

CURRICULUM VITAE
The Johns Hopkins University School of Medicine

Hester F. Shieh, MD

December 2025

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

Hospital

2021-present Staff Surgeon, Johns Hopkins All Children's Hospital, St. Petersburg, FL
2021-present Staff Surgeon, Tampa General Hospital, Tampa, FL
2021-2023 Staff Surgeon, Brandon Regional Hospital, Brandon, FL

Faculty

2022-present Assistant Professor in Surgery, Johns Hopkins All Children's Hospital, St. Petersburg, FL

Personal Data

Business Address	Division of Pediatric Surgery Johns Hopkins All Children's Hospital 501 6 th Ave S St. Petersburg, FL 33701
Tel	727 767 4170
Fax	727 767 4346
E-mail	hshieh1@jhmi.edu

Education and Training

Undergraduate

2008 B.S. Chemical-Biological Engineering, B.S. Biology, Minor Psychology, Massachusetts Institute of Technology, Cambridge, MA

Doctoral/graduate

2012 M.D., The University of Arizona College of Medicine – Phoenix, Phoenix, AZ

Postdoctoral

2012-2013 Intern, General Surgery, Dr. Tracey D. Arnell, New York-Presbyterian Hospital/Columbia University Medical Center, New York, NY
2013-2015 Resident, General Surgery, Dr. Tracey D. Arnell, New York-Presbyterian Hospital/Columbia University Medical Center, New York, NY
2015-2017 Research Fellow, Pediatric Surgery, Dr. Dario O. Fauza, Boston Children's Hospital, Boston, MA
2017-2019 Resident, General Surgery, Dr. Tracey D. Arnell, New York-Presbyterian Hospital/Columbia University Medical Center, New York, NY
2019-2021 Clinical Fellow, Pediatric Surgery, Dr. Craig W. Lillehei, Boston Children's Hospital, Boston, MA
2022-2023 Surgical Critical Care Fellow, Pediatric Surgery, Dr. Raquel Gonzalez, Johns Hopkins All Children's Hospital, St. Petersburg, FL

Professional Experience

2005-2008 Research Assistant, Laboratory of Professor Robert S. Langer, Massachusetts Institute of Technology, Cambridge, MA
2005-2008 Staff, Scripps National Spelling Bee, Washington, D.C.
2006-2007 AP Biology Teacher, Educational Studies Program, Delve, Massachusetts Institute of Technology, Cambridge, MA
2009-2012 Research Assistant, Dr. Julio A. Rodriguez, Vascular and Endovascular Surgery, Arizona Heart Institute/Hospital, Phoenix, AZ

PUBLICATIONS

Original Research [OR]

