C U R R I C U L U M V I T A E

November 2020

NAME: Allison Leigh Speer, M.D.

PRESENT TITLE: Assistant Professor
Department of Pediatric Surgery
McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth)

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CITIZENSHIP: United States

UNDERGRADUATE EDUCATION:

1998-2002 University of Southern California, Los Angeles, CA
Bachelor of Science, *Cum Laude*
Major in Biochemistry, Minor in Musical Studies (Piano Performance)
Baccalaureate/MD (8 year combined undergraduate & medical school program)

GRADUATE EDUCATION:

2002-2006 Keck School of Medicine at the University of Southern California, Los Angeles, CA
Doctor of Medicine
Baccalaureate/MD (8 year combined undergraduate & medical school program)

POSTGRADUATE TRAINING:

2006-2007 General Surgery Intern
University of Southern California, Los Angeles, CA

2007-2009 General Surgery Resident
University of Southern California, Los Angeles, CA

2009-2012 Pediatric Surgery Research Fellow
Children's Hospital Los Angeles, Los Angeles, CA

2009 The Association for Academic Surgery 20th Annual Fundamentals of Surgical Research Course. Chicago, IL.

2011 The Association for Academic Surgery 7th Annual Career Development Course. San Francisco, CA.

2012	The American College of Surgeons Residents as Teachers and Leaders Course. Chicago, IL.
2012-2014	General Surgery Resident University of Southern California, Los Angeles, CA
2014-2016	Pediatric Surgery Fellow Children's National Medical Center, Washington, DC
2014	Pediatric Colorectal, Motility and Pelvic Reconstruction Course, Nationwide Children's, Columbus, OH.
2015	The American College of Surgeons Committee on Trauma Advanced Surgical Skills for Exposure in Trauma (ASSET) Course. R Adams Cowley Shock Trauma Center, Baltimore, MD.
2016	Eleventh Annual Pediatric Surgical Oncology Review Course. St. Jude Children's Research Hospital. Memphis, TN.
2016	Presenting Data and Information Course by Edward Tufte. Houston, TX.
2016-2018	McGovern Medical School at UTHealth, Center for Clinical Research & Evidence-Based Medicine Clinical Research Curriculum Literature Appraisal Course, 12/14/2016-2/15/2017 Ethical Aspects of Clinical Research Course, 2/22/2017-4/12/2017 Translational Research Course, 4/19/2017-5/24/2017 Clinical Trials Course, 11/8/2017-2/7/2018
2017	AAS/SUS Surgical Investigators' Course, February 5-6, 2017. Las Vegas, NV.
2017-2018	McGovern Medical School at UTHealth, New Investigator Development Program Grants 101, 1/9/2017-1/10/2017 Grants 102, 2/2018-8/2018
2020	The Grant Training Center Two-Day Professional NIH Development Workshop August 24-25, 2020, Virtual.

ACADEMIC & ADMINISTRATIVE APPOINTMENTS:

2016-present	Assistant Professor, Department of Pediatric Surgery McGovern Medical School at The University of Texas Health Science Center at Houston (UTHealth)
2016-present	Assistant Professor, Department of Surgical Oncology, Division of Surgery The University of Texas MD Anderson Cancer Center

HOSPITAL APPOINTMENTS:

9/2016-present	Children's Memorial Hermann Hospital
10/2016-present	The Woman's Hospital of Texas

10/2016-present Memorial Hermann Southwest Hospital
10/2016-present Lyndon B. Johnson General Hospital, Harris County Hospital
11/2016-present MD Anderson Cancer Center
11/2016-present Memorial Hermann The Woodlands Hospital
4/2017-present Memorial Hermann Memorial City Hospital
5/2017-present Memorial Hermann Sugar Land Hospital
9/2017-present Memorial Hermann Katy Hospital

LICENSURE:
Texas Medical License #Q9521, issued 8/1/2016, expires 8/31/2021.
California Medical License #A103252, issued 3/28/2008, expires 7/31/2021.
District of Columbia Medical License #MD042229, issued 4/1/2014, expired 12/31/2018.
Drug Enforcement Administration Registration #FS0830136, issued 5/16/2008, expires 2/28/2023.
DC Controlled Dangerous Substance License #CS1400218, issued 5/8/2014, expired 12/31/2018.
National Provider Identification #1750554630.

CERTIFICATIONS:
American Board of Surgery
Certification in Surgery #060816, issued 11/16/2015, expires 12/31/2026.
Certification in Pediatric Surgery #001415, issued 4/25/2017, expires 12/31/2027.

Advanced Trauma Life Support (ATLS)
8/30/2009-8/30/2013, 3/13/2014-3/13/2018, 1/26/2018-1/26/2022

Pediatric Advanced Life Support (PALS)
7/2009-7/2011, 6/2016-6/2018, 6/2018-6/2020, 6/2020-6/2022

Basic Life Support (BLS)
6/2006-6/2008, 6/2012-6/2014, 6/2016-6/2018, 6/2018-6/2020, 6/2020-6/2022

PROFESSIONAL ORGANIZATIONS:
LOCAL:
Texas Medical Center Digestive Diseases Center (TMC DDC):
2016-present Associate Member

Gulf Coast Consortia (GCC):
2017-present Member

REGIONAL:
South Texas Chapter of the American College of Surgeons:
2018-present Associate Fellow Member

American Academy of Pediatrics Texas Chapter:
2018-present Specialty Fellow

NATIONAL:
American College of Surgeons (ACS):
2006-2016 Resident Member

2011-2014	Governor's Committee on Surgical Practice in Hospital and Ambulatory Settings Member
2016-2019	Associate Fellow
2019-present	Fellow of the American College of Surgeons (FACS)

Association for Academic Surgery (AAS):

