings, Conferences, etc.

20. September 20, 2019. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Ketamine.*
21. September 20, 2019. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Strategies for High Risk Patients.*
22. September 20, 2019. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Clinical Case Studies.*
23. September 20, 2019. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Needs to Go Now! Sedation for Unscheduled Emergency Procedures.*
24. September 16, 2018. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Multi-specialty, international forum: Sedation cases & conundrums.*
25. September 15, 2018. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Clinical approaches t procedural sedation in the autistic child.*
26. September 15, 2018. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *TROOPS: Tracking and reporting outcomes of procedural sedation.*
27. September 14, 2018. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Clinical case studies in pediatric sedation.*
28. September 14, 2018. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *How did we do? Defining efficacy of sedation.*

29. May 23, 2018. Society for Pediatric Sedation Conference 2018. Atlanta, GA, *Problem-based learning discussion: ketamine.*
30. May 22, 2018. Society for Pediatric Sedation Conference 2018. Atlanta, GA, *Sedation outcomes: definitions and assessment tools.*
31. September 15, 2017. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Setting the stage for sedation outside the OR.*
32. September 15, 2017. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Case studies in pediatric and dental sedation*
33. September 15, 2017. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Simulated medical and dental sedation interactive videos*
34. September 16, 2017. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *An interactive problem based learning discussion (PLD): For emergency procedures.*
35. September 16, 2017. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *TROOPS: Unveiling of a new sedation tool*
36. September 16, 2017. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Open Forum: Interactive sedation case studies*
37. November 19, 2016. FDA: Sedation Consortium on Endpoints and Procedures for Treatment, Education, and Research (SCEPTER II). *Adverse Events Reporting Tool for Procedural Sedation Clinical Trials*
38. September 9, 2016. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Pediatric Sedation: Getting Started*
39. September 9, 2016. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *The Sedation Armamentarium: Drugs, Routes and Delivery Options*
40. September 9, 2016. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Pediatric Sedation: Case Studies in Pediatric Sedation*
41. September 10, 2016. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *PBLD, Emergency Procedures*
42. September 10, 2016. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Sedation Strategies. Emergency Procedures for Children with Full Stomachs*
43. November 19, 2015. Grand Rounds Randall Children's Hospital, Legacy Emanuel, Portland Oregon. *Ketamine: "To Dissociation and Beyond!"*
44. September 20, 2014. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Ketamine*
45. September 19, 2014. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Case Studies in Pediatric Sedation*
46. September 19, 2014. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Rescue: Managing Sedation Adverse Events*
47. September 19, 2014. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Pediatric Sedation: Getting Started*
48. May 19, 2014. Society for Pediatric Sedation Conference 2011. Charleston, SC, *Pediatric Sedation Cases*

49. September 27, 2013. Pediatric Sedation Outside the OR Conference. New York, NY. *NPO Status and Sedation Risk; Guidelines, Facts, and Outcomes.*
50. September 28, 2013. Pediatric Sedation Outside the OR Conference. New York, NY. *Expanded Roles of Ketamine.*
51. September 27, 2013. Pediatric Sedation Outside the OR Conference. New York, NY. *Sedation Jeopardy*
52. September 27, 2013. Pediatric Sedation Outside the OR Conference. New York, NY. *Rescue: Managing Sedation Adverse Events*
53. September 27, 2013. Pediatric Sedation Outside the OR Conference. New York, NY. *Sedation Outside the OR: Getting Started.*
54. May 23, 2013. Prehospital Conference, Ridgeview Medical Center. *Pediatric Resuscitation: ABC vs. CAB.*
55. April 4, 2013, Emergency Medicine Grand Rounds. Medical University of South Carolina, Charleston, SC. *NPO Guidelines: What are the Outcomes?*
56. September 9, 2012. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *NPO Guidelines: A Risk Versus Benefit Assessment- What are the Outcomes?*
57. September 8, 2012. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Ketamine.*
58. September 7, 2012. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Sedation Jeopardy.*
59. September 7, 2012. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Case Studies in Pediatric Sedation*
60. September 7, 2012. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Rescue: Managing Sedation Adverse Events*
61. September 7, 2012. Pediatric Sedation Outside the OR Conference. San Francisco, CA. *Sedation Outside the OR: Getting Started.*
62. April 13, 2012, 13th Annual Pediatric Emergency Medicine Advances and Controversies for the Clinician, 2012. Orlando, FL. *Code Blue! Pediatric Mock Code Scenarios*
63. April 12, 2012, 13th Annual Pediatric Emergency Medicine Advances and Controversies for the Clinician, 2012. Orlando, FL. *911-Pediatric Emergency Cases*
64. April 11, 2012, 13th Annual Pediatric Emergency Medicine Advances and Controversies for the Clinician, 2012. Orlando, FL. *Pediatric Resuscitation: ABC vs. CAB*
65. April 11, 2012, 13th Annual Pediatric Emergency Medicine Advances and Controversies for the Clinician, 2012. Orlando, FL. *Update on Sedation*
66. March 26, 2012. American College of Emergency Physicians. Advanced Pediatric Emergency Medicine Assembly. Washington, D.C. *Ketamine and Its Evolving Role in RSI for Kids.*
67. March 26, 2012. American College of Emergency Physicians. Advanced Pediatric Emergency Medicine Assembly. Washington, D.C. *Atropine for the Pretreatment of Bradycardia During RSI: Does It Work?*
68. September 20, 2011. Pediatric Sedation Outside the Operating Room. Boston, MA. *Simulations in Pediatric Sedation.*

