

CURRICULUM VITAE

BIOGRAPHICAL

Name: **Douglas A. Potoka, M.D.**

Business Address: Akron Children's Hospital Beeghly Campus
Building A, 2nd Floor
6505 Market Street
Boardman, OH 44512

Email: dpotoka@akronchildrens.org

Business Phone: 330-543-6060

EDUCATION AND TRAINING

UNDERGRADUATE

1988 - 1992	Carnegie Mellon University Pittsburgh PA	B.S., 1992 Biological Sciences
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GRADUATE

1992 - 1996	Johns Hopkins University School of Medicine Baltimore MD	M.D., 1996 Medicine
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POSTGRADUATE

1996 - 1997	University Health Center of Pittsburgh Pittsburgh PA	Intern General Surgery Richard Simmons
1997 - 1999	University Health Center of Pittsburgh Pittsburgh PA	Junior Resident General Surgery Timothy Billiar
1999 - 2001	University of Pittsburgh Department of Surgery Pittsburgh PA	Research Fellow Surgery Henri Ford
2001 - 2003	University Health Center of Pittsburgh Pittsburgh, PA	Senior/Chief Resident General Surgery Timothy Billiar
2003 - 2005	Children's Hospital of Pittsburgh Pittsburgh, PA	Fellow Pediatric Surgery Henri Ford/Edward Barksdale

APPOINTMENTS AND POSITIONS

UNIVERSITY APPOINTMENTS

2005-2018	University of Pittsburgh School of Medicine	Faculty Appointment
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Department of Surgery
Pittsburgh, PA

Assistant Professor
of Surgery

2018-2019

University of Pittsburgh School of Medicine
Department of Surgery
Pittsburgh, PA

Faculty Appointment
Associate Professor
of Surgery

HOSPITAL APPOINTMENTS

2020-present

Akron Children's Hospital
Department of Pediatric Surgery
Akron, OH

Attending Surgeon

2005-2019

Children's Hospital of Pittsburgh of UPMC
Department of Pediatric Surgery
Pittsburgh, PA

Attending Surgeon

2005-2019

Magee-Women's Hospital of UPMC
Pittsburgh, PA

Consultant

2005-2008

Western Penn Hospital
Pittsburgh, PA

Consultant

2005-2008

Allegheny General Hospital
Pittsburgh, PA

Consultant

2006-2007

Mercy Hospital of Pittsburgh
Pittsburgh, PA

Courtesy Staff

CERTIFICATION AND LICENSURE

SPECIALTY CERTIFICATION

The American Board of Surgery- General Surgery
The American Board of Surgery- Pediatric Surgery
Advanced Trauma Life Support (ATLS)
Basic Life Support (BLS)
Pediatric Advanced Life Support (PALS)

12/14/2005-12/31/2026
3/31/2008-12/31/2028

MEDICAL LICENSURE

State of Pennsylvania

License #MD-074039-L

Exp. 12/31/2020

State of Ohio

License # 35.091490

Exp. 4/1/2022

Drug Enforcement Agency

Exp. 03/31/2022

MEMBERSHIP IN PROFESSIONAL SOCIETIES

Association for Academic Surgery

2006-2016

American Pediatric Surgical Association

2009-present

American Academy of Pediatrics, Section on Surgery

2010-present

American College of Surgeons

2010-present

HONORS AND AWARDS

UNDERGRADUATE

Andrew Carnegie Scholar (top student within department)

Department Award for Academic Achievement and Undergraduate Research

Honors Program in Research Biology

University Honors

Overall GPA 4.0

MEDICAL SCHOOL

Phi Beta Kappa

Alpha Omega Alpha

RESIDENCY

Best Junior Resident (Voted by finishing Chief Residents)

Surgical Infection Society Research Fellowship (Declined)

Doris B. Maxwell Research Award

PROFESSIONAL

Pittsburgh Magazine Best Doctors 2019

PUBLICATIONS

REFEREED ARTICLES

1. **Potoka DA**, Takao S, Oowaki T, Bulkley GB, Klein AS. Endothelial cells potentiate oxidant-mediated Kupffer cell phagocytic killing. *Free Rad Biol Med* 1998; 24:1217-1227.
2. **Potoka DA**, Schall LC, Gardner MJ, Stafford PW, Peitzman AB, Ford HR. Impact of pediatric trauma centers on mortality in a statewide system. *J Trauma* 2000; 49:237-245.
3. **Potoka DA**, Nadler EP, Zhou X, Zhang X-R, Upperman JS, Ford HR. Inhibition of NF- κ B by I κ B prevents cytokine-induced NO production and promotes enterocyte apoptosis *in vitro*. *Shock* 2000; 14:366-373.
4. **Potoka DA**, Schall LC, Ford HR. Development of a novel age-specific pediatric trauma score. *J Pediatr Surg* 2001; 36:106-112.
5. Zhou X, Mantis N, Zhang X-R, **Potoka DA**, Watkins SC, Ford HR. *Salmonella typhimurium* induces