2009-2016	Candidate Member
2011-2013	Membership Committee Candidate Member
2016-present	Active Member
2016-2019	Basic and Translational Science Committee Member
2019-present	Publications Committee Member

American Pediatric Surgical Association (APSA):

2014-2018	Candidate Member
2018-present	Regular Member
2017-2020	Informatics and Telemedicine Committee Member, Visual Abstract Subcommittee Chair
2018-present	Benjy Brooks Taskforce Member
2020-present	Education Committee Member

American Academy of Pediatrics Section on Surgery (AAP):

2017-2018	Candidate Member
2018-present	Fellow of the American Academy of Pediatrics (FAAP)
2019-present	Publications Committee Member

Association of Women Surgeons (AWS):

2018-2019	New Surgeon Member

American Gastroenterological Association (AGA):

2019-present	Member

HONORS AND AWARDS:

1998-2002	USC Presidential Scholarship, academic scholarship (half tuition)
1999	Women's Water Polo National Collegiate I Champion
2002	USC Renaissance Scholar, recognition for a Major and Minor in disparate fields
2002	USC Order of Troy, awarded for excellence in scholarship, leadership, and service
2002	Mortar Board National College Senior Honor Society
2002	Blue Key National Service and Honor Fraternity
2006	USC Sagar Gupta, MD Memorial Scholarship Award
2010	American Pediatric Surgical Association M. Judah Folkman Memorial Award for Best Poster Presentation
2011	Best Manuscript by a New Association for Academic Surgery Member
2011	Best Quick Shot Presentation by a New Association for Academic Surgery Member
2011	Poster of Distinction, Federation of American Societies for Experimental Biology Summer Research Conference, Gastrointestinal Tract XIV: Stem Cells, Adaptation, Inflammation & Cancer
2011	American College of Surgeons Surgical Forum Excellence in Research Award
2011	USC Department of Surgery Annual Resident Research Competition Winner

2014	Alpha Omega Alpha Honor Medical Society
2014	The Jeanine Chalabian, M.D. Most Dedicated Teacher Award
2014	Keck School of Medicine Outstanding Teaching as a House Officer Award
2018, 2019, 2020	Houstonia magazine Top Doctor
2019	Texas Monthly magazine Texas Rising Star Doctor

EDITORIAL POSITIONS:

Reviewer:

2019-present	Journal of Surgical Research

SERVICE ON NATIONAL GRANT REVIEW PANELS, STUDY SECTIONS, COMMITTEES:

None.

SERVICE ON THE MCGOVERN MEDICAL SCHOOL AT THE UNIVERSITY OF TEXAS HEALTH SCIENCE CENTER AT HOUSTON COMMITTEES:

8/2017-present	Program Evaluation Committee for UTHealth Pediatric Surgery Fellowship Program
2018-2021	UTHealth Faculty Senator

SERVICE ON GRADUATE SCHOOL COMMITTEES:

9/2019-present	Baylor College of Medicine, Pediatric Gastroenterology Fellow, Scholarship Oversight Committee (SOC) for Peace Dike, MD, Research Advisor: Geoffrey Preidis, MD/PhD, (2-year commitment).
7/2020-present	Baylor College of Medicine, The Graduate School of Biomedical Sciences, Immunology & Microbiology, Thesis Advisory Committee (TAC) for Grace Adeniyi-Ipadeola, PhD Student, Research Advisor: Sasirekha Ramani, PhD

SERVICE ON UTMSH AFFILIATED HOSPITAL COMMITTEES:

Children's Memorial Hermann Hospital:

9/2016-present	Short bowel syndrome Therapy And Rehabilitation (STAR) Team Co-Director
2/2017-present	UTHealth Pediatric Telemedicine Committee Member
3/2017-present	Broviac Committee Member
4/2017-present	Medication Safety Committee Member
5/2018-present	The Fetal Center Innovative Therapy Review Committee (FCITRC) Member

SERVICE TO THE COMMUNITY:

7/16-23/2016	Surgical Mission, Mending Kids International Hospital Bernard Mevs, Port-au-Prince, Haiti

SPONSORSHIP OF CANDIDATES FOR POSTGRADUATE DEGREE:

None.

SPONSORSHIP OF POSTDOCTORAL FELLOWS:

9/2016-7/2017	Laura Hollinger, Pediatric Surgery Fellow Currently Assistant Professor at the Medical University of South Carolina, SC
8/2017-7/2019	Carey Watson, Pediatric Surgery Fellow Currently in Private Practice at Great Lakes Pediatric Surgeons, Inc., Fort Wayne, IN
11/2018-11/2020	Megan Coughlin, Pediatric Surgery Fellow

8/2019-present Alfred Francois Trappey, Pediatric Surgery Fellow
8/2020-present Mary Arbuthnot, Pediatric Surgery Fellow

CURRENT TEACHING RESPONSIBILITIES:

9/2016-present Medical student, surgery resident, and pediatric surgery fellow clinical teaching
Patient care rounds (monthly)
Intraoperative technical teaching (weekly)
Department of Pediatric Surgery Fellow's Conference (weekly)
Department of Pediatric Surgery Morbidity and Mortality Conference (weekly)
Department of Pediatric Surgery, Pathology, and Radiology Conference (monthly)
Department of Pediatric Surgery and Pediatric Gastroenterology Conference (q2months)
Department of Surgery Grand Rounds, Morbidity & Mortality Conferences (weekly)

8/2018-present Annual Lecture to 2nd year Medical Students at McGovern Medical School at UTHealth, "Congenital GI Malformations"

8/2019-7/2020 3rd year Medical Student Surgery Clerkship Core Faculty
Teach ten 3rd year medical students q8 weeks physical examination skills in surgical patients including abdominal exam, hernia exam, and trauma exam (primary/secondary/tertiary survey).