69. September 19, 2011. Pediatric Sedation Outside the Operating Room. Boston, MA. *The Art and Science of Sedation*.
70. September 18, 2011. Pediatric Sedation Outside the Operating Room. Boston, MA. *Emergency Sedation*.
71. September 17, 2011. Pediatric Sedation Outside the Operating Room. Boston, MA. *Emergency Sedation*.
72. September 15, 2011. Children's Hospital, Boston Faculty and Fellows Conference, Boston, MA. *Evidence-based Case Conference*.
73. April 28, 2011, 13th Annual Michigan State University Emergency Medicine Conference. Grand Rapids, MI. *Measuring the Quality of Emergency Department Sedation?*
74. April 28, 2011, 13th Annual Michigan State University Emergency Medicine Conference. Grand Rapids, MI. *What's the latest on Ketamine for kids?*
75. September 12, 2010, Pediatric Sedation Outside of the Operating Room, San Francisco, CA. *A New Look at Redefining Adverse Events*.
76. September 11, 2010, Pediatric Sedation Outside of the Operating Room, San Francisco, CA. *Ketamine Sedation*.
77. May 29, 2008. Third International Conference on Pediatric Sedation, Savannah, Georgia. *Ketamine Sedation Safety Profile in Children*
78. November 21, 2003. Old West Trauma Symposium, United Medical Center, Cheyenne, WY. *Assessment and Initial Management of Pediatric Trauma Patients and Sedation and Pain Control in Pediatric Trauma Patients*

Invited Oral Presentations at Local and Regional Professional Meetings, Conferences, etc.

1. November 16, 2018. 2018 Pediatric Trauma and Emergency Care Conference. University of Minnesota Masonic Children's Hospital. *Procedural Sedation and Comfort Care for Children with Painful Injuries*.
2. June 6, 2017. Safety in Emergency Care for Children, University of Minnesota Masonic Children's Hospital. *Ensuring Safety of Direct Hospital Admissions*
3. June 6, 2017. Safety in Emergency Care for Children, University of Minnesota Masonic Children's Hospital. *Safety of Emergency Procedural Sedation for Children*
4. June 4, 2015. Topics and Advances in Pediatrics 2015. *Rapid ED Evaluation of Children Directly Admitted to the UMMCH*.
5. August 21, 2015. University of Minnesota Dental School Pediatric Residency. Introduction to sedation.
6. May 23, 2013. Prehospital Conference, Ridgeview Medical Center. *Pediatric Resuscitation: ABC vs. CAB*.
7. June 8, 2012. Topics and Advances in Pediatrics 2012, University of Minnesota, Department of Pediatrics, Minneapolis, MN. *Pediatric Resuscitation: ABC vs. CAB*
8. April 19, 2012, Regions Hospital Emergency Medicine Residency Conference, St. Paul, MN. *Pediatric Sedation: Overview and Update*.
9. June 9, 2011. Topics and Advances in Pediatrics, University of Minnesota, Department of Pediatrics, Minneapolis, MN. *Bronchiolitis Management*

10. May 24, 2011. Society for Pediatric Sedation Conference 2011. Minneapolis, MN, *Distinguishing Sedation Adverse Events from Performance Measures*
11. May 22, 2011. SPS Sedation Provider Course, Minneapolis, MN. *Simulations in Sedation. Adverse Events.*
12. October 1, 2009, Oktoberfest: Pediatric Conference for Nurses. *Pediatric Trauma: Early Recognition of Respiratory Failure and Shock*
13. September 29, 2009, Mayo Clinic Rochester, Emergency Medicine Conference. *Sedation for Children in the ED: Ketamine for Everyone?*
14. May 15, 2009, Family Medicine Update 2009. Interesting Cases in Pediatrics.
15. March 10, 2009, Fairview Ridges Hospital Emergency Medicine Conference *Bronchiolitis & Croup: Emergency Department Management.*
16. October 24, 2008, Life Link III: Trauma Tactics. *Stabilization and Transport of Pediatric Trauma Patients: A Case Review*
17. October 3, 2008. EMS Trauma Summit. *Pediatric Trauma Megacode.*
18. April 4, 2008. EMS Trauma Summit. *Pediatric Airway*
19. March 28, 2008. Topics and Advances in Pediatrics. *Should I Sedate Kids in My Office?*
20. November 8, 2007. St. Cloud Trauma Symposium. *Pediatric Trauma: Cases.*
21. October 3, 2007 Pediatric Critical Care Nursing Conference. *Pediatric Trauma @ UMCH What does it mean, and what can we expect?*
22. June 25, 2007 St. Cloud Hospital, CentraCare Health System. St. Cloud, MN *When Sedation Doesn't Go as Planned.*
23. February 9, 2007 Topics in Pediatric Emergency Medicine. *Airway Management. From BLS to RSI.*
24. April 26, 2006. Greeley Family Medicine Physicians. *Pediatric Procedural Sedation and Analgesia.*
25. December 8, 2005. The Children's Hospital Pediatric Trauma Conference. *ABC's of Pediatric Trauma*
26. November 30, 2005 Section of Gastroenterology Lecture. *Pediatric Procedural Sedation and Analgesia.*
27. November 16, 2005. 2005 2nd & 3rd Year Fellows Retreat *Finding and Negotiating a Faculty Position.*
28. October 5, 2005. Emergency Medicine Conference, Denver Health Medical Center. *Pediatric Sedation*
29. September 16, 2005. 14th Annual O'Neil Pediatric Clinical Update. *Case Studies in the Emergency Department*
30. July 13, 2005. Introduction to Fellowship Training. *Introduction to the Fellow Education Program and JCAHO Primer.*
31. July 18, 2005 Pediatric Trauma Conference. *ABC's of Pediatric Trauma*
32. November 3, 2004 Section of Gastroenterology Lecture. *Pediatric Sedation*