- apoptosis in human monocyte-derived macrophages. *Microbiol Immunol* 2001; 44:987-995.
6. **Potoka DA**, Schall LC, Ford HR. Improved functional outcome for severely injured children treated at pediatric trauma centers. *J Trauma* 2001; 51:824-832.
 7. Zhou X, **Potoka DA**, Boyle P, Nadler EP, McGinnis K, Ford HR. Aminoguanidine renders inducible nitric oxide synthase knockout mice more susceptible to *Salmonella typhimurium* infection. *FEMS Microbiol Lett* 2002; 206:93-97.
 8. Schall LC, **Potoka DA**, Ford HR. A new method for estimating probability of survival in pediatric trauma patients using revised TRISS methodology based on age-adjusted weights. *J Trauma* 2002; 52:235-241.
 9. **Potoka DA**, Schall LC, Ford HR. Risk factors for splenectomy in children with blunt splenic trauma. *J Pediatr Surg* 2002; 37:294-299.
 10. Hackam D, **Potoka D**, Meza M, Pollock A, Gardner M, Abrams P, Upperman J, Schall L, Ford H. Utility of radiographic hepatic injury grade in predicting outcome after blunt abdominal trauma in children. *J Pediatr Surg* 2002; 37:386-389.
 11. **Potoka DA**, Upperman JS, Nadler EP, Wong CT, Zhou X, Zhang XR, Ford HR. NF- κ B inhibition enhances peroxynitrite-induced enterocyte apoptosis. *J Surg Res* 2002; 106:7-14.
 12. Cassidy LD, **Potoka DA**, Adelson PD, Ford HR. Development of a novel method to predict disability after head trauma in children. *J Pediatr Surg* 2003; 38:482-485.
 13. Upperman JS, **Potoka DA**, Zhang XR, Wong K, Zamora R, Ford HR. Mechanism of intestinal-derived fungal sepsis by gliotoxin, a fungal metabolite. *J Pediatr Surg* 2003; 38:966-970.
 14. **Potoka DA**, Upperman JS, Zhang XR, Kaplan JR, Corey SJ, Grishin A, Zamora R, Ford HR. Peroxynitrite inhibits enterocyte proliferation and modulates Src kinase activity *in vitro*. *Am J Physiol* 2003; 285: G861-G869.
 15. Nadler EP, **Potoka DA**, Shultz BL, Morrison KE, Ford HR, Gaines BA. The high morbidity associated with handlebar injuries in children. *J Trauma* 2005; 58:1171-1174.
 16. Grishin AV, Wang J, **Potoka DA**, Hackam DJ, Upperman JS, Boyle P, Zamora R, Ford HR. Lipopolysaccharide induces cyclooxygenase-2 in intestinal epithelium via a noncanonical p38 MAPK pathway. *J Immunol* 2006; 176:580-588.
 17. **Potoka D**, McClain R, and Upperman JS. Pediatric cystadenoma of the mesocolon. *J Pediatr Surg* 2006; 41:63-64.
 18. Kane TD, Atri P, **Potoka DA**. Triple fistula: management of a double tracheoesophageal fistula with a third H-type proximal fistula. *J Pediatr Surg* 2007; 42:E1-3.
 19. Barsness KA, Feliz A, **Potoka DA**, Gaines BA, Upperman JS, Kane TD. Laparoscopic versus open Nissen fundoplication in infants after neonatal laparotomy. *JSLs* 2007; 11:461-465.
 20. Kane TD, Nadler EP, **Potoka DA**. Thoracoscopic aortopexy for vascular compression of the trachea: approach from the right. *J Laparoendosc Adv Surg Tech A* 2008; 18:313-316.
 21. Shah SR, Wishnew J, Barsness K, Gaines BA, **Potoka DA**, Gittes GK, Kane TD. Minimally invasive congenital diaphragmatic hernia repair: a 7-year review of one institution's experience. *Surg Endosc* 2009; 23:1265-7
 22. Zheng C, Kane TD, Kurland G, Irlano K, Spahr J, **Potoka DA**, Weardon PD, Morell VO. Feasibility of laparoscopic Nissen fundoplication after pediatric lung or heart-lung transplantation: should this be the standard? *Surg Endosc* 2011; 25:249-254.
 23. Shah SR, Esni F, Jakub A, Paredes J, Lath N, Malek M, **Potoka DA**, Prasad K, Mastroberardino PG, Shiota C, Guo P, Miller KA, Hackam DJ, Burns RC, Tulachan SS, Gittes GK. Embryonic mouse blood flow and oxygen correlate with early pancreatic differentiation. *Dev Biol* 2011; 349:342-349.
 24. Lath NR, Galambos C, Best Rocha A, Malek M, Gittes GK, **Potoka DA**. Defective pulmonary innervation and autonomic imbalance in congenital diaphragmatic hernia. *Am J Physiol Lung Cell Mol Physiol* 2012; 302: L390-L398.
 25. Yu L, Wynn J, Ma L, Guha S, Mychaliska GB, Crombleholme TM, Azarow KS, Lim FY, Chung DH, **Potoka D**, Warner BW, Bucher B, Leduc CA, Costa K, Stolar C, Aspelund G, Arkovitz MS, Chung WK. De novo copy number variants are associated with congenital diaphragmatic hernia. *J Med Genet* 2012; 49(10):650-9.