Invited Lecturer

9/27/2016 Department of Bioengineering at Rice University George R. Brown School of Engineering. Bioengineering Colloquia Seminar (BIOE 698/699). "Regenerative Medicine Strategies for Intestinal Failure: Past, Present and Future". Houston, TX.

10/6/2016 The Texas Medical Center Digestive Disease Center GI Research Forum. "Regenerative Medicine Strategies for Intestinal Failure: Past, Present and Future". Houston, TX.

3/27/2017 Houston Methodist's Center for Neuroregeneration. Neural Control of Organ Disease and Regeneration Course. "Regenerative Medicine Strategies for the Gut". Houston, TX.

10/21/2017 The Association for Academic Surgery 28th Annual Fundamentals of Surgical Research Course. "Creating a Timeline for Success in a Basic Science Lab". San Diego, CA.

2/1/2018 The 13th Annual Academic Surgical Congress. Basic Science Committee Session: So You Want to be a Surgeon-Scientist: How to Succeed in Today's Environment. "What to Look for in a Faculty Position: A Young Surgeon's Perspective". Jacksonville, FL.

11/29/2018 Lecture to Neonatology Fellows (Years 1-3) at McGovern Medical School at UTHealth, "GI Anomalies"

4/25/2019 Lecture to Otolaryngology Residents (Years 1-5) at McGovern Medical School at UTHealth, "Tracheoesophageal Fistula"

Invited Moderator

2/1/2018 The 13th Annual Academic Surgical Congress. Pediatrics Quickshot Session 4. Jacksonville, FL.

10/20/2018 The Association for Academic Surgery 29th Annual Fundamentals of Surgical Research Course. Marketing Session. Boston, MA.

10/29/2019 American College of Surgeons 2019 Clinical Congress. Session: SP210: e-Posters III, Station 4. San Francisco, CA.

6/18/2020 American Pediatric Surgical Association 51st Annual Meeting. Informatics Breakout Session. "Visual Abstracts: Information Appetizers Served Up on Social Media". Virtual Conference.

MENTORING ACTIVITIES:

McGovern Medical School at the University of Texas Health Science Center at Houston

2016-present Women in Surgery Mentorship Program Mentor
- 2019-2020 Brooke Beanland, MS1
- 2018-2019 Laura Van Buskirk, MS1
- 2018-2019 Helene Weideman, MS1
- 2017-2018 Erin Orozco, MS1-2
- 2017-2018 Joy Davis, MS1-2
- 2016-2017 Victoria Morris, MS1
- 2016-2017 Magen Ross, MS1

2018-present Women in Surgery Faculty/Resident/Student Social Hostess (4/17/2018, 9/17/2018, 10/8/2019)

2018-present Student Surgical Association Mini-Lecture on Pediatric Surgery (9/24/2018, 10/22/2019)

2018-present Summer Research Program Mentor
- 2018 Ge Yan, MS2: "Predictors of Enteral Autonomy in Pediatric Intestinal Failure", (C. Frank Webber Prize for Student Research 3rd Place)
- 2019 Mariaelena Boyle, MS2: "Transplanted Human Intestinal Organoids (tHIOs) Demonstrate Enhanced Tight Junctions Compared to Human Intestinal Organoids (HIOs)", (C. Frank Webber Prize for Student Research 1st Place).
- 2020 Amy Weinberg, MS2: "The Role of the Enteric Nervous System in Intestinal Epithelial Barrier Function in Human Intestinal Organoids"

2019 Student Trauma Society Lecture on Pediatric Trauma & Critical Care (9/16/2019)

2019 American Medical Women's Association and Women in Surgery Joint Meeting Lecture on Women in Surgery (12/9/2019)

Undergraduate Student Observers

7/2018-8/2018 Louis Hill, Senior at Augustana College, Rock Island, IL

High School Student Observers

5/2018-7/2018 Daniela Garcia, Senior at Cypress Ridge High School, Houston, TX

CURRENT CLINICAL SERVICE RESPONSIBILITIES:

2016-present Pediatric Surgery Clinic (0.5 day per week)
2016-present Operative days (1 day per week)
2016-present On-Call for hospitals 14.3% of every month (share call with 7 partners)

CURRENT GRANT SUPPORT:

1. 8/1/2020-7/31/2021 "Defining the role of the enteric nervous system in epithelial barrier function in human intestinal organoids"
American Pediatric Surgical Association Foundation Award ($25,000).
Principal Investigator: Allison L. Speer, MD.
Percent effort: 2%.

PAST GRANT SUPPORT:

1. 2011-2012 "The Effect of Fgf10 Over-expression during Tissue-Engineered Stomach Generation"
Ethicon-Society of University Surgeons Surgical Research Fellowship Award ($30,000).
Principal Investigator/Faculty Mentor: Tracy C. Grikscheit, MD.
Research Fellow: Allison L. Speer, MD

2. 2/1/2017-1/31/2018 "Optimizing the Motility of Tissue-Engineered Intestine"
Texas Medical Center Digestive Diseases Center Pilot/Feasibility Award ($35,000).
Principal Investigator: Allison L. Speer, MD.
Percent effort: 10%.

3. 7/1/2018-6/30/2020 "Improving enteric nervous system development and function in human tissue-engineered small intestine"
National Institutes of Health Loan Repayment Program ($70,000).
Principal Investigator: Allison L. Speer, MD.
Percent effort: N/A.

PUBLICATIONS:

A. Abstracts:

1. Sala FG, Matthews JA, **Speer AL**, Grikscheit TC. Murine Tissue-Engineered Small Intestine Demonstrates Intact Tight and Adherens Junctions. J Surg Res. 2010 Feb;158(2):199.

2. **Speer AL**, Sala FG, Matthews JA, Grikscheit TC. Intestinal Subepithelial Myofibroblasts Demonstrate COX-2 Expression in Early Stages of Epithelial Proliferation in Tissue Engineered Small Intestine. J Surg Res. 2010 Feb;158(2):199-200.