33. September 28, 2004. 13th Annual O'Neil Pediatric Clinical Update. *"Beyond the Obvious"* Emergency Department Case Studies
34. May 20, 2004. EMS Day Conference. *Transport and Treatment of the Injured Child*
35. December 8, 2003. Emergent Care of the Injured Child. *Sedation and Pain Control in the Injured Child.*
36. August 3, 2003. 30th Annual Rocky Mountain Trauma & Emergency Medicine Conference. *Sedation and Pain Control in Pediatric Trauma Patients.*
37. July 2, 2003 St. Mary-Corwin Medical Center, Pueblo, CO, Pediatric Trauma In-service. *Assessment and Initial Management of Pediatric Trauma Patients and Sedation and Pain Control in Pediatric Trauma Patients*
38. December 9, 2002 The Children's Hospital Pediatric Trauma Conference. *Primary Survey – Find and Fix Life Threats (ABC's).*
39. September 13, 2002 11th Annual O'Neil Pediatric Clinical Update. *Mock Exercises in Pediatric Resuscitation.*
40. April 24-28, 2002 Colorado Symposium on Emergency Care, Durango, Colorado. *Pediatric Trauma, Pediatric Environmental Emergencies, Pediatric Assessment.*
41. January 11, 2001 Office Pediatrics Update. *Challenging Cases "Emergency Department Style"*
42. April 16, 2001 The Children's Hospital Trauma Conference. *Pediatric Airway and Rapid Sequence Intubation.*
43. April 25-30, 2001 Colorado Symposium on Emergency Care, Durango, Colorado. *Pediatric Assessment, Advanced Pediatric Airway and Rapid Sequence Intubation.*
44. September 20, 2001 10th Annual O'Neil Pediatric Clinical Update. *Challenging Cases: "Emergency Department Style".*
45. December 11, 2000 Emergent Care of the Injured Child. *ABC's of Pediatric Trauma.*
46. September 29, 2000 Porter Hospital Pre-Hospital Conference. *Respiratory Emergencies.*
47. August 3, 2000, Swedish Hospital Pre-Hospital Training Program, *Pediatric Assessment.*
48. July 30, 2000, 27th Annual Rocky Mountain Trauma and Emergency Medicine Conference, *Pediatric Rapid Sequence Intubation.*
49. September 14, 2000 Pediatric Clinical Update, *Pediatric Trauma.*
50. July 21, 2000, Pediatric Pharmacy Research Unit, *Pediatric Emergency Department Sedation.*
51. May 5, 2000, Colorado Chapter, American Academy of Pediatrics. *Abdominal "Mysteries".*
52. April 26-30, 2000 Colorado Symposium on Emergency Care, Durango, Colorado. *Advanced Pediatric Airway and Rapid Sequence Intubation, ABC's of Pediatric Resuscitation, Pediatric Seizures.*

Poster and Oral Abstract Presentations at Professional Meetings, Conferences, etc.

1. Schlegelmilch M, **Roback MG**, Bhatt M. Impact of young age on outcomes of emergency department procedural sedation. Pediatric Academic Societies meeting, April, 2019 and Canadian Association of Emergency Physicians Conference, May, 2019 .