1. Ferreira LS, Gerecht S, Fuller J, **Shieh HF**, Vunjak-Novakovic G, Langer R. Bioactive hydrogel scaffolds for controllable vascular differentiation of human embryonic stem cells. *Biomaterials* 2007; 28(17): 2706-17. *I contributed to data collection and analysis, and critical revision of the final manuscript.*
2. Ferreira LS, Gerecht S, **Shieh HF**, Watson N, Rupnick MA, Dallabrida SM, Vunjak-Novakovic G, Langer R. Vascular progenitor cells isolated from human embryonic stem cells give rise to endothelial and smooth muscle like cells and form vascular networks in vivo. *Circ Res* 2007; 101(3): 286-94. *I contributed to data collection and analysis, and critical revision of the final manuscript.*
3. **Shieh HF**, Wilson JM, Sheils CA, Smithers CJ, Kharasch VS, Becker RE, Studley M, Morash D, Buchmiller TL. Does the ex utero intrapartum treatment to extracorporeal membrane oxygenation procedure change morbidity outcomes for high-risk congenital diaphragmatic hernia survivors? *J Pediatr Surg* 2017; 52(1): 22-25.
4. Feng C, Graham CD, **Shieh HF**, Brazzo JA, Connors JP, Rohrer L, Papadakis A, Zurakowski D, Fauza DO. Transamniotic stem cell therapy (TRASCET) in a leporine model of gastroschisis. *J Pediatr Surg* 2017; 52(1): 30-34. *I contributed to data collection and analysis, and critical revision of the final manuscript.*
5. Graham CD, **Shieh HF**, Brazzo JA, Zurakowski D, Fauza DO. Donor mesenchymal stem cells home to maternal wounds after transamniotic stem cell therapy (TRASCET) in a rodent model. *J Pediatr Surg* 2017; 52(6): 1006-1009. *I contributed to data collection and analysis, and critical revision of the final manuscript.*
6. **Shieh HF**, Graham CD, Brazzo JA, Zurakowski D, Fauza DO. Comparisons of human amniotic mesenchymal stem cell viability in FDA-approved collagen-based scaffolds: Implications for engineered diaphragmatic replacement. *J Pediatr Surg* 2017; 52(6): 1010-1013.
7. **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Rhein LM, Manfredi MA, Baird CW, Jennings RW. Posterior tracheopexy for severe tracheomalacia. *J Pediatr Surg* 2017; 52(6): 951-955.
8. **Shieh HF**, Barnewolt CE, Wilson JM, Zurakowski D, Connolly SA, Estroff JA, Zalieckas J, Smithers CJ, Buchmiller TL. Percent predicted lung volume changes on fetal magnetic resonance imaging throughout gestation in congenital diaphragmatic hernia. *J Pediatr Surg* 2017; 52(6): 933-937.
9. **Shieh HF**, Ahmed A, Tracy SA, Zurakowski D, Fauza DO. Fetal bone marrow homing of donor mesenchymal stem cells after transamniotic stem cell therapy (TRASCET). *J Pediatr Surg* 2018; 53(1): 174-177.
10. **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Visner GA, Manfredi MA, Baird CW, Jennings RW. Posterior tracheopexy for severe tracheomalacia associated with esophageal atresia (EA): primary treatment at the time of initial EA repair versus secondary treatment. *Front Surg* 2018; 4:80.
11. **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Visner GA, Manfredi MA, Jennings RW*, Baird CW*. Descending aortopexy and posterior tracheopexy for severe tracheomalacia and left mainstem bronchomalacia. *Semin Thorac Cardiovasc Surg* 2019; 31(3): 479-485.
12. **Shieh HF**, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. Donor mesenchymal stem cell kinetics after transamniotic stem cell therapy (TRASCET) for experimental spina bifida. *J Pediatr Surg* 2018; 53(6): 1134-1136.
13. **Shieh HF**, Tracy SA, Hong CR, Chalphin AV, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. Transamniotic stem cell therapy (TRASCET) in a rabbit model of spina bifida. *J Pediatr Surg* 2019; 54(2): 293-296.
14. Graham CD, **Shieh HF**, Karabas M, Zurakowski D, Hansen A, Fauza DO. Anisotropic hydrostatic intraluminal esophageal stretch: prototyping and initial testing in vivo. *J Pediatr Surg* 2019; 54(8): 1563-1566. *I contributed to data collection and analysis, and critical revision of the final manuscript.*
15. **Shieh HF**, Estroff JA, Barnewolt CE, Zurakowski D, Tan WH, Buchmiller TL. Prenatal imaging throughout gestation in Beckwith-Wiedemann syndrome. *Prenat Diagn* 2019; 39(9): 792-795.
16. Robson VK*, **Shieh HF***, Wilson JM, Buchmiller TL. Non-operative management of extralobar pulmonary sequestration: a safe alternative to resection? *Pediatr Surg Int* 2020; 36(3): 325-331. *Co-first authors.
17. **Shieh HF**, Jennings RW, Manfredi MA, Ngo PD, Zendejas B*, Hamilton TE*. Cautionary tales in the use of magnets for the treatment of long gap esophageal atresia. *J Pediatr Surg* 2022; 57(10): 342-347.
18. Markovitz M, Monforte H, **Shieh HF**, Smithers CJ, Kucera JN. Endobronchial mucoepidermoid carcinoma in a pediatric patient: A case report. *Radiol Case Rep* 2022; 17(6): 2034-2037. *I contributed to data collection and analysis, and critical revision of the final manuscript.*