26. Yu L, Wynn J, Cheung YH, Shen Y, Mychaliska GB, Crombleholme TM, Azarow KS, Lim FY, Chung DH, **Potoka D**, Warner BW, Bucher B, Stolar C, Aspelund G, Arkovitz MS, Chung WK. Variants in GATA4 are a rare cause of familial and sporadic congenital diaphragmatic hernia. *Hum Genet.* 2012; 132(3):285-92.
27. Wynn J, Krishnan U, Aspelund G, Zhang Y, Duong J, Stolar CJ, Hahn E, Pietsch J, Chung D, Moore D, Austin E, Mychaliska G, Gajarski R, Foong YL, Michelfelder E, **Potoka D**, Bucher B, Warner B, Grady M, Azarow K, Fletcher SE, Kutty S, Delaney J, Crombleholme T, Rosenzweig E, Chung W, Arkovitz MS. Outcomes of Congenital Diaphragmatic Hernia in the Modern Era of Management. *J Pediatr* 2013; 163(1):114-9.
28. Wynn J, Aspelund G, Zygmunt A, Stolar CJ, Mychaliska G, Butcher J, Lim FY, Gratton T, **Potoka D**, Brennan K, Azarow K, Jackson B, Needelman H, Crombleholme T, Zhang Y, Duong J, Arkovitz MS, Chung WK, Farkouh C. Developmental outcomes of children with congenital diaphragmatic hernia: a multicenter prospective study. *J Pediatr Surg* 2013; 48(10):1995-2004.
29. Coleman AJ, Brozanski B, Mahmood B, Wearden PD, **Potoka D**, Kuch BA. First 24-h SNAP-II score and highest PaCO₂ predict the need for ECMO in congenital diaphragmatic hernia. *J Pediatr Surg* 2013; 48(11):2214-8.
30. Yu L, Bennett JT, Wynn J, Carvill GL, Cheung YH, Shen Y, Mychaliska GB, Azarow KS, Crombleholme TM, Chung DH, **Potoka D**, Warner BW, Bucher B, Lim FY, Pietsch J, Stolar C, Aspelund G, Arkovitz MS; University of Washington Center for Mendelian Genomics, Mefford H, Chung WK. Whole exome sequencing identifies de novo mutations in GATA6 associated with congenital diaphragmatic hernia. *J Med Genet* 2014; 51(3):197-202.
31. Rymer C, Paredes J, Halt K, Schaefer C, Wiersch J, Zhang G, **Potoka DA**, Vainio S, Gittes GK, Bates CM, Sims-Lucas S. Renal blood flow and oxygenation drive nephron progenitor differentiation. *Am J Physiol Renal Physiol* 2014; 307(3):F337-45.
32. Azarow KS, Cusick R, Wynn J, Chung W, Mychaliska GB, Crombleholme TM, Chung DH, Lim FY, **Potoka D**, Warner BW, Aspelund G, Arkovitz MS. The association between congenital diaphragmatic hernia and undescended testes. *J Pediatr Surg.* 2015; 50(5):744-5.
33. Rhodes J, Saxena D, Zhang G, Gittes GK, **Potoka DA**. Defective Parasympathetic Innervation is Associated with Airway Branching Abnormalities in Experimental CDH. *Am J Physiol Lung Cell Mol Physiol.* 2015; 309:L168-74.
34. Yu L, Sawle AD, Wynn J, Aspelund G, Stolar CJ, Arkovitz MS, **Potoka D**, Azarow KS, Mychaliska GB, Shen Y, Chung WK. Increased burden of de novo predicted deleterious variants in complex congenital diaphragmatic hernia. *Hum Mol Genet.* 2015; 24:4764-73.
35. Farkouh-Karoleski C, Najaf T, Wynn J, Aspelund G, Chung WK, Stolar CJ, Mychaliska GB, Warner BW, Wagner AJ, Cusick RA, Lim FY, Schindel DT, **Potoka D**, Azarow K, Cotten CM, Hesketh A, Soffer S, Crombleholme T, Needelman H. A definition of gentle ventilation in congenital diaphragmatic hernia: a survey of neonatologists and pediatric surgeons. *J Perinat Med.* 2017; 45(9):1031-3
36. Okolo FC, Zhang G, Rhodes J, **Potoka DA**. Intra-amniotic Sildenafil Treatment Modulates Vascular Smooth Muscle Cell Phenotype in the Nitrofen Model of Congenital Diaphragmatic Hernia. *Sci Rep.* 2018; 8(1):17668.
37. Qi H, Yu L, Zhou X, Wynn J, Zhao H, Guo Y, Zhu N, Kitaygorodsky A, Hernan R, Aspelund G, Lim FY, Crombleholme T, Cusick R, Azarow K, Danko ME, Chung D, Warner BW, Mychaliska GB, **Potoka D**, Wagner AJ, ElFiky M, Wilson JM, Nickerson D, Bamshad M, High FA, Longoni M, Donahoe PK, Chung WK, Shen Y. De novo variants in congenital diaphragmatic hernia identify MYRF as a new syndrome and reveal genetic overlaps with other developmental disorders. *PLoS Genet.* 2018; 14(12):e1007822.
38. Abramov A, Fan W, Hernan R, Zenilman AL, Wynn J, Aspelund G, Khlevner J, Krishnan U, Lim FY, Mychaliska GB, Warner BW, Cusick R, Crombleholme T, Chung D, Danko ME, Wagner AJ, Azarow K, Schindel D, **Potoka D**, Soffer S, Fisher J, McCulley D, Farkouh-Karoleski C, Chung WK, Duron V. Comparative outcomes of right versus left congenitadiaphragmatic hernia: A multicenter analysis. *J Pediatr Surg.* 2020; 55(1):33-38.