2. Brown JJ, Gray J, Hopkins K, Sethuraman U, Farooqi A, **Roback MG**, Nerheim D, Kannikeswaran, N. Emergency Department Procedural Sedation in Children with Autism Spectrum Disorder. Pediatric Academic Societies meeting, May 2018.
3. Bhatt M, Johnson DW, **Roback MG**. Impact of ED procedural sedation on the lives of children and their families following discharge. Pediatric Academic Societies meeting, May 2017.
4. Asmundsson AS, Arms J, Kaila R, Thieler C, **Roback MG**, Louie J. Croup: Does ED presentation and course predict inpatient management? Pediatric Academic Societies meeting, May 2017.
5. Cullen KR, Klimes-Dougan B, Lim KO, Carstedt P, Eberly LE, **Roback MG**, Albott S, Armatya P, Mueller BA. Intravenous ketamine for adolescents with treatment-resistant depression: clinical effects and impacts on neural structure. American College of Neuropsychopharmacology, Hollywood Florida, December 7, 2016.
6. Bhatt M, Johnson DW, Barrowman N, Farion KJ, Dixon A, Beno S, McTimoney CM, Dubrovsky AS, Chan J, **Roback MG**. Impact of preprocedural fasting on sedation-associated adverse events in pediatric emergency sedation. Pediatric Academic Societies meeting, May 2016.
7. Bhatt M, Johnson DW, Barrowman N, Chan J, Farion KJ, Dixon A, Beno S, McTimoney CM, Dubrovsky AS, **Roback MG**. Impact of preprocedural opioid timing on the risk of sedation-related adverse events in the pediatric emergency department (ED). Pediatric Academic Societies meeting, May 2016.
8. Louie JP, Furnival RA, Marmet J, Jacob A, Nerheim DA, **Roback MG**. Feasibility and outcomes of rapid emergency department patient evaluation prior to direct children's hospital admission. Pediatric Academic Societies meeting, May 2016.
9. Graiziger K, Louie J, Holm T, Avendano P, Blieberg A, Kaila R, Schneider K, Furnival R, **Roback M**, Hendrickson M. Communicating with radiology: the initiation of emergency physician preliminary radiographic reads using a web-based software (iSite). Pediatric Academic Societies meeting, May 2016.
10. Bhatt M, Johnson DW, Farion KJ, Dixon A, Beno S, McTimoney CM, Ali S, Dubrovsky AS, Sourial N, Barrowman NJ, **Roback MG**. Prevalence and Predictors of Adverse Events in Pediatric Emergency Department Sedation: A multi-center surveillance study from the PERC network. American Academy of Pediatrics National Convention and Exhibits, October 2015, Washington D. C.
11. Duffy M, Gaillard P, Wey A, **Roback MG**. Comparison of Emergency Department Visits for Complications of Gastrostomy vs. Gastrojejunostomy Tubes in Children Pediatric Academic Society, May 2014, Vancouver, British Columbia.
12. Furnival RA, Bergmann KR, Gaillard P, **Roback MG**, Orchard P. Presentation, treatment, and outcomes of Emergency Department visits of children after hematopoietic cell transplant. Pediatric Academic Society, May 2014, Vancouver, British Columbia.
13. Bhatt M, **Roback MG**, Klassen TP, et al. Improving the quality of emergency department sedation. Pediatric Academic Societies' Meeting, Washington, D.C., May, 2013.
14. Kannikeswaran N, Malian M, Hussain M, Lieh-Lai MW, Zidan D, **Roback MG**. Optimal dosing of ketamine for procedural sedation for children in the emergency department. Pediatric Academic Societies' Meeting, Washington, D.C., May, 2013.
15. Mallory, MD, Banks DK, **Roback MG**. Emergency Department Propofol Sedation in 3,756 Children. Pediatric Academic Societies' Meeting, Boston, April, 2012.

16. Bhatt M, **Roback MG**, Klassen TP, et al. Procedural sedation in Canadian pediatric emergency departments: Description of practice variation and adverse events. Pediatric Academic Societies' Meeting, Boston, April, 2012.
17. Giese A, Hellmich T, Hendrickon M, **Roback MG**. PALS Knowledge Retention During the First Year of Pediatric Residency. Pediatric Academic Societies' Meeting, Boston, April, 2012.
18. Hellmich T, Andrews J, Gladding S. **Roback MG**. Implementation of a web-based curriculum for pediatric residents at multiple pediatric emergency departments. Pediatric Academic Societies' Meeting, Boston, April, 2012.
19. Mandt M, Wathen JE, Bajaj L, Gao D, Galinkin J, **Roback MG**. Etomidate sedation for brief procedures in a pediatric emergency department. Pediatric Academic Societies' Meeting, Honolulu, May, 2008.
20. **Roback MG**, Wathen JE, Bajaj L. Emergence reactions in children receiving ED ketamine sedation. American Academy of Pediatrics 2007 National Convention & Exhibition October 28, 2007
21. Langston T, Wathen JE, **Roback MG**, Bajaj L. Does Ondansetron Reduce Vomiting Associated with Intravenous Ketamine Procedural Sedation? A Double Blind, Randomized, Placebo Controlled Trial. Pediatric Academic Societies' Meeting, San Francisco, May, 2006.
22. **Roback MG**, Wathen JE, MacKenzie T. Safety and Efficacy of IV vs. IM Ketamine Sedation for Orthopedic Procedures in a Pediatric Emergency Department. Pediatric Academic Societies' Meeting, Washington, D.C., May, 2005.
23. **Roback MG**, Anderson M, Bajaj L, Barkin S, Strain J. A Decision Rule for Identifying Children at Low Risk for Pneumonia with First Time Wheezing Episodes. Pediatric Academic Societies' Meeting, San Francisco, May, 2004.
24. **Roback MG**, Wathen J, Bajaj L. Effect of NPO Time on Adverse Events in Pediatric Procedural Sedation and Analgesia. Pediatric Academic Societies' Meeting, Seattle, May, 2003.
25. **Roback MG**, Hurley D, Wathen J, MacKenzie T. Amnesia of Orthopedic Reductions with Ketamine Sedation in a Pediatric Emergency Department. American Academy of Pediatric Meeting, Boston, October, 2002.
26. Rewers A, Sunanda B, Bothner J, **Roback M G**, Eisenbarth G, Klingensmith G. Paradoxical Lower Risk of DKA in Children with Long-Standing Type 1 Diabetes and Expressing the HLA-DRB1*0301,DQB1*0201/DRB1*04,DQB1*0302 Genotype. American Diabetes Association's 62nd Scientific Sessions June 14-18, 2002, San Francisco, California.
27. Bajaj L, **Roback MG**, Bland S. Post Reduction Management of Intussusception: Practice Patterns and the Safety of Outpatient Management. Pediatric Academic Societies Meeting, Baltimore, May, 2002.
28. Marcin J, Glaser N, Barnett P, McCaslin I, Nelson D, Trainor J, Louie J, Kaufman F, Quayle K, **Roback MG**, Malley R, Kuppermann N. Clinical and Therapeutic Factors Associated with Adverse Outcomes in Children with DKA-Related Cerebral Edema. The Pediatric Emergency Medicine Collaborative Research Committee of the American Academy of Pediatrics. Pediatric Academic Societies Meeting, Baltimore, May, 2002.
29. **Roback MG**, Wathen J, MacKenzie T, Hurley D. Length of Sedation with Ketamine Administered IV vs. IM in a Pediatric Emergency Department Regional APA, Carmel 2002 and Pediatric Academic Societies Meeting, Baltimore, May, 2002.