19. Vitale RJ, **Shieh HF**, Modi BP, Gordon RJ. Primary hyperparathyroidism from ectopic parathyroid adenoma in a 12-year-old with slipped capital femoral epiphysis. *J Endocr Soc* 2022; 6(6): bvac071. *I contributed to data collection and analysis, and critical revision of the final manuscript.*
20. **Shieh HF**, Hamilton TE, Manfredi MA, Ngo PD, Wilsey MJ, Yasuda JL, Zendejas B, Smithers CJ. Evolution of left-sided thoracoscopic approach for long gap esophageal atresia repair. *J Pediatr Surg* 2023; 58(4): 629-632.
21. Meisner JW, Izadi S, Kamran A, **Shieh HF**, Smithers CJ, Bennett J, Demehri FR, Mohammed S, Lawlor C, Choi SS*, Zendejas B*. Screening for vocal fold movement impairment in children undergoing esophageal and airway surgery. *Laryngoscope* 2023; 133(12): 3564-3570.
22. Hamilton-Hall MN, Jungbauer D, Finck C, Middlesworth W, Zendejas B, Alaish SM, Griggs CL, Russell RT, **Shieh HF**, Scholz S, Kunisaki SM, Feng C, Danko ME, DeFazio JR, Smithers CJ, Zamora IJ, Knod JL. Esophageal surveillance practices in esophageal atresia patients: A survey by the Eastern Pediatric Surgery Network study (EPSN). *J Pediatr Surg* 2023; 58(6): 1213-1218.
23. Barnett GS, Kimsey KM, **Shieh HF**, Smithers CJ, deVries JM, Mouch J, Wilsey MJ. Treatment of esophageal perforation: endoscopic vacuum-assisted closure. *JPGN Rep* 2023; 4(2): e314.
24. Kamran A, Smithers CJ, Izadi S, Staffa SJ, Zurakowski D, Demehri FR, Mohammed S, **Shieh HF**, Ngo PD, Yasuda JL, Manfredi MA, Hamilton TE, Jennings RW, Zendejas B. Surgical treatment of esophageal anastomotic stricture after repair of esophageal atresia. *J Pediatr Surg* 2023; 58(12): 2375-2383.
25. Mohammed S, Kamran A, Izadi S, Visner G, Frain L, Demehri FR, **Shieh HF**, Jennings RW, Smithers CJ, Zendejas B. Primary posterior tracheopexy at time of esophageal atresia repair significantly reduces respiratory morbidity. *J Pediatr Surg* 2024; 59(1): 10-17.
26. Kuo FH, Elliott RA, Watkins SC, **Shieh HF**, Smithers CJ, Jennings RW, Munoz-San Julian C. Negative pressure suction test: an intraoperative airway maneuver to assess effectiveness of surgical correction of tracheobronchomalacia. *Paediatr Anaesth* 2023; in press.
27. Izadi S, Smithers CJ, **Shieh HF**, Demehri FR, Mohammed S, Hamilton TE, Zendejas B. The history and legacy of the Foker process for the treatment of long gap esophageal atresia. *J Pediatr Surg* 2023; in press.
28. Trocchia C, **Shieh HF**, Dolan I, Wilsey MJ, Smithers CJ. Pulling instead of pushing: a case report of gastrostomy-assisted pull technique as an alternative method for endoluminal sponge placement in E-VAC therapy. *JPGN Rep* 2024
29. Mukharesh L, Krone KA, Hamilton TE, **Shieh HF**, Smithers CJ, Winthrop ZA, Muise ED, Jennings RW, Mohammed S, Demehri FR, Zendejas B, Visner GA. Outcomes of surgical treatment of tracheobronchomalacia in children. *Pediatric Pulmonology* 2024.
30. Kamran A, Smithers CJ, Mohammed S, Izadi S, Demehri FD, **Shieh HF**, Ngo P, Yasuda J, Chang D, Wilsey MJ, Zendejas B. Management strategies and outcomes of distal congenital esophageal strictures in the setting of long-gap esophageal atresia. *J Pediatr Surg* 2024; in press.
31. Izadi S, Koo DC, **Shieh HF**, Chiu MZ, Demehri FD, Mohammed S, Staffa SJ, Smithers CJ, Zendejas B. Botulinum toxin enhanced Foker process for long gap esophageal atresia. *J Pediatr Surg* 2024; in press.
32. **Shieh HF**, Jennings RW, Hamilton TE, Izadi S, Zendejas B*, Smithers CJ*. Tracheobronchopexy to avoid tracheostomy in esophageal atresia patients with tracheomalacia. *J Pediatr Surg* 2024; in press.

Review Articles [RA]

1. **Shieh HF**, Jennings RW. Long-gap esophageal atresia. *Semin Pediatr Surg* 2017; 26(2): 72-77.

Editorials [ED]

1. **Shieh HF**, Jennings RW. Three-dimensional printing of external airway splints for tracheomalacia. *J Thorac Dis* 2017; 9(3): 414-416.

Book Chapters

1. **Shieh HF**, Smithers CJ. Esophageal Atresia and Tracheoesophageal Fistula. *Fischer's Mastery of Surgery*, 8th Edition.
2. EA and CDH chapters. *Pediatric Surgery Clerkship Textbook*

FUNDING N/A

CLINICAL ACTIVITIES

Clinical Focus

My clinical practice is in general pediatric surgery, with a clinical focus in advanced esophageal and airway treatment, congenital diaphragmatic hernia, and critical care.