REVIEW ARTICLES

1. **Potoka DA**, Schall LC, Gardner MJ, Peitzman AB, Ford HR. Improved outcomes for injured children treated at pediatric trauma centers. *Trauma Rounds*, Spring 2000.
2. Peitzman AB, Ford HR, Harbrecht BG, **Potoka DA**, Townsend R. Injury to the Spleen. *Curr Probl Surg* 2001; 38:932-1008.
3. **Potoka DA**, Nadler EP, Upperman JS, Ford HR. The Role of nitric oxide and peroxynitrite in gut barrier failure. *World J Surg* 2002; 26:806-811.
4. **Potoka DA**, Saladino RA. Blunt abdominal trauma in the pediatric patient. *Clin Pediatr Emerg Med* 2005; 6:23-31.
5. Upperman JS, **Potoka D**, Grishin A, Hackam D, Zamora R, Ford HR. Mechanisms of nitric oxide-mediated intestinal barrier failure in necrotizing enterocolitis. *Sem Pediatr Surg* 2005; 14:159-166.
6. **Potoka DA**, Gaines BA, Leppäniemi A, Peitzman AB. Management of blunt pancreatic trauma: what's new? *Eur J Trauma Emerg Surg* 2015; 41:239-250.

PUBLISHED ABSTRACTS

1. **Potoka D**, Takao S, Oowaki T, Bulkley G, Klein A. Role of reactive oxygen species and endothelial cell interaction in phagocytic killing by Kupffer cells. *Gastroenterology* 110: A1293, 1996.
2. **Potoka DA**, Upperman JS, Ford HR. Peroxynitrite induces enterocyte apoptosis in a dose- and time-dependent manner via caspase 3 activation. *FASEB Journal* 14: A196, 2000.
3. **Potoka DA**, Nadler EP, Upperman JS, Ford HR. Inhibition of NF- κ B by I- κ B prevents cytokine-induced NO production and promotes enterocyte apoptosis *in vitro*. *Shock* 13:4A, 2000.
4. **Potoka DA**, Schall LC, Ford HR. Improved functional outcome and length of stay in pediatric trauma patients treated at pediatric trauma centers compared to adult trauma centers. *J Trauma* 49:380, 2000.
5. **Potoka DA**, Upperman JS, Ford HR. Nitric oxide pre-treatment protects against peroxynitrite-induced enterocyte apoptosis. *Shock* 13 (Supplement 2):66, 2000.
6. **Potoka DA**, Roganskaya V, Upperman JS, Corey SC, Ford HR. Mechanism of peroxynitrite (ONOO⁻)-mediated gut barrier failure: ONOO⁻ inhibits enterocyte proliferation and modulates Src kinase activity. *Surgical Infections* 2:76, 2001.
7. **Potoka D**, Zamora R, Zhang X, Ford H. Modulation of enterocyte P-glycoprotein expression and function by inflammatory mediators *in vitro*. *Shock* 15:61A, 2001
8. Lee W, Huang X, **Potoka DA**. The role of angiogenic factors in early pulmonary vascular development in experimental congenital diaphragmatic hernia. *J Surg Res* 144:322, 2008.
9. Malek MM, Huang X, **Potoka DA**. Increased recruitment and proliferation of intrapulmonary perivascular precursor cells in experimental congenital diaphragmatic hernia. *J Surg Res* 151:207, 2009.
10. Malek MM, Shah SR, Jakub AM, Galambos C, Gittes GK, and **Potoka DA**. Analysis of embryonic pulmonary blood flow: both angiogenesis and vasculogenesis contribute to pulmonary vascular development. *Am. J. Respir. Crit. Care Med.* 179: A1835, 2009.
11. Lath NR, Galambos C, Gittes GK, **Potoka,DA**. Defective Neuronal Innervation and Autonomic Imbalance in Human Congenital Diaphragmatic Hernia (CDH) and a Murine Model of CDH. *J Surg Res* 165:310, 2011.