30. Rewers A, Klingensmith G, Bothner J, **Roback MG**, Chase P. Emergency complications in adolescents with type 1 diabetes and co-existing psychiatric disorders. Pediatric Academic Societies Meeting, Baltimore, May, 2002.
31. Fastle R, **Roback MG**. Pediatric endotracheal intubation: comparison of success rates and complications by physician training; poster presentation, Pediatric Academic Societies Meeting, Baltimore, May, 2001.
32. Arleta Rewers, Peter Chase, Todd Mackenzie, Philip Walravens, **Mark Roback**, Georgeanna Klingensmith. Acute complications of type 1 diabetes in children. 2001 American Diabetes Association 61st Scientific Session, Philadelphia, PA and 2001 American Academy of Pediatrics Annual Meeting, San Francisco, CA.
33. **Roback MG**, Anderson M, MacKenzie T, Barkin S, Strain S. Use of chest radiographs for evaluation of first time wheezing illnesses. 2001 American Academy of Pediatrics Annual Meeting, San Francisco, CA.
34. Ferguson MA, Anderson ME, **Roback MG**. Maintaining resuscitation skills in outpatient pediatrics; poster presentation, Pediatric Academic Societies Meeting, Boston, May, 2000.
35. Wathen JE, Bothner JP, **Roback MG**. Does midazolam alter the clinical effects of intravenous ketamine sedation in children- A double blind, prospective, emergency department report; platform presentation, Pediatric Academic Societies Meeting, Boston, May, 2000. The National Conference on Pediatric Trauma, Vail, CO, June, 2000.
36. **Roback MG**, Wathen JE, Bothner JP. Comparison of the efficacy and safety of sedation drugs used in a pediatric emergency department; poster presentation, Pediatric Academic Societies Meeting, Boston, May, 2000. The National Conference on Pediatric Trauma, Vail, CO, June, 2000. 27th Annual Rocky Mountain Trauma and Emergency Medicine Conference, Steamboat, CO, July, 2000. "Outstanding oral presentation by a faculty member".
37. Glaser N, Barnett P, McCaslin I, Nelson D, Trainor J, Louie J, Kaufman F, Quayle K, **Roback M**, Malley R., Kuppermann N. Factors associated with cerebral edema in children with diabetic ketoacidosis (DKA); poster presentation, Pediatric Academic Societies Meeting, Boston, May, 2000.
38. Wathen J, **Roback MG**. Adverse effects of ketamine sedation in the pediatric emergency department. "*Best poster presentation*", Rocky Mountain Conference on Emergency Medicine, Breckenridge CO, July 1999
39. Fastle RK, **Roback MG**. Pediatric intubations: is pretreatment with atropine required? "*Best over-all oral presentation*", Rocky Mountain Conference on Emergency Medicine, Snowmass, CO, January 1999; poster presentation, Pediatric Academic Societies Meeting, San Francisco, CA, May, 1999.
40. Ferguson MA, Anderson ME, **Roback MG**. Community clinic preparedness for pediatric resuscitation. Rocky Mountain Conference on Emergency Medicine, Snowmass, CO, January 1999; poster presentation, Pediatric Academic Societies Meeting, San Francisco, CA, May, 1999.
41. Wathen J, **Roback MG**. Ketamine side effects. Platform presentation, Pediatric Academic Societies Meeting, New Orleans, LA, May, 1998.
42. Hay T, **Roback MG**, Strain J, Dreitlein DA. Esophageal coins - The need for emergent extraction? Presented at the 40th Annual Society of Pediatric Radiology Meeting, St. Louis, MO, May 13-18, 1997.
43. Dreitlein DA, **Roback MG**: Evaluation of first time wheezing episodes: When is a chest radiograph indicated? Abstract. Archives of Pediatrics and Adolescent Medicine 1996; 150:63.

Presented at the Pediatric Academic Societies Meeting, Washington D.C., May, 1996 and Rocky Mountain Conference on Emergency Medicine, Breckenridge, CO, February, 1996.