Certification

Medical, other state/government licensure

2015-present Massachusetts #263145

2021-present Florida #ME 151591

Boards

2021-present General Surgery, American Board of Surgery

EDUCATIONAL ACTIVITIES N/A

RESEARCH ACTIVITIES

2021-present Compassionate Use of Connect-EA Magnamosis, Food and Drug Administration and Johns Hopkins All Children's Hospital IRB approval, PI

2021-present Eastern Pediatric Surgery Network, Long Gap Esophageal Atresia Retrospective Review, Working Group; Prospective Study

2022-present Johns Hopkins All Children's Hospital, Esophageal and Airway Treatment Registry, PI

2022-present Eastern Pediatric Surgery Network, Esophageal Atresia Surveillance, Working Group

SYSTEM INNOVATION AND QUALITY IMPROVEMENT ACTIVITIES N/A

ORGANIZATIONAL ACTIVITIES N/A

2021-present Florida Association of Pediatric Surgeons

2021-present Eastern Pediatric Surgery Network

2022-present APSA

2022-present IPEG

RECOGNITION

Awards, Honors

2000 Arizona State Spelling Bee Champion

2002 Francis Young Community Hero Award

2006 Massachusetts Institute of Technology Paul E. Gray Research Scholarship

2008 Tau Beta Pi, Massachusetts Beta Chapter, The Engineering Honor Society

2008 Sigma Xi, The Scientific Research Society

2010 First Place, 8th Arizona Heart Institute Cardiovascular Research Competition

2012 The University of Arizona Sarver Heart Center, Charles W. and Virginia C. Hall Award

2012 The University of Arizona College of Medicine – Phoenix, Distinction in Community Service

2016 Joshua Ryan Rappaport Research Fellowship, Department of Surgery, Boston Children's Hospital

2017 International Fetal Medicine and Surgery Society Young Investigator Travel Award

2018 American Pediatric Surgical Association Poster of Distinction in Clinical Science: Non-Operative Management of Extralobar Pulmonary Sequestration: A Safe Alternative to Resection?

2018 International Fetal Medicine and Surgery Society Young Investigator Travel Award

2022 Johns Hopkins All Children's Hospital Excellence & Discovery, Perioperative Services Educators, Esophageal and Airway Treatment Presentation

OTHER PROFESSIONAL ACCOMPLISHMENTS

Posters

2006 Ferreira LS, Gerecht S, **Shieh HF**, Vunjak-Novakovic G, Langer R. "Isolation and Characterization of Vascular Progenitor Cells from Human Embryonic Stem Cells," 4th Annual Meeting of the International Society for Stem Cell Research, Toronto, Ontario, Canada.

2016 Feng C, Graham CD, **Shieh HF**, Brazzo JA, Connors JP, Rohrer L, Papadakis A, Zurakowski D, Fauza DO. "Trans-Amniotic Stem Cell Therapy (TRASCET) in a Leporine Model of Gastroschisis," Dr. M. Judah Folkman Research Day, Boston, MA.

- 2016 **Shieh, HF**, Wilson JM, Sheils CA, Smithers CJ, Kharasch VS, Becker RE, Studley M, Morash D, Buchmiller TL. “Does the Ex Utero Intrapartum Treatment to Extracorporeal Membrane Oxygenation Procedure Change Morbidity Outcomes for High-Risk Congenital Diaphragmatic Hernia Survivors?,” 5th Annual Harvard Medical School Surgery Research Day, Boston, MA.
- 2016 **Shieh HF**, Graham CD, Brazzo JA, Zurakowski D, Fauza DO. “Cell Viability in FDA-Approved Collagen Scaffolds: Implications for Engineered Diaphragmatic Repair,” 63rd Annual Meeting of the Massachusetts Chapter of the American College of Surgeons, Boston, MA.
- 2016 **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Rhein LM, Manfredi MA, Baird CW, Jennings RW. “Posterior Tracheopexy for Severe Tracheomalacia,” 63rd Annual Meeting of the Massachusetts Chapter of the American College of Surgeons, Boston, MA.
- 2017 **Shieh HF**, Ahmed A, Graham CD, Tracy SA, Zurakowski D, Fauza DO. “Fetal Bone Marrow and Maternal Homing of Donor Mesenchymal Stem Cells after Trans-Amniotic Stem Cell Therapy (TRASCET),” Dr. M. Judah Folkman Research Day, Boston, MA.
- 2017 **Shieh HF**, Ahmed A, Fauza DO. “Segmental Intestinal Resurfacing: A Potential Novel Strategy for Engineered Esophageal Replacement,” Section on Surgery of the American Academy of Pediatrics 2017 Annual Meeting, Chicago, IL.
- 2017 Graham CD, **Shieh HF**, Karabas M, Zurakowski D, Hansen A, Fauza DO. “Hydrostatic Intraluminal Esophageal Stretch: Prototype Fabrication and Initial Safety Testing in a Large Animal Model,” 64th Annual Meeting of the Massachusetts Chapter of the American College of Surgeons, Boston, MA.
- 2021 Vitale RJ, **Shieh HF**, Modi BP, Gordon RJ. “Primary Hyperparathyroidism From Ectopic Parathyroid Adenoma in a Patient With Bilateral Slipped Capital Femoral Epiphysis,” Endocrine Society Virtual Meeting.
- 2021 Kimsey K, Barnett G, DeVries J, Smithers CJ, Wilsey M. Treatment of Esophageal Perforations: Endoscopic Vacuum-Assisted Closure (EVAC). NASPGHAN.
- 2022 Mukharesh L, Krone KA, Zendejas B, Hamilton TE, Smithers CJ, Frain L, Muise ED, **Shieh HF**, Jennings RW, Visner GA. Surgical Outcomes of Pediatric Tracheobronchomalacia. American Thoracic Society 2022, San Francisco, CA.
- 2023 Levin JC, Levy PT, Leeman KT, Visner GA, Krone KA, **Shieh HF**, Smithers CJ, Mohammed S, Zendejas B. Surgical and medical management of bronchopulmonary dysplasia complicated by tracheobronchomalacia. 9th Annual Children’s Hospital of Philadelphia Chronic Lung Disease Conference, Philadelphia, PA.