PRESENTATIONS

1. **Potoka D**, Takao S, Oowaki T, Bulkley G, Klein A. Role of reactive oxygen species and endothelial cell interaction in phagocytic killing by Kupffer cells. Poster presentation at Digestive Disease Week, American Association for the Study of Liver Diseases, San Francisco CA, May 1996.
2. **Potoka DA**, Upperman JS, Ford HR. Peroxynitrite induces enterocyte apoptosis in a dose- and time-dependent

- manner via caspase 3 activation. Presented at the 42nd Annual University Surgical Residents' Conference at the 61st Annual Meeting of the Society of University Surgeons, Toronto, February 2000.
3. **Potoka DA**, Upperman JS, Ford HR. Peroxynitrite inhibits enterocyte Src kinase and phosphatidylinositol-3-kinase activity *in vitro*. Presented at the 46th Annual Meeting of the Southwestern Pennsylvania Chapter of the American College of Surgeons, Pittsburgh PA, March 2000.
 4. **Potoka DA**, Upperman JS, Ford HR. Peroxynitrite induces enterocyte apoptosis in a dose- and time-dependent manner via caspase 3 activation. Presented at Experimental Biology 2000, Federation of American Societies for Experimental Biology, San Diego CA, April 2000.
 5. **Potoka DA**, Nadler EP, Upperman JS, Ford HR. Inhibition of NF- κ B by I- κ B prevents cytokine-induced NO production and promotes enterocyte apoptosis *in vitro*. Presented at the 20th Annual Meeting of the Surgical Infection Society, Providence RI, April 2000.
 6. **Potoka DA**, Schall LC, Ford HR. Development of a novel age-specific pediatric trauma score. Presented at the 31st Annual Meeting of the American Pediatric Surgical Association, Orlando FL, May 2000.
 7. **Potoka D**, Upperman J, Ford H. Nitric oxide protects against peroxynitrite-induced enterocyte apoptosis. Presented at the 23rd Annual Conference on Shock, Shock Society, Snowbird Utah, June 2000.
 8. **Potoka DA**, Schall LC, Ford HR. TRISS underestimates survival in pediatric trauma patients. Presented at the National Conference on Pediatric Trauma, Vail Colorado, June 2000.
 9. **Potoka DA**, Schall LC, Ford HR. Improved functional outcome and length of stay in pediatric trauma patients treated at pediatric trauma centers compared to adult trauma centers. Presented at the 60th Annual Meeting of the American Association for the Surgery of Trauma, San Antonio TX, October 2000.
 10. Schall LC, **Potoka DA**, Ford HR. A new method for estimating probability of survival in pediatric trauma patients using revised TRISS methodology based on age-adjusted weights. Presented at the 60th Annual Meeting of the American Association for the Surgery of Trauma, San Antonio TX, October 2000.
 11. **Potoka DA**, Schall LC, Ford HR. Impact of drug and alcohol use on mortality in pediatric trauma patients. Presented at the American Academy of Pediatrics 2000 Annual Meeting, Chicago IL, October 2000.
 12. **Potoka DA**, Nadler EP, Wong CT, Upperman JS, Ford HR. NF- κ B inhibition enhances peroxynitrite (ONOO⁻)-induced enterocyte apoptosis. Presented at the 34th Annual Meeting of the Association for Academic Surgery, Tampa FL, November 2000.
 13. **Potoka DA**, Schall LC, Ford HR. Risk factors for splenectomy in children with blunt splenic trauma. Presented at the 4th Annual Meeting of the Pennsylvania Committee on Trauma, Harrisburg PA, November 2000.
 14. **Potoka DA**, Roganskaya V, Upperman JS, Corey SC, Ford HR. Mechanism of peroxynitrite (ONOO⁻)-mediated gut barrier failure: ONOO⁻ inhibits enterocyte proliferation and modulates Src kinase activity. Presented at the 21st Annual Meeting of the Surgical Infection Society, Snowbird Utah, May 2001.
 15. **Potoka DA**, Schall LC, Ford HR. Risk factors for splenectomy in children with blunt splenic trauma. Presented at the 32nd Annual Meeting of the American Pediatric Surgical Association, Naples FL, May 2001.
 16. **Potoka D**, Zamora R, Zhang X, Ford H. Modulation of enterocyte P-glycoprotein expression and function by inflammatory mediators *in vitro*. Presented at the 24th Annual Conference on Shock, Shock Society, Marco Island FL, June 2001.
 17. **Potoka D**, Nadler E, Boyle P, Wong C, Zhang X, Zamora R, Ford H. Nitric oxide mediates enterocyte apoptosis in experimental NEC by upregulating caspase activity and Bad protein expression. Presented at the 87th Clinical Congress of the American College of Surgeons, New Orleans LA, October 2001.
 18. **Potoka DA**, Nadler EP, Stanford A, Boyle PA, Wong C, Zamora R, Upperman JS, Ford HR. Cyclooxygenase-2 expression attenuates intestinal inflammation in experimental necrotizing enterocolitis. Presented at the 35th Annual Meeting of the Association for Academic Surgery, Milwaukee WI, November 2001.
 19. Barsness KA, Feliz A, **Potoka DA**, Gaines BA, Upperman JS, Kane TD. Laparoscopic versus open Nissen fundoplication in infants after neonatal laparotomy. Presented at the 15th Annual Meeting of the Society of Laparoendoscopic Surgeons, Boston MA, September 2006.
 20. Shah SR, Wishnew J, Barsness K, Gaines BA, **Potoka DA**, Gittes GK, Kane TD. Minimally invasive repair of