3. Matthews JA, Sala FG, **Speer AL**, Li Y, Skelton DC. Mesenchymal specific inhibition of vascular endothelial growth factor (VEGF) reduces intestinal development in neonatal mice. J Am Coll Surg. 2010 Sep;211(3)Supplement:S20.

4. Matthews JA, Sala FG, **Speer AL**, Li Y, Skelton DC. Ubiquitous overexpression of vascular endothelial growth factor (VEGF) optimizes the development of tissue-engineered intestine. J Am Coll Surg. 2010 Sep;211(3)Supplement:S61-62.

5. **Speer AL**, Sala FG, Matthews JA, Li Y, Grikscheit TC. Tissue-Engineered Stomach: a Useful Mechanistic In Vivo Model and Potential Replacement Option. J Surg Res. 2011 Feb;165(2):179.

6. Li Y, **Speer AL**, Matthews JA, Sala FG, Barthel ER, Torashima Y, Grikscheit TC. PGE2 Promotes The Growth Of Tissue Engineered Small And Large Intestine. J Surg Res. 2011 Feb;165(2):212.

7. Sala FG, Matthews JA, **Speer AL**, Li Y, Grikscheit TC. Lgr5 Positive Stem Cells Contribute To the Formation Of Tissue-Engineered Small Intestine In The Mouse Model. J Surg Res. 2011 Feb;165(2):232.

8. Matthews JA, Sala FG, **Speer AL**, Li Y, Grikscheit TC. Mesenchymal Specific Inhibition Of Vascular Endothelial Growth Factor (VEGF) Attenuates Growth in Neonatal Mice. J Surg Res. 2011 Feb;165(2):259.

9. Li Y, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Barthel ER, Grikscheit TC. Murine Intestinal Subepithelial Myofibroblast Cells (ISEMF) Provide Necessary Support For Lgr5-EGFP Positive And Negative Cells To Grow In A Matrigel Culture System. J Surg Res. 2011 Feb;165(2):288.

10. Li Y, Matthews JA, Sala FG, **Speer AL**, Torashima Y, Barthel ER, Grikscheit TC. Tissue-Engineered Small Intestine Forms From Multicellular Clusters Maintained in Vitro Without Growth Factors. J Surg Res. 2011 Feb;165(2):339.

11. Li Y, Barthel ER, Matthews JA, Sala FG, **Speer AL**, Torashima Y, Grikscheit TC. MyD88-Mediated Innate Immune Signaling Demonstrated by RegIII-gamma Induction Can Occur Without Exposure To Intraluminal Enteric Bacteria In Tissue-Engineered Intestine. J Surg Res. 2011 Feb;165(2):339.

12. **Speer AL**, Sala FG, Matthews JA, Barthel ER, Torashima Y, Grikscheit TC. Tissue-engineered small intestine regenerates from frozen organoid units: A novel long-term storage method. J Am Coll Surg. 2011 Sep;213(3)Supplement:S67.

13. Matthews JA, Sala FG, **Speer AL**, Barthel ER, Grikscheit TC. Vascular endothelial growth factor (VEGF) improves the growth of tissue-engineered colon. J Am Coll Surg. 2011 Sep;213(3)Supplement:S67.

14. Barthel ER, Matthews JA, Sala FG, **Speer AL**, Torashima Y, Grikscheit TC. Postnatal human colon organoid units can be grown in culture and form full-thickness intestinal tissue in a murine host. J Am Coll Surg. 2011 Sep;213(3)Supplement:S76.

15. **Speer AL**, Torashima Y, Bernard J, Grikscheit TC, Frey MR. Interleukin-1beta stimulates intestinal subepithelial myofibroblasts to release factors that promote intestinal epithelial restitution. J Am Coll Surg. 2011 Sep;213(3)Supplement:S79.

16. Barthel ER, Hou X, Matthews JA, **Speer AL**, Sala FG, Grikscheit TC. Single Lgr5+ intestinal stem cells co-cultured with intestinal subepithelial myofibroblasts (ISEMF) differentiate into absorptive and secretory cell linages without exogenous growth factors. J Surg Res. 2012 Feb;172(2):196.

17. Norgaard SM, Matthews JA, Hou X, Sala FG, **Speer AL**, Barthel EB, Grikscheit TC. Reduction of bioavailable vascular endothelial growth factor (VEGF) alters terminal differentiation of the absorptive and secretory lineages in neonatal mouse intestine. J Surg Res. 2012 Feb;172(2):196.

18. **Speer AL,** Sala FG, Barthel ER, Torashima Y, Hou X, Levin DE, Grikscheit TC. Fibroblast growth factor 10 overexpression in murine tissue-engineered stomach attenuates growth, reduces epithelial proliferation, and promotes mucous cell differentiation. J Surg Res. 2012 Feb;172(2):315.

19. Hill JR, Sala FG, **Speer AL**, Barthel EB, Grikscheit TC. Tissue-engineered small intestine demonstrates digestive and absorptive capability. J Surg Res. 2012 Feb;172(2):315.

20. Torashima Y, Barthel ER, **Speer AL**, Hou X, Sala FG, Grikscheit TC. Long-term observation of intestinal ischemic injury in the mouse. J Surg Res. 2012 Feb;172(2):340.

21. **Speer AL**, Sala FG, Barthel ER, Torashima Y, Hou X, Dreyfuss JML, Levin DE, Grikscheit TC. Tissue-engineered stomach epithelium develops few parietal cells but is not metaplastic. J Am Coll Surg. 2012 Sep;215(3)Supplement:S140.

22. Levin DE, Sala FG, Barthel ER, **Speer AL**, Hou X, Torashima Y, Dreyfuss JML, Grikscheit TC. Tissue-engineered small intestine (TESI) forms normal architecture following a period of hyper-proliferation. J Am Coll Surg. 2012 Sep;215(3)Supplement:S137.