Oral/Podium Presentations

- 2006 Ferreira LS, Gerecht S, **Shieh HF**, Vunjak-Novakovic G, Langer R. “Isolation and Characterization of Vascular Progenitor Cells from Human Embryonic Stem Cells,” International Meeting of the Portuguese Society for Stem Cells and Cellular Therapies, Madeira, Portugal. *[Dr. Ferreira gave the talk.]*
- 2010 Rodriguez JA, **Shieh HF**. “In-Situ Fenestrations of Commercially Available Endografts for Thoracoabdominal and Pararenal AAA Repair,” International Congress XXIII on Endovascular Interventions, Scottsdale, AZ. *[Dr. Rodriguez gave the talk.]*
- 2010 Rodriguez JA, **Shieh HF**. “In-Situ Fenestrations of Commercially Available Endografts for Thoracoabdominal and Pararenal AAA Repair,” CICE Meeting, Sao Paulo, Brazil. *[Dr. Rodriguez gave the talk.]*
- 2010 Rodriguez JA, **Shieh HF**, Diethrich EB. “Update on CLASE Study: Randomized Trial on Endovascular Management of the Superficial Femoral Artery,” XVIII Congreso Colombiano De Angiologia Y Cirugia Vascular, Barranquilla, Colombia. *[Dr. Rodriguez gave the talk.]*
- 2010 Rodriguez JA, **Shieh HF**. “On-Table Fenestrated Grafts for Thoracoabdominal and Pararenal AAA Repair,” International Summit with the Experts, San Juan, PR. *[Dr. Rodriguez gave the talk.]*
- 2011 Rodriguez JA, **Shieh HF**. “On-Table Fenestrated Grafts for Thoracoabdominal and Pararenal AAA Repair,” International Congress XXIV for Endovascular Specialists, Scottsdale, AZ. *[Dr. Rodriguez gave the talk.]*
- 2016 Graham CD, **Shieh HF**, Brazzo JA, Rohrer L, Papadakis A, Pan AHS, Zurakowski D, Fauza DO. “Donor Mesenchymal Stem Cell Trafficking after Trans-Amniotic Stem Cell Therapy (TRASCET) in