44. **Roback MG**, Saladino R, et al: Effect of activated protein C on endotoxin shock in rabbits. Abstract. Pediatric Research 1995, 37(4):300. Presented, Scientific Pediatric Research, May San Diego, California, and Society of Academic Emergency Medicine, May 1995. San Antonio, TX.
45. **Roback MG**, Baskin MN: Failure to predict which patients with bronchiolitis discharged from the emergency department will return requiring admission. Abstract. Archives of Pediatrics and Adolescent Medicine 1994, 148(4):65. Presented at the Pediatric Academic Societies Meeting, Seattle, WA, May, 1994
46. Anderson DL, Borys DJ, Ling LJ, **Roback MG**: Carbamazepine and its 10,11-Epoxyde: A Case Report. Veterinary and Human Toxicology 1990, 32(4):360.

Workshop Presentations:

1. **Roback MG**, Frush K. Emergency Preparedness and Office Mock Codes for the General Practitioner. American Academy of Pediatrics 2007 National Convention & Exhibition October 28, 2007
2. **Roback MG**, Frush K, Toback S. Office Emergency Preparedness and Mock Codes for the General Practitioner. American Academy of Pediatrics 2005 National Convention & Exhibition October 9, 2005
3. **Roback MG**, Teach SJ, First LR: Pediatric Mock Codes - A faculty development workshop in teaching and evaluating resuscitation skills. Pediatric Academic Society, 1996 Annual Meeting.

Other Key Activities and Accomplishments

1. Seminar Invited Faculty. Radcliffe Institute for Advanced Study, Harvard University. Moving from Reaction to Prediction: Leveraging High Speed Data Recording and Advanced Computational Tools for Predicting Sedation-Related Adverse Events in Children, 3/20/14

TEACHING AND CURRICULUM DEVELOPMENT

University of Minnesota Medical School

- | | |
|---------------|---|
| 2017-2019 | Director Simulation Education Program in Emergency Medicine |
| 2007-2019 | Director, Mock Code Program, University of Minnesota Masonic Children's Hospital |
| 2006-2019 | Course Director, Pediatric Advanced Life Support, University of Minnesota Masonic Children's Hospital |
| 1991- present | Pediatric Advanced Life Support Instructor |

University of Colorado School of Medicine, Denver, Colorado

- | | |
|-----------|---|
| 2005-2006 | Course Director, Pediatric Advanced Life Support, The Children's Hospital |
| 1994-2006 | Director, Mock Code Program, The Children's Hospital |

ADVISING AND MENTORING

University of Minnesota Medical School

2017-2019

Vishal Naik, MD

Pediatric Resident and Chief Resident, University of Minnesota

- Project: Critical Evaluation of Pediatric Resuscitation Simulation Exercises

2017-2018

James Gray, MD

Pediatric Chief Resident, University of Minnesota

- Project: Procedural needs of children with autism spectrum disorder

2017-2018

David Mills, MD

Resident in Pediatrics and 2nd Attending UMMCH Emergency Department

- Project: High-fidelity Pediatric Resuscitation Simulations

2013-2014 Meghann Duffy, MD

Resident in Pediatrics, University of Minnesota, Fellow in Pediatric Emergency Medicine, Children's Hospitals and Clinics of Minnesota

- Project: Comparison of Emergency Department Visits for Complications of Gastrostomy vs. Gastrojejunostomy Tubes in Children
 - Abstract Presentation: Pediatric Academic Society, Vancouver, British Columbia, 2014

2011-2012 Ann Giese, MD

Resident in Pediatrics, University of Minnesota Medical School.

- Project: PALS Knowledge Retention During the First Year of Pediatric Residency.
 - Abstract presentation: Pediatric Academic Societies' Meeting, Boston, 2012.

2011 – 2012 Thomas Helmich, MD

Faculty, Division of Emergency Medicine, University of Minnesota Children's Hospital.

- Project: Implementation of a web-based curriculum for pediatric residents at multiple pediatric emergency departments.
 - Abstract Presentation: Pediatric Academic Societies' Meeting, Boston, 2012.

2010-2011 Sameer Gupta, MD

Faculty, Division of Critical Care, University of Minnesota Children's Hospital.

- Project: Shock,
 - Textbook Chapter, Bajaj L, Hambridge S et al. eds. Berman's Pediatric Decision Making, 5th ed.: Elsevier Publishing Services. 2011

2008-2012 Marissa Hendrickson, MD

Faculty, Division of Emergency Medicine, University of Minnesota Children's Hospital

- Project: Emergency department usage and medical care needs of adolescents in a high-intensity wrestling camp.
 - Manuscript: *Sports Health* 2012;4(3):258-60.
- Project: Oral Lesions

- Textbook Chapter, Fleisher GR, Ludwig S, eds. Textbook of pediatric emergency medicine, 7th ed.: Lippincott Williams and Wilkins, Baltimore, MD. In press.

2008 Vashali Jhai, MD

Fellow in Pediatric Emergency Medicine, University of Minnesota School of Medicine and Children's Hospitals and Clinics of Minnesota

- Project: Textbook of Pediatric Emergency Procedures, 2nd Edition.
 - Book review: *Ann Emerg Med.* 2008;52:479.

University of Colorado School of Medicine, Denver, Colorado

2007-2008 William McDonnell, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: High Altitude Associate Illnesses.
 - Textbook chapter: Pediatric Emergency Medicine. Saunders Elsevier, Philadelphia, PA, 2008.