23. Barthel ER, Pierce JR, Levin DE, **Speer AL,** Goodhue CJ, Ford HR, Grikscheit TC, Upperman JS. Delayed family reunification of pediatric disaster survivors increases inpatient hospital costs: a simulation study. J Surg Res. 2013 Feb;179(2):345.

24. Torashima Y, Levin DE, Barthel ER, **Speer AL**, Sala FG, Hou X, Grikscheit TC. Fgf10 Overexpression Optimizes the Formation of Tissue-Engineered Small Intestine. J Surg Res. 2013 Feb;179(2):234.

25. Spurrier RG, **Speer AL**, Grikscheit TC. Preservation of epithelial-mesenchymal contact is not required for formation of tissue-engineered intestine. J Am Coll Surg. 2013 Sep;217(3)Supplement:S141.

26. Spurrier RG, Grant CN, Levin DE, **Speer AL**, Grikscheit TC. Vitrification Preserves Murine and Human Donor Cells for Delayed Generation of Tissue-Engineered Small Intestine. J Surg Res. 2014 Feb;186(2):646-647.

27. Hou X, Barthel ER, **Speer AL**, Levin DE, Grant CN, Spurrier RG, Garcia S, Grikscheit TC. Small intestine organoid units can be maintained in long-term culture without exogenous growth factors, with subsequent formation of tissue-engineered small intestine. J Surg Res. 2014 Feb;186(2):648.

28. Spurrier RG, **Speer AL**, Hou X, El-Nachef WN, Grikscheit TC. Sufficient progenitor cells do not require microdesigned biomaterials to generate murine and human tissue-engineered esophagus. J Am Coll Surg. 2014 Sep;219(3)Supplement:S140.

29. McNeill EP, Sequeira DJ, Shroyer NF, **Speer AL**. Optimizing the Integration of the Enteric Nervous System into Human Intestinal Organoids. J Am Coll Surg. 2020 Oct;231(4)Supplement:2, E57-58.

B. Refereed Original Articles in Journals:

1. **Speer AL**, Schofield DE, Wang KS, Shin CE, Stein JE, Shaul DB, Mahour GH, Ford HR. Contemporary Management of Lipoblastoma. J Pediatr Surg. 2008 Jul;43(7):1295-1300. PMID: 18639685.

2. **Speer AL**, Sohn HJ, Moazzez A, Portillo J, Clarke T, Katkhouda N, Mason RJ. Establishing an Acute Care Surgery Service: Lessons Learned from the Epidemiology of Emergent Non-Trauma Patients and Increasing Utilization of Laparoscopy. J Trauma. 2010 Oct;69(4):938-42. PMID: 20375915.

3. Sala FG, Matthews JA, **Speer AL**, Torashima Y, Barthel ER, Grikscheit TC. A Multicellular Approach Forms a Significant Amount of Tissue-Engineered Small Intestine in the Mouse. Tissue Eng Part A. 2011 Jul;17(13-14):1841-50. PMID: 21395443. (Figure 6C is the journal's cover image for this issue).

4. Matthews JA, Sala FG, **Speer AL**, Warburton D, Grikscheit TC. VEGF Optimizes the Formation of Tissue-Engineered Small Intestine. Regen Med. 2011 Sep;6(5):559-67. PMID: 21916592.

5. **Speer AL**, Sala FG, Matthews JA, Grikscheit TC. Murine Tissue-Engineered Stomach Demonstrates Epithelial Differentiation. J Surg Res. 2011 Nov;171(1):6-14. PMID: 21571313.

6. Matthews JA, Sala FG, **Speer AL**, Li Y, Warburton D, Grikscheit TC. Mesenchymal Specific Inhibition of Vascular Endothelial Growth Factor (VEGF) Attenuates Growth in Neonatal Mice. J Surg Res. 2012 Jan;172(1):40-7. PMID: 21696760.

7. **Speer AL**, Barthel ER, Patel MM, Grikscheit TC. Solid Pseudopapillary Tumor of the Pancreas: A Single Institution 20-Year Series of Pediatric Patients. J Pediatr Surg. 2012 Jun;47(6):1217-22. PMID: 22703796.

8. Barthel ER, **Speer AL**, Levin DE, Naik-Mathuria BJ, Grikscheit TC. Giant cystic meconium peritonitis (GCMP) presenting in a neonate with classic radiographic eggshell calcifications and treated with an elective surgical approach: a case report. J Med Case Rep. 2012 Aug 2:6(1):229. PMID: 22857611.

9. **Speer AL**, Al Alam D, Sala FG, Ford HR, Bellusci S, Grikscheit TC. Fibroblast growth factor 10-fibroblast growth factor receptor 2b mediated signaling is not required for adult glandular stomach homeostasis. PLoS ONE. 2012. Nov;7(11): e49127. PMID: 23133671.

10. Barthel ER, Levin DE, **Speer AL**, Sala FG, Torashima Y, Hou X, Grikscheit TC. Human tissue-engineered colon forms from postnatal progenitor cells: an *in vivo* murine model. Regen Med. 2012 Nov;7(6):807-18. PMID: 23164081.

11. Barthel ER, **Speer AL**, Levin DE, Sala FG, Hou X, Torashima Y, Wigfall CM, Grikscheit TC. Tissue engineering of the intestine in a murine model. J Vis Exp. 2012. Dec 1;(70). PMID: 23222891.

12. Castle S, **Speer AL,** Torres MB, Anselmo DM, Nguyen NX. Combined laparoscopic-endoscopic placement of primary gastrojejunal feeding tubes in children: a preliminary report. J Laparoendosc Adv Surg Tech A. 2013 Feb;23(2):170-3. PMID: 23327346.