- a Normal Rodent Model,” 49th Annual Meeting of the Pacific Association of Pediatric Surgeons, Kauai, HI. *[Dr. Graham gave the talk.]*
- 2016 Graham CD, **Shieh HF**, Brazzo JA, Rohrer L, Papadakis A, Pan AHS, Zurakowski D, Fauza DO. “Donor Mesenchymal Stem Cell Trafficking after Trans-Amniotic Stem Cell Therapy (TRASCET) in a Normal Rodent Model,” 23rd Annual New England Surgical Society Surgical Resident and Fellow Research Presentation Day, Waltham, MA. *[Dr. Graham gave the talk.]*
- 2016 Feng C, Graham CD, **Shieh HF**, Brazzo JA, Connors JP, Rohrer L, Papadakis A, Zurakowski D, Fauza DO. “Trans-Amniotic Stem Cell Therapy (TRASCET) in a Leporine Model of Gastroschisis,” Forty-seventh Annual Meeting of the American Pediatric Surgical Association, San Diego, CA. *[Dr. Feng gave the talk.]*
- 2016 **Shieh HF**, Wilson JM, Sheils CA, Smithers CJ, Kharasch VS, Becker RE, Studley M, Morash D, Buchmiller TL. “Does the Ex Utero Intrapartum Treatment to Extracorporeal Membrane Oxygenation Procedure Change Morbidity Outcomes for High-Risk Congenital Diaphragmatic Hernia Survivors?,” Forty-seventh Annual Meeting of the American Pediatric Surgical Association, San Diego, CA.
- 2016 Feng C, Graham CD, **Shieh HF**, Brazzo JA, Connors JP, Rohrer L, Papadakis A, Zurakowski D, Fauza DO. “Trans-Amniotic Stem Cell Therapy (TRASCET) Decreases Bowel Damage in a Leporine Model of Gastroschisis,” 35th Annual International Fetal Medicine and Surgery Society Meeting, Kasane, Botswana. *[Dr. Feng gave the talk.]*
- 2016 Graham CD, **Shieh HF**, Brazzo JA, Rohrer L, Papadakis A, Pan AHS, Zurakowski D, Fauza DO. “Donor Mesenchymal Stem Cell Trafficking after Trans-Amniotic Stem Cell Therapy (TRASCET) in a Normal Rodent Model,” 35th Annual International Fetal Medicine and Surgery Society Meeting, Kasane, Botswana. *[Dr. Graham gave the talk.]*
- 2016 Feng C, Graham CD, **Shieh HF**, Brazzo JA, Darrah T, Zurakowski D, Fauza DO. “Human Bone Constructs Engineered from Mesenchymal Stem Cells: A Comparison of Pre- and Postnatal Cell Sources,” Section on Surgery of the American Academy of Pediatrics 2016 Annual Meeting, San Francisco, CA. *[Dr. Feng gave the talk.]*
- 2016 Graham CD, **Shieh HF**, Brazzo JA, Zurakowski D, Fauza DO. “Donor Mesenchymal Stem Cells Home to Maternal Wounds after Transamniotic Stem Cell Therapy (TRASCET) in a Rodent Model,” Section on Surgery of the American Academy of Pediatrics 2016 Annual Meeting, San Francisco, CA. *[Dr. Graham gave the talk.]*
- 2016 **Shieh HF**, Barnewolt CE, Wilson JM, Zurakowski D, Connolly SA, Estroff JA, Zalieckas J, Smithers CJ, Buchmiller TL. “Percent Predicted Lung Volume Changes on Fetal Magnetic Resonance Imaging Throughout Gestation in Congenital Diaphragmatic Hernia,” Section on Surgery of the American Academy of Pediatrics 2016 Annual Meeting, San Francisco, CA.
- 2016 **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Rhein LM, Manfredi MA, Baird CW, Jennings RW. “Posterior Tracheopexy for Severe Tracheomalacia,” Section on Surgery of the American Academy of Pediatrics 2016 Annual Meeting, San Francisco, CA.
- 2016 **Shieh HF**, Graham CD, Brazzo JA, Zurakowski D, Fauza DO. “Comparisons of Human Amniotic Mesenchymal Stem Cell Viability in FDA-Approved Collagen-Based Scaffolds: Implications for Engineered Diaphragmatic Replacement,” Section on Surgery of the American Academy of Pediatrics 2016 Annual Meeting, San Francisco, CA.
- 2016 **Shieh HF**, Barnewolt CE, Wilson JM, Zurakowski D, Connolly SA, Estroff JA, Zalieckas J, Smithers CJ, Buchmiller TL. “Percent Predicted Lung Volume (PPLV) Changes on Fetal MRI Throughout Gestation in CDH,” 63rd Annual Meeting of the Massachusetts Chapter of the American College of Surgeons, Boston, MA.
- 2016 **Shieh HF**, Buchmiller TL, Barnewolt CE. “BCH Clinical Research Review: Recent projects addressing the fetal diagnosis of congenital diaphragmatic hernia,” Boston Children’s Hospital Advanced Fetal Care Center Conference, Boston, MA.
- 2017 **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Visner GA, Manfredi MA, Jennings RW, Baird CW. “Descending Aortopexy and Posterior Tracheopexy for Severe Tracheomalacia and Left Mainstem Bronchomalacia,” American Association of Thoracic Surgery Centennial, Boston, MA.
- 2017 Graham CD, **Shieh HF**, Karabas M, Zurakowski D, Hansen A, Fauza DO. “Hydrostatic Intraluminal Esophageal Stretch: Prototype Fabrication and Initial Safety Testing in a Large Animal Model,” Forty-eighth Annual Meeting of the American Pediatric Surgical Association, Hollywood, FL. *[Dr. Graham gave the talk.]*