- congenital diaphragmatic hernias: a review of our experience. Presented at the 16th Annual Meeting of the Society of Laparoendoscopic Surgeons, San Francisco CA, September 2007.
21. Lee W, Huang X, **Potoka DA**. The role of angiogenic factors in early pulmonary vascular development in experimental congenital diaphragmatic hernia. Presented at the 3rd Annual Academic Surgical Congress, Huntington Beach CA, February 2008.
 22. Malek M, Shah S, Jakub A, Branca M, Huang X, Thomas J, Gittes G, **Potoka D**. Analysis of embryonic pulmonary blood-flow: effects on airway branching morphogenesis and development of pulmonary hypoplasia in congenital diaphragmatic hernia. Presented at the 94th Annual Clinical Congress of the American College of Surgeons, San Francisco CA, October 2008.
 23. Malek MM, Huang X, **Potoka D**. Increased recruitment and proliferation of intrapulmonary arterial perivascular precursor cells in experimental congenital diaphragmatic hernia. Presented at the 4th Annual Academic Surgical Congress, Fort Myers FL, February 2009.
 24. Segura BJ, Prince J, Feliz A, Klinkner D, Sau I, Burns RC, **Potoka D**, Miller K, Gittes G, Gaines BA, Kane TD. Operative management of traumatic pancreatic transaction in children. Presented at the 4th Annual Academic Surgical Congress, Fort Myers FL, February 2009.
 25. Malek MM, Shah SR, Jakub AM, Galambos C, Gittes GK, **Potoka DA**. Analysis of embryonic pulmonary blood flow: both angiogenesis and vasculogenesis contribute to pulmonary vascular development. Presented at the American Thoracic Society International Conference, San Diego CA, May 2009.
 26. Malek M, Shah S, Speicher J, Huang X, Jakub A, Miller K, Gittes G, **Potoka D**. Disconnect of Embryonic Pulmonary Blood-Flow and Neural Morphogenesis in Experimental Congenital Diaphragmatic Hernia (CDH). Presented at the 95th Annual Clinical Congress of the American College of Surgeons, Chicago IL, October 2009.
 27. Castro EC, Sen P, Parks WT, **Potoka DA**, Langston C, Galambos C. Serotonin Transporter (SERT) of Lung Endothelium Promotes Perinatal Pulmonary Vascular Adaptation and Its Defective Expression Characterizes Alveolar Capillary Dysplasia/Misalignment of Pulmonary Veins (ACD/MPV). Presented at the Society for Pediatric Pathology Spring Meeting, Washington DC, March 2010.
 28. Lath NR, Galambos C, Gittes GK, **Potoka DA**. Defective Neuronal Innervation and Autonomic Imbalance in Human Congenital Diaphragmatic Hernia (CDH) and a Murine Model of CDH. Presented at the 6th Annual Academic Surgical Congress, Huntington Beach CA, February 2011.
 29. Coleman AJ, Kuch BA, Brozanski BS, Mahmood B, **Potoka DA**, Wearden PD. First 24 hour SNAP-II score and highest PaCO₂ predict the need for ECMO in congenital diaphragmatic hernia. Presented at the 27th Annual CNMC ECMO Symposium, Keystone CO, February 2011.
 30. Galambos C, Zang G, **Potoka D**, Sims-Lucas S, Gittes G. Most early fetal pulmonary vessels are perfused, and some are vasoreactive. Presented at Lung Development, Cancer and Disease (Keystone Symposia), Taos NM, February 2013.
 31. Galambos C, Zhang G, Sims-Lucas S, Paredes S, Malek M, **Potoka D**, Gittes G. In Utero Embryonic Intracardiac Injection under Biomicroscopy Guidance: A Cutting-Edge Technology to Study Embryonic Lung Development in Vivo. Presented at the Society for Pediatric Pathology Spring Meeting, Baltimore MD, March 2013.
 32. Zhang G, Rhodes J, Gittes GK, **Potoka DA**. Intra-Amniotic Sildenafil Improves Embryonic Pulmonary Blood Flow, Lung Morphology, and Survival in Experimental Congenital Diaphragmatic Hernia (CDH). Presented at the 2014 National Conference & Exhibition of the American Academy of Pediatrics, San Diego CA, October 2014.
 33. Mahmood B, Vincent L, Coleman A, Kuch BA, **Potoka D**, Katz A, Brozanski B, Abdalla WMA. Fetal MRI and Ultrasound Imaging Can Predict Outcomes in Patients with Isolated Left Sided Congenital Diaphragmatic Hernia. Presented at the 2015 International Congenital Diaphragmatic Hernia Workshop, Toronto ON, September 2015.
 34. Okolo FC, Zhang G, Rhodes J, **Potoka D**. Intra-Amniotic Sildenafil Treatment Modulates Vascular Smooth Muscle Cell Phenotype in the Nitrofen Model of Congenital Diaphragmatic Hernia. Presented at the 2017 National Conference & Exhibition of the American Academy of Pediatrics, Chicago IL, September 2017.