13. Levin DE, Barthel ER, **Speer AL**, Sala FG, Hou X, Torashima Y, Grikscheit TC. Human tissue-engineered small intestine forms from postnatal progenitor cells. J Pediatr Surg. 2013 Jan;48(1):129-37. PMID: 23331805.

14. Torashima Y, Levin DE, Barthel ER, **Speer AL**, Sala FG, Hou X, Grikscheit TC. *Fgf10* overexpression enhances the formation of tissue-engineered small intestine. J Tissue Eng Regen Med. 2016 Feb;10(2):132-9. PMID: 23468377.

15. Levin DE, Sala FG, Barthel ER, **Speer AL**, Hou X, Torashima Y, Grikscheit TC. A "living bioreactor" for the production of tissue-engineered small intestine. Methods Mol Biol. 2013;1001:299-309. PMID: 23494439.

16. Barthel ER, Pierce JR, **Speer AL,** Levin DE, Goodhue CJ, Ford HR, Grikscheit TC, Upperman JS. Delayed family reunification of pediatric disaster survivors increases mortality and inpatient hospital costs: a simulation study. J Surg Res. 2013 Sept;184(1):430-7. PMID: 23827792.

17. Levin DE, **Speer AL**, Giuliani S, Panossian A, Arkader A, Stanley P, Anselmo DM. Extremity amputations for vascular anomalies in children: A single-center experience over 10 years. Current Orthopaedic Practice. 2013; Nov/Dec;24(6):653-658.

18. Levin DE, **Speer AL**, Pierce JR, Nowicki D, Arkader A, Stanley P, Panossian A, Anselmo DM. Room for Improvement: Patterns of Referral Misdiagnosis to a Vascular Anomalies Center. Open Journal of Pediatrics. 2013 Dec;3(4):331-336.

19. **Speer AL**, Merritt R, Panossian A, Stanley P, Anselmo DM. Primary intestinal lymphangiectasia with massive abdominal lymphatic malformation requiring surgical debulking. Journal of Pediatric Surgery Case Reports. 2013 Dec;1(12):425-428.

20. Ferkel EI, **Speer AL**, Anselmo D, Panossian A, Stanley P, Arkader A. Vascular Malformations and Associated Syndromes: The Role of the Orthopaedic Surgeon. JBJS Reviews. 2014 May;2(5):e2. http://dx.doi.org/10.2106/JBJS.RVW.M.00075.

21. Spurrier RG, **Speer AL**, Grant CN, Levin DE, Grikscheit TC. Vitrification Preserves Murine and Human Donor Cells for Generation of Tissue-Engineered Intestine. J Surg Res. 2014 Aug;190(2):399-406. PMID: 24857678.

22. Spurrier RG, **Speer AL,** Hou X, El-Nachef WN, Grikscheit TC. Murine and human tissue-engineered esophagus form from sufficient stem/progenitor cells and do not require microdesigned biomaterials. Tissue Eng Part A. 2015 Mar;21(5-6):906-15. PMID: 25298083.

23. Grant CN, Mojica SG, Sala FG, Hill JR, Levin DE, **Speer AL**, Barthel ER, Shimada H, Zachos NC, Grikscheit TC. Human and Mouse Tissue-Engineered Small Intestine Both Demonstrate Digestive and Absorptive Function. Am J Physiol Gastrointest Liver Physiol. 2015 Apr 15;308(8):G664-77. PMID: 25573173.

24. Jelin EB, Daggag H, **Speer AL**, Hameed N, Lessan N, Barakat M, Nadler EP. Melanocortin-4 receptor signaling is not required for short-term weight loss after sleeve gastrectomy in pediatric patients. Int J Obes (Lond). 2016 Mar;40(3):550-3. PMID: 26538186.

25. Strumwasser A, **Speer AL**, Inaba K, Branco BC, Upperman JS, Ford HR, Lam L, Talving P, Shulman I, Demetriades D. The Impact of Acute Coagulopathy on Mortality in Pediatric Trauma Patients. J Trauma and Acute Care Surg. 2016 Aug;81(2):312-8. PMID: 27032006.

26. **Speer AL**, Parekh J, Qureshi FG, Nadler EP. Thirty-day Outcomes for Children and Adolescents Undergoing Laparoscopic Sleeve Gastrectomy at a Free-standing Children's Hospital. Clinical Obesity. 2017 Apr;7(2):86-91. https://doi.org/10.1111/cob.12181

27. Anderson KT, Bartz-Kurycki MA, Martin R, Imseis E, Austin MT, **Speer AL,** Lally KP, Tsao K. Tunneled central venous catheters in pediatric intestinal failure: a single center experience. J Surg Res. 2018 Nov;231:346-351. PMID: 30278951.

28. Mulcahy CF, Park JC, Rubio EI, **Speer AL**, Badillo A, Pena M. Severe Acquired Tracheomalacia caused by a Chronic Esophageal Foreign Body. J Pediatr Surg Case Rep. 2019 Aug;47:101253. https://doi.org/10.1016/j.epsc.2019.101253

29. Boyle MA, Sequeira DJ, McNeill EP, Criss ZK, Shroyer NF, **Speer AL**. In vivo transplantation of human intestinal organoids enhances select tight junction gene expression. J Surg Res. 2020 Nov 6;. doi: 10.1016/j.jss.2020.10.002. [Epub ahead of print] PubMed PMID: 33168233.

30. Cabrera TB, **Speer AL**, Greives MR, Goff DA, Menon NM, Reynolds EW. Sirolimus for Kaposiform Hemangioendothelioma and Kasaback-Merritt Phenomenon in a Neonate. Am J Perinatol Rep. 2020 November; 10(4):e390-e394. https://doi.org/10.1055/s-0040-1718901.