- 2017 **Shieh HF**, Smithers CJ, Hamilton TE, Zurakowski D, Visner GA, Manfredi MA, Baird CW, Jennings RW. "Posterior Tracheopexy for Severe Tracheomalacia Associated with Esophageal Atresia (EA): Primary Treatment at the Time of Initial EA Repair Versus Secondary Treatment," Forty-eighth Annual Meeting of the American Pediatric Surgical Association, Hollywood, FL.
- 2017 **Shieh HF**, Ahmed A, Tracy SA, Zurakowski D, Fauza DO. "Fetal Bone Marrow Homing of Donor Mesenchymal Stem Cells after Transamniotic Stem Cell Therapy (TRASCET)," Forty-eighth Annual Meeting of the American Pediatric Surgical Association, Hollywood, FL.
- 2017 Graham CD, **Shieh HF**, Karabas M, Zurakowski D, Hansen A, Fauza DO. "Hydrostatic Intraluminal Esophageal Stretch: Prototype Fabrication and Initial Safety Testing in a Large Animal Model," Dr. M. Judah Folkman Research Day, Boston, MA. [*Dr. Graham gave the talk.*]
- 2017 **Shieh HF**, Ahmed A, Graham CD, Tracy SA, Zurakowski D, Fauza DO. "Fetal Bone Marrow and Maternal Homing of Donor Mesenchymal Stem Cells after Trans-Amniotic Stem Cell Therapy (TRASCET)," 6th Annual Harvard Medical School Surgery Research Day, Boston, MA.
- 2017 **Shieh HF**, Estroff JA, Barnewolt CE, Zurakowski D, Tan WH, Buchmiller TL. "Prenatal Imaging Throughout Gestation in Beckwith-Wiedemann Syndrome," 50th Annual Meeting of the Pacific Association of Pediatric Surgeons, Seattle, WA.
- 2017 **Shieh HF**, Ahmed A, Zurakowski D, Fauza DO. "Induced Chemotaxis and Haptotaxis of Human Mesenchymal Stem Cells: A Comparison of Clinically Relevant Cell Sources," 50th Annual Meeting of the Pacific Association of Pediatric Surgeons, Seattle, WA.
- 2017 **Shieh HF**, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. "Donor Mesenchymal Stem Cell Kinetics after Transamniotic Stem Cell Therapy (TRASCET) for Experimental Spina Bifida," Section on Surgery of the American Academy of Pediatrics 2017 Annual Meeting, Chicago, IL.
- 2017 **Shieh HF**, Estroff JA, Barnewolt CE, Zurakowski D, Tan WH, Buchmiller TL. "Prenatal Imaging Throughout Gestation in Beckwith-Wiedemann Syndrome," 36th Annual International Fetal Medicine and Surgery Society Meeting, Jackson Hole, WY.
- 2017 **Shieh HF**, Ahmed A, Tracy SA, Zurakowski D, Fauza DO. "Fetal Bone Marrow Homing of Donor Mesenchymal Stem Cells after Transamniotic Stem Cell Therapy (TRASCET)," 36th Annual International Fetal Medicine and Surgery Society Meeting, Jackson Hole, WY.
- 2017 **Shieh HF**, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. "Donor Mesenchymal Stem Cell Kinetics after Transamniotic Stem Cell Therapy (TRASCET) for Experimental Spina Bifida," 36th Annual International Fetal Medicine and Surgery Society Meeting, Jackson Hole, WY.
- 2018 Robson VK*, **Shieh HF***, Wilson JM, Buchmiller TL. "Non-Operative Management of Extralobar Pulmonary Sequestration: A Safe Alternative to Resection?," Forty-ninth Annual Meeting of the American Pediatric Surgical Association, Palm Desert, CA. [*Dr. Robson gave the talk.*]
- 2018 **Shieh HF**, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. "Donor Mesenchymal Stem Cell Kinetics after Transamniotic Stem Cell Therapy (TRASCET) for Experimental Spina Bifida," New York-Presbyterian/Columbia University Irving Medical Center Department of Surgery 2nd Annual Research Symposium, New York, NY.
- 2018 **Shieh HF**, Tracy SA, Hong CR, Chalphin AV, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. "Transamniotic Stem Cell Therapy (TRASCET) in a Leporine Model of Spina Bifida," 65th Annual International Congress of the British Association of Paediatric Surgeons, Liverpool, UK.
- 2018 **Shieh HF**, Tracy SA, Hong CR, Chalphin AV, Ahmed A, Rohrer L, Zurakowski D, Fauza DO. "Transamniotic Stem Cell Therapy (TRASCET) in a Leporine Model of Spina Bifida," 37th Annual International Fetal Medicine and Surgery Society Meeting, Bali, Indonesia.
- 2020 **Shieh HF**, Demehri FR, Hamilton TE, Jennings RW, Smithers CJ, Zendejas B. "When Two Ends Don't Meet: Traction-Induced Esophageal Growth for Complex Esophageal Atresia," Boston Surgical Society 4th Annual Case of the Year Competition, Boston, MA.
- 2022 **Shieh HF**, Hamilton TE, Manfredi MA, Ngo PD, Wilsey MJ, Yasuda JL, Zendejas B, Smithers CJ. "Evolution of left-sided thoracoscopic approach for long gap esophageal atresia repair," International Pediatric Endosurgery Group's 31st Annual Congress for Endosurgery in Children, Miami, FL.
- 2022 Hamilton-Hall MN, Jungbauer D, Finck C, Middlesworth W, Zendejas B, Alaish SM, Griggs CL, Russell RT, **Shieh HF**, Scholz S, Kunisaki SM, Feng C, Danko ME, DeFazio JR, Smithers CJ, Zamora IJ, Knod JL. "Current Esophageal Surveillance Practices in Esophageal Atresia Patients." Section on Surgery of the American Academy of Pediatrics 2022 Annual Meeting, Anaheim, CA.