2005-12 Maria Mandt, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: Assessment and monitoring of pediatric procedural sedation.
 - Review article: *Clin Ped Emerg Med.* 2007;8(4):268-278.
- Project: Etomidate sedation for brief procedures in a pediatric emergency department.
 - Abstract platform presentation
 - Manuscript: *Pediatr Emerg Care* 2012;28(9):898-904.

2004-2008 William T. Langston, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: Does Ondansetron Reduce Vomiting Associated with Intravenous Ketamine Procedural Sedation? A Double Blind, Randomized, Placebo Controlled Trial.
 - Grant: The Children's Hospital Research Institute - Quality/Systems Improvement Award – \$5000.
 - Abstract platform presentation
 - Manuscript: *Ann Emerg Med.* 2008;52(1):30-4.

2002-2004 Rebecca Fastle, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: Pediatric intubations: is pretreatment with atropine required?
 - Abstract poster presentation
 - Abstract platform presentation
 - Manuscript: *Pediatr Emerg Care.* 2004;20:651-655.

2001-2003 Lalit Bajaj, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: Post Reduction Management of Intussusception: Practice Patterns and the Safety of Outpatient Management.
 - Abstract presentation

- Manuscript: *Pediatr* 2003;112:1302-7.

1998-2000 Kristine Rittichier, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: Are signs and symptoms associated with persistent corneal abrasions in children?
 - Manuscript: *Arch Pediatr Adol Med.* 2000

1998-2000 Joseph Wathen, MD

Fellow in Pediatric Emergency Medicine, The Children's Hospital of Colorado and the University of Colorado School of Medicine

- Project: Adverse effects of ketamine sedation in the pediatric emergency department.
 - Abstract presentation
- Project: Does midazolam alter the clinical effects of intravenous ketamine sedation in children? A double-blind, randomized, controlled emergency department trial.
 - Platform presentation
 - Manuscript *Ann Emerg Med.* 2000;36:579-588.

1996-1998 David Dreitlein

Medical Student, University of Colorado School of Medicine

- Project: Chest radiograph in the evaluation of first time wheezing episodes: Review of current clinical practice and efficacy.
 - Manuscript and Poster Presentation *Ped Emerg Care* 1998;14(3):181-4.

Other Mentoring Activities

2007-present. Maala Bhatt, MD

Faculty, Division of Pediatric Emergency Medicine, Montréal Children's Hospital, Montréal, Québec, Canada

- Project: Consensus Panel on Sedation Research of Pediatric Emergency Research Canada (PERC) and the Pediatric Emergency Care Applied Research Network (PECARN) Consensus-based recommendations for standardizing terminology and reporting adverse events for emergency department procedural sedation and analgesia in children.
 - Manuscript: *Ann Emerg Med.* 2009;53:426-435.e4.
- Project: Procedural sedation in Canadian pediatric emergency departments: Description of practice variation and adverse events.
 - Abstract presentation: Pediatric Academic Societies' Meeting, Boston, 2012.
- Project: Improving the quality of emergency department sedation.
 - Abstract presentation: Pediatric Academic Societies' Meeting, Washington, D.C., 2013
- Project: Multicenter pediatric emergency department sedation safety surveillance study
 - Manuscript: *BMJ Open.* 2015;5(5):e008223
 - Manuscript: *JAMA Pediatr.* 2017;171(10):957-964.
 - Manuscript: *JAMA Pediatr.* epub May 7, 2018.

2017-2019 James Brown, MD

PEM Fellow, Division of Pediatric Emergency Medicine, Children's Hospital of Michigan, Detroit, MI

- Project: Emergency Department Procedural Sedation in Children with Autism Spectrum Disorder
 - Abstract Presentation: Pediatric Academic Societies' Meeting, Toronto, 2018

2011-2016 Nirupama Kannikeswaran, MD

Faculty, Division of Pediatric Emergency Medicine, Children's Hospital of Michigan, Detroit, MI

- Project: Optimal dosing of ketamine for procedural sedation for children in the emergency department.
 - Abstract Presentation: Pediatric Academic Societies' Meeting, Washington, D.C., 2013
 - Manuscript: *J Emerg Med.* 2016;34(8):1347-53.

2012-2013 Kaynan Doctor, MD

Fellow in Pediatric Emergency Medicine, Children's National Medical Center, Washington, D.C

- Project: An update on pediatric hospital-based sedation.
 - Review Article: *Curr Opin Ped.* 2013;25(3):310-316.

2012 Michael Mallory, MD

Faculty, Pediatric Emergency Medicine, Children's Healthcare of Atlanta, Atlanta, GA.