31. McNeill EP, **Speer AL**, Bitar KN, DeCoppi P, Orlando G. Bioengineering of the digestive tract: approaching the clinic. Cytotherapy 2020 Special Issue. *Submitted and in review.*

C. Invited Articles in Journals (Reviews, Editorials, etc):

1. **Speer AL**, Kao LS. The Association for Academic Surgery 2011-present: standing on the shoulders of giants. J Surg Res. 2017;217:20-24. PMID: 28918958.

D. Chapters:

1. **Speer AL**, Grikscheit TC, Upperman JS, Ford HR. Chapter 10: Sepsis and Related Considerations in Pediatric Surgery, 7th edition. Pages 141-163. Coran AG, Adzick NS, Krummel TM, Laberge J,

Shamberger RC, Caldamone AA (eds). Elsevier, Philadelphia, PA. February 14, 2012. ISBN: 978-0-323-07255-7.

2. Castle SL, **Speer AL**, Grikscheit TC, Ford HR. Chapter 46: Necrotizing Enterocolitis in Operative Pediatric Surgery, 2nd edition. Pages 597-608. Ziegler MM, Azizkhan RG, von Allmen D, Weber T (eds). McGraw-Hill Education, New York, NY. 2014. ISBN 978-0-07-162723-8.

3. **Speer AL**, Kane TD. Chapter 41: Pectus Deformities in Fundamentals of Pediatric Surgery, 2nd edition. Pages 351-358. Peter Mattei, Peter F. Nichol, Michael D. Rollins, II, and Christopher S. Muratore (eds). Springer Nature, New York, NY. October 15, 2016. ISBN: 978-3-319-27443-0.

4. **Speer AL**, Rymeski BA, Petty JK. Chapter 32: Pediatric General Surgeon and Critically Ill Cardiac Patient in Critical Heart Disease in Infants and Children, 3rd edition. Ungerleider RM, Meliones JN, Nelson McMillan K, Cooper DS, Jacobs JP (eds). Elsevier, Philadelphia, PA. December 17, 2018. ISBN: 978-1-4557-0769-7.

5. **Speer AL**. Current Concepts for Tissue Engineering of the Gastrointestinal Tract in Reference Module in Biomedical Sciences, 2019. McQueen CA (ed). Elsevier, Inc. Accessed online: February 28, 2019 at https://www.sciencedirect.com/referencework/9780128012383/biomedical-sciences. https://doi.org/10.1016/B978-0-12-801238-3.65847-6

E. Books:
None.

F. Other Professional Communications:
1. Presentations
Local
1. Huston L, Haney S, Su J, Clinton C, **Speer A**, Liu A, Luftman J, Vigil D. An Urban American Sports Medicine Clinic in the 21st Century: a Year in Review. UCLA Primary Care Research Forum. Los Angeles, CA, May 2005. (poster presentation)

2. **Speer AL**, Sala FG, Matthews JA, Skelton DC, Grikscheit TC. Tissue-Engineered Esophagus is a Versatile In Vivo Mouse Model with Intact Architecture. Childrens Hospital Los Angeles and The Saban Research Institute 15th Annual Poster Session. Los Angeles, CA, June 7, 2010. (poster presentation)

3. Li Y, **Speer AL**, Matthews JA, Sala FG, Skelton DC, Grikscheit TC. PGE2 promotes the Formation and Growth of Tissue Engineered Intestine. Childrens Hospital Los Angeles and The Saban Research Institute 15th Annual Poster Session. Los Angeles, CA, June 7, 2010. (poster presentation)

4. Matthews JA, Sala FG, **Speer AL**, Grikscheit TC. A Novel Model for Investigating the Effects of Vascular Endothelial Growth Factor (VEGF) in the Mouse Mesenchyme. Childrens Hospital Los Angeles and The Saban Research Institute 15th Annual Poster Session. Los Angeles, CA, June 7, 2010. (poster presentation)

5. Sala, FG, Matthews JA, **Speer AL**, Skelton DC, Grikscheit TC. Cell Lineage Tracing of Tissue-Engineered Small Intestine in the Mouse Model Demonstrates Contributions to the Stem Cell Niche

and the Entire Epithelium. Childrens Hospital Los Angeles and The Saban Research Institute 15th Annual Poster Session. Los Angeles, CA, June 7, 2010. (poster presentation)

6. **Speer AL,** Sala FG, Matthews JA, Grikscheit TC. Tissue-Engineered Esophagus: an In Vivo Mouse Model with Therapeutic Potential. USC Stem Cell Translational and Clinical Sciences Research Symposium. Los Angeles, CA, September 22, 2010. (poster presentation)

7. Matthews JA, Sala FG, **Speer AL**, Grikscheit TC. Mesenchymal Specific Inhibition of Vascular Endothelial Growth Factor (VEGF) Attenuates Intestinal Growth in Neonatal Mice. USC Stem Cell Translational and Clinical Sciences Research Symposium. Los Angeles, CA, September 22, 2010. (poster presentation)

8. Sala FG, Matthews JA, **Speer AL**, Grikscheit TC. Tissue-engineered small intestine regenerated from an intact stem cell niche. USC Stem Cell Translational and Clinical Sciences Research Symposium. Los Angeles, CA, September 22, 2010. (poster presentation)

9. **Speer AL**, Sala FG, Barthel ER, Matthews JA, Grikscheit TC. Mesenchymal Expression of Fibroblast Growth Factor 10 May be Essential for Generation of Tissue-Engineered Stomach. Children's Hospital Los Angeles and The Saban Research Institute 16th Annual Poster Session. Los Angeles, CA, June 6, 2011. (poster presentation)

10. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. Fibroblast Growth Factor-10 (FGF10) is Expressed in the Mesenchyme of Mouse Tissue-Engineered Small Intestine. Children's Hospital Los Angeles and The Saban Research Institute 16th Annual Poster Session. Los Angeles, CA, June 6, 2011. (poster presentation)