PROFESSIONAL ACTIVITIES

LECTURES AT NATIONAL AND REGIONAL MEETINGS

Pediatric Trauma: when to transfer and why? 4 th Annual John M. Templeton Jr. Pediatric Trauma Symposium Philadelphia, PA	Course Instructor	March 2004
ECMO in Neonatal Respiratory Failure Children's Hospital of Pittsburgh ECMO Course Pittsburgh, PA	Speaker	October 18, 2008
Saccular Stage of Lung Development CDH: The Next Hurdle Meeting Houston, TX	Speaker	February 7, 2013
Embryonic Pulmonary Blood Flow and Epithelial Progenitor Cells in CDH CDH: The Next Hurdle Meeting Houston, TX	Speaker	February 8, 2013
Nonsurgical <i>In Utero</i> Modulation of Lung Growth and Pulmonary Hypertension in CDH ECMO and the Advanced Therapies for Respiratory Failure Keystone, CO	Invited Speaker	February 24, 2015
Nonsurgical Prenatal Therapy to Promote Lung Growth and Attenuate Vascular Remodeling in CDH Children's Hospital Neonatal Consortium Annual Meeting Kansas City, MO	Invited Speaker	September 24, 2015
Congenital Diaphragmatic Hernia and ECMO 8 th Annual Neonatal and Pediatric ECMO Conference Pittsburgh, PA	Invited Speaker	August 1, 2016
ECMO for Congenital Diaphragmatic Hernia 9 th Annual Neonatal and Pediatric ECMO Conference Pittsburgh, PA	Invited Speaker	July 31, 2017
Congenital Diaphragmatic Hernia and ECMO 10 th Annual Neonatal and Pediatric ECMO Conference Pittsburgh, PA	Invited Speaker	July 31, 2018

GRAND ROUNDS

Surgical Management of Pediatric Emphysema Drew Wiltsie Lecture CHP Pediatric Grand Rounds Children's Hospital of Pittsburgh Pittsburgh, PA	Speaker	November 1, 2012
Congenital Diaphragmatic Hernia Cardiothoracic Surgery Grand Rounds Presbyterian University Hospital Pittsburgh, PA	Speaker	August 7, 2013
Management of Acute Appendicitis Akron Children's Hospital Mahoning Valley Community Pediatric Grand Rounds Boardman, OH	Speaker	August 26, 2020

TEACHING

The Acute Abdomen Children's Hospital of Pittsburgh Emergency Department Division Conference Pittsburgh, PA	Guest Speaker	September 21, 2005
Necrotizing Enterocolitis University of Pittsburgh General Surgery Resident Conference Pittsburgh, PA	Group Moderator	February 15, 2006
The Acute Abdomen Children's Hospital of Pittsburgh Emergency Department Division Conference Pittsburgh, PA	Guest Speaker	October 11, 2006
Pancreatic Trauma Children's Hospital of Pittsburgh Trauma Conference Pittsburgh, PA	Speaker	March 20, 2007
Congenital Diaphragmatic Hernia Children's Hospital of Pittsburgh NICU Lecture Series Pittsburgh, PA	Speaker	August 22, 2007
Congenital Diaphragmatic Hernia Children's Hospital of Pittsburgh Respiratory Care Conference Pittsburgh, PA	Speaker	August 13, 2008