- 2022 Meisner JW, Izadi S, Kamran A, **Shieh HF**, Smithers CJ, Bennett J, Demehri FR, Mohammed S, Lawlor C, Choi SS, Zendejas B. Prevalence and characteristics of vocal fold movement impairment in children undergoing complex esophageal and airway surgery: the importance of routine screening. Quad Conference – International Network on Esophageal Atresia Conference, Cincinnati, OH. Value of routine screening for vocal fold movement impairment in children undergoing at-risk cervical and/or thoracic operations, Shawn Izadi. Surgical treatment of esophageal anastomotic strictures after esophageal atresia repair, Ali Kamran.
- 2023 Mohammed S, Kamran A, Izadi S, Visner G, Frain L, Demehri FR, **Shieh HF**, Jennings RW, Smithers CJ, Zendejas B. Primary posterior tracheopexy at time of esophageal atresia repair significantly reduces respiratory morbidity. Annual Meeting of the American Pediatric Surgical Association, Orlando, FL.
- 2023 **Shieh HF**, Jennings RW, Hamilton TE, Izadi S, Kamran A, Visner GA, Frain L, Zendejas B, Smithers CJ. Tracheobronchopexy to avoid tracheostomy in esophageal atresia patients with severe life-threatening tracheobronchomalacia. Annual Meeting of the American Pediatric Surgical Association, Orlando, FL.
- 2023 Trocchia C, Shieh HF, Dolan I, Wilsey MJ, Smithers CJ. Pulling instead of pushing: a case report of gastrostomy-assisted pull technique as an alternative method for endoluminal sponge placement in E-VAC therapy. North American Society for Pediatric Gastroenterology, Hepatology and Nutrition Annual Meeting. San Diego, CA.
- 2024 Smithers CJ*, **Shieh HF***, Izadi S, Demehri FR, Mohammed S, Jennings RW, Monnier P*, Zendejas B*. Tapering Membrane Reduction Tracheobronchoplasty for Tracheobronchomalacia with Wide Posterior Membrane. Annual Meeting of the American Pediatric Surgical Association, Phoenix, AZ.

Community Services

- 2008-present Massachusetts Institute of Technology Educational Council
- 2008-2012 University of Arizona College of Medicine Phoenix Commitment to Underserved People, Wesley Community Center's Centro de Salud Clinic (180 hours)
- 2009-2010 University of Arizona College of Medicine Phoenix International Health Organization medical volunteer trip to Nuestros Pequeños Hermanos Mexico orphanage (2 weeks)
- 2006 Massachusetts Institute of Technology Public Service Center, SciPRO Mentor
- 2005 Massachusetts Institute of Technology, Habitat for Humanity, Washington D.C. (1 week)
- 2000-2004 Scottsdale Healthcare Shea Hospital, Information Desk (402 hours)
- 2000-2004 Mayo Clinic Scottsdale, Oncology and Outpatient Infusion (59 hours)
- 2000-2004 City of Scottsdale Youth Corps Program, Parks Recreation & Facilities Main Office (222 hours)
- 2000-2004 Volunteer Center of Maricopa County, Youth Volunteer Corps (147 hours)
- 2000-2004 Arizona Science Center (64 hours)

Invited Surgeon

Hospital Metropolitano Quito, Ecuador 2/9-12/23