- Project: Emergency Department Propofol Sedation in 3,756 Children.
 - Abstract Presentation: Pediatric Academic Societies' Meeting, Boston, 2012

PROFESSIONAL SERVICE AND PUBLIC OUTREACH

Service To The Discipline/Profession/Interdisciplinary Area(s)

- | | |
|---------|--|
| 6/2016 | Grant Reviewer, Swiss National Science Foundation |
| 11/2011 | Panel Member, Society for Pediatric Sedation Consensus Conference |
| 1/2011 | Panel Member, Quality of care indicators for pediatric conditions requiring high acuity emergency care. Canadian Institutes of Health Research, Pediatric Emergency Research Canada. Banff, Alberta, Canada. |
| 5/2009 | Panel Member, Section of Emergency Medicine Special Interest Group Preparing the Workforce to Meet Innovative and Evolving Needs in PEM, 2009 PAS/ASPR Joint Meeting in Baltimore, MD. |
| 5/2009 | Moderator, Section of Emergency Medicine original science platform session, 2009 PAS/ASPR Joint Meeting in Baltimore, MD. |
| 5/2008 | Moderator, Section of Emergency Medicine original science platform session, 2008 PAS/ASPR Joint Meeting in Honolulu, Hawaii. |
| 2006- | Abstract Reviewer: Pediatric Academic Societies' Program Committee |
| 10/2004 | Scientific Abstract Session Moderator, Section of Emergency Medicine. American Academy of Pediatrics NCE, San Francisco, CA. |
| 1996- | Pediatric Emergency Medicine Collaborative Research Committee, American Academy of Pediatrics. |

Editorships/Journal Reviewer Experience

- | | |
|-----------|---|
| 2015-2016 | Guest Editor/Reviewer: <i>Current Opinion in Anesthesiology</i> |
| 2007- | Reviewer: <i>Pediatrics</i> |
| 2005- | Reviewer: <i>Annals of Emergency Medicine</i> |
| 2005- | Reviewer: <i>Academic Emergency Medicine</i> |

2002- Reviewer: *Pediatric Emergency Care*

Organization of conferences, workshops, panels, symposia

- 2012- Director, Fundamental Sedation Symposium, Pediatric Sedation Outside the Operating Room Conference. Boston Children's Hospital - Harvard Medical School
- 2011 Instructor, Society for Pediatric Sedation, Sedation Provider Course

Committee memberships

- 2018- Data Safety Monitoring Board: A study of non-steroidal or opioid analgesia use in children with musculoskeletal injuries: The no OUCH trial. Pediatric Emergency Research Canada (PERC)
- 2018- Data Safety Monitoring Board: Intranasal versus intravenous ketamine for procedural sedation in children: a randomized controlled non-inferiority multicenter trial. Pediatric Emergency Research Canada (PERC)
- 2018- Data Safety Monitoring Board: Multi-dose ondansetron for pediatric gastroenteritis: a randomized controlled trial. Pediatric Emergency Research Canada (PERC)
- 2018- Data Safety Monitoring Board: A randomized controlled trial comparing epinephrine and dexamethasone to placebo in the treatment of infants with bronchiolitis. Pediatric Emergency Research Canada (PERC)
- 2013-2017 Data Safety Monitoring Committee. Impact of Emergency Department Probiotic Treatment of Pediatric Gastroenteritis: Randomized Controlled Trial [PROGUT Study]. Pediatric Emergency Research Canada
- 2010-2013 Co-Chair, Academic Pediatric Association Special Interest Group in Emergency Medicine
- 2011: Collaborative Pediatric Emergency Research: The Power of Big Numbers
- 2012: Traumatic Brain Injury: Bedside to Bench
- 2013: Quality in Pediatric Emergency Medicine: Progress, Challenges and Next Steps
- 2007-2009 Regional Pediatric Advanced Life Support faculty
- 2004-2006 Advisory Panel/Planning Committee for the PEM Fellows Conference Grant
- 2000-2006 PEM Fellowship Directors' Committee

Service to the University/Medical School/Department

Children's Hospital Colorado

- 2019- Co-Chair, Emergency Services Coordinating Committee
- 2019- Simulation Steering Committee
- 2019- Trauma Steering Committee
- 2019- Sedation Committee

University of Minnesota

Medical School Service and Intercollegiate Service

2009- UMMC/ Sedation Committee
2009-2015 Promotion and Tenure Committee, University of Minnesota Medical School
2009-2011 Chair, Fellowship Oversight Committee

Department/Unit Service

2018-2019 Chair, Academic Track Committee, Department of Pediatrics
2008-2010 Competency Committee, Department of Pediatrics
2008-2009 Chair, Task Force on Fellowships, Department of Pediatrics
2007-2012 Curriculum Committee, Department of Pediatrics
2007-2010 Pediatric Emergency Medicine Fellowship Steering Committee
2007-2015 Code Review Committee, University of Minnesota Amplatz Children's Hospital
2007- Clinical Scholar Track Committee, Department of Pediatrics
2006-2011 Intern Selection Committee, Department of Pediatrics

University of Colorado School of Medicine, Denver, Colorado

2005-2006 Co-chair, Committee on Fellowship Training (COFE), University of Colorado School of Medicine
2001-2006 General Medical Education Committee, University of Colorado School of Medicine
2001-2005 Chair, Pharmacy and Therapeutics Committee, The Children's Hospital, Denver, CO
2001-2005 Medical Quality Assessment Committee The Children's Hospital, Denver, CO
1998-2006 Pharmacy and Therapeutics Committee (P&T)
1998-2006 Colorado Multiple Institutional Review Board (COMIRB), University of Colorado School of Medicine
1996-2001 Critical Care Advisory Committee
1995-2001 Critical Care M&M Review Team
1995-2000 Housestaff Selection Committee, Department of Pediatrics, The Children's Hospital, Denver, CO
1994-2005 Sedation/Invasive Procedures Committee The Children's Hospital, Denver, CO
1994-2001 Emergency Response Team, The Children's Hospital, Denver, CO

Updated: December 1, 2019