Intussusception Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	July 23, 2009
Appendicitis Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	August 27, 2009
Vascular Anomalies Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	June 17, 2010
Congenital Diaphragmatic Hernia Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	July 29, 2010
Pediatric Surgery Mount Pleasant Area High School Career Day Lecture Mount Pleasant, PA	Guest Speaker	December 9, 2011
Vascular Anomalies Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	April 14, 2011
MIS in Pediatric Surgery Indiana Regional Medical Center Pediatrics Education Conference Indiana, PA	Guest Speaker	May 18, 2011
ECMO Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	September 29, 2011
Vascular Anomalies Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	March 29, 2012
ECMO Children's Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	August 2, 2012

Problem Based Learning Sessions First Year Medical Anatomy Course “Introduction of the Thorax” University of Pittsburgh School of Medicine Pittsburgh, PA	Facilitator	August 28 & 31, 2012
Problem Based Learning Sessions First Year Medical Anatomy Course “Introduction of the Extremities” University of Pittsburgh School of Medicine Pittsburgh, PA	Facilitator	September 25 & 28, 2012
Congenital Diaphragmatic Hernia Children’s Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	January 10, 2013
ECMO Children’s Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	August 1, 2012
Embryonic Pulmonary Blood Flow in CDH Children’s Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	January 30, 2014
Congenital Diaphragmatic Hernia Children’s Hospital of Pittsburgh Neonatal Nursing Fellowship Class Pittsburgh, PA	Speaker	March 7, 2018
Congenital Diaphragmatic Hernia and ECMO Children’s Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	May 31, 2018
Prenatal Management of Common Surgical Diagnoses Children’s Hospital of Pittsburgh Academic Morning Core Lecture Series Pittsburgh, PA	Speaker	March 21, 2019
Congenital Diaphragmatic Hernia Mercy Health-St. Elizabeth’s Youngstown General Surgery Education Lecture Youngstown, OH	Speaker	September 17, 2020

PERSONS MENTORED

Wayne Lee, BA University of Pittsburgh Medical Student	Scholarly Project Mentor	2007-2010
Han Moe Shin University of Pittsburgh Undergraduate	Summer Student Research Program	2013 & 2014
Frances Okolo, MD University of Pittsburgh Surgical Resident	Surgical Research Fellowship	2016-2019

RESEARCH SUPPORT

Prior

GRANT: CHP Seed Money Grant
TITLE: Impact of Pediatric Trauma Centers on Outcome for Pediatric Trauma in a Statewide System
INSTITUTION: Children's Hospital of Pittsburgh
PRINCIPAL INVESTIGATOR: Douglas A. Potoka, MD
PROJECT PERIOD: 10/1/99-10/1/00 SUPPORT AMOUNT: \$10,000

GRANT: National Research Service Award (NRSA) F32-GM-20697
TITLE: Role of Peroxynitrite in Enterocyte Apoptosis and Cell Signaling
INSTITUTION: National Institutes of Health
PRINCIPAL INVESTIGATOR: Douglas A. Potoka, MD
PROJECT PERIOD: 2000-2001 SUPPORT AMOUNT: \$40,936

GRANT: R01-HD057036
TITLE: Identification of Novel Genes for Congenital Diaphragmatic Hernia
INSTITUTION: National Institutes of Health
PRINCIPAL INVESTIGATOR: Wendy Chung, PhD
ROLE: Collaborator & Site PI for Children's Hospital of Pittsburgh of UPMC
PROJECT PERIOD: 9/29/08-6/30/13

GRANT: 1K08HD061599-01A2
TITLE: Pulmonary Blood Flow in Lung Development and Congenital Diaphragmatic Hernia
INSTITUTION: National Institutes of Health
PRINCIPAL INVESTIGATOR: Douglas A. Potoka, MD
PROJECT PERIOD: 07/01/11 - 06/30/16 SUPPORT AMOUNT: \$627,495

SERVICE AND COMMITTEES

Specialty Clinics/Treatment Centers

Fetal Diagnosis and Treatment Center, Magee Women's Hospital of UPMC (2016-2019)

ECMO Call, Children's Hospital of Pittsburgh of UPMC ECMO Program (2005-2019)

Administrative

CHP Medical Staff Nominating Committee (2013)

Responsible for Division of Pediatric General and Thoracic Service Call Schedule (2015-2019)

Faculty Interviewer for General Surgery Residency and Pediatric Surgery Fellowship Candidates (2005-2019)

Critical Airway Team, Planning Committee (2017)

Akron Children's Hospital Medical Documentation Committee (2020-current)

Organizations

Reviewer for Scientific Abstract Submissions for the Scientific Forum, ACS Clinical Congress 2016

ACS Committee on Applicant, Applicant Interviewer, Pittsburgh, 4/26/19