11. Matthews JA, Sala FG, **Speer AL**, Grikscheit TC. VEGF Optimizes Tissue-Engineered Intestine Formation by Increasing the Mucosal Growth and Crypt Epithelium Proliferation. Children's Hospital Los Angeles and The Saban Research Institute 16th Annual Poster Session. Los Angeles, CA, June 6, 2011. (poster presentation)

12. **Speer AL**, Sala FG, Al-Alam D, Bellusci S, Ford HR, Grikscheit TC. The role of FGF10-FGFR2b mediated signaling during adult glandular stomach homeostasis. Children's Hospital Los Angeles and The Saban Research Institute 17th Annual Poster Session. Los Angeles, CA, June 4, 2012. (poster presentation)

13. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. In vitro culture of murine small intestinal organoid units prior to in vivo implantation for intestinal tissue engineering. Children's Hospital Los Angeles and The Saban Research Institute 17th Annual Poster Session. Los Angeles, CA, June 4, 2012. (poster presentation)

14. Hou X, Matthews JA, Norgaard SM, Barthel ER, **Speer AL**, Sala FG, Torashima Y, Levin DE, Garcia S, Torres E, Grikscheit TG. Reduced VEGF level alters differentiation of secretory lineages in neonatal mice intestine. Children's Hospital Los Angeles and The Saban Research Institute 17th Annual Poster Session. Los Angeles, CA, June 4, 2012. (poster presentation)

15. **Speer AL**, Parekh J, Qureshi FG, Nadler EP. 30-day Outcomes for Children and Adolescents undergoing Laparoscopic Sleeve Gastrectomy at a Children's Hospital. 2nd Annual Joseph E.

Robert, Jr. Academic Day Symposium. Children's National Medical Center. Washington, D.C. November 21, 2015. (oral presentation)

16. Patel S, Sequeira D, Bhattarai D, Criss II ZK, Shroyer NF, **Speer AL**. Exploring GLP2 activity and cellular targets in human intestinal enteroids (HIEs) and organoids (HIOs). Texas Medical Center Digestive Diseases Center 10th Annual Frontiers in Digestive Diseases Symposium. Houston, TX, March 2, 2019. (poster presentation)

17. Boyle MA, Sequeira D, Bhattarai D, Criss II ZK, Shroyer NF, **Speer AL**. Transplanted Human Intestinal Organoids (tHIOs) Demonstrate Enhanced Tight Junctions Compared to Human Intestinal Organoids (HIOs). Gulf Coast Consortia (GCC) Regenerative Medicine Symposium. Houston, TX. November 8, 2019. (poster presentation)

18. McNeill EP, Sequeira DJ, Shroyer NF, **Speer AL**. Optimizing the integration of enteric neural crest cells (ENCCs) into human intestinal organoids (HIOs). Texas Medical Center Digestive Diseases Center 11th Annual Frontiers in Digestive Diseases Symposium. Houston, TX, February 29, 2020. (poster presentation)

Regional

1. **Speer AL**, Sydorak R, Stein J, Mahour GH, Shaul D. Minimally Invasive Pectus Excavatum Repair: Getting it Just Right. American College of Surgeons Southern California Chapter 2006 Annual Scientific Meeting. Santa Barbara, CA, January 21, 2006. (oral presentation)

2. **Speer AL**, Sohn HJ, Moazzez A, Portillo J, Clarke T, Katkhouda N, Mason RJ. Epidemiology of the Non-Trauma Component of Acute Care Surgery: Analysis of a Clinician-Completed Registry. 80th Annual Meeting of the Pacific Coast Surgical Association. San Francisco, CA, February 14, 2009. (oral presentation)

3. Sala FG, Matthews JA, **Speer AL**, Grikscheit TC. Murine Tissue-Engineered Small Intestine Demonstrates Intact Tight and Adherens Junctions. California Institute for Regenerative Medicine Grantee Meeting. San Francisco, CA, March 3-5, 2010. (oral presentation)

4. **Speer AL,** Inaba K, Branco BC, Upperman JS, Ford HR, Demetriades D. Diaphragmatic Injury in Pediatric and Adult Trauma: Results of a National Trauma Databank Analysis. Southern California Chapter of the American College of Surgeons Annual Scientific Meeting. Santa Barbara, CA, January 22, 2011. (oral presentation)

5. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. Demonstration of a delayed strategy for implantation of murine intestinal organoid units for the production of tissue-engineered small intestine. California Institute for Regenerative Medicine Grantee Meeting. San Francisco, CA, September 14-16, 2011. (poster presentation)

6. Yan G, Anderson KT, Chica JK, Ferguson DM, Hatton GE, Chapman JC, Kawaguchi A, Imseis EM, **Speer AL**. Pediatric Intestinal Failure and The Achievement of Enteral Autonomy: Identifying Predictors. South Texas American College of Surgeons Annual Meeting. Austin, TX, February 9, 2019. (oral presentation)

7. Cabrera TB, **Speer AL**, Greives MR, Goff DA, Menon NM, Reynolds EW. Sirolimus for

Kaposiform Hemangioendothelioma in a Neonate. 2020 Southern Regional Meeting. New Orleans, LA. February 13, 2020. (oral presentation)

8. Coughlin M, Tsao K, Lally KP, **Speer AL**. Thoracoscopic Rehbein procedure for Type B esophageal atresia and tracheoesophageal fistula. South Texas American College of Surgeons Annual Meeting. Houston, TX. March 5-7, 2020. (video abstract)

National

1. Haney S, Clinton C, **Speer A**, Su J, Huston L, Liu A, Luftman J, Vigil D. An Urban American Sports Medicine Clinic in the 21st Century: a Year in Review. American Medical Society for Sports Medicine. Austin, TX, April 2005. (poster presentation)

2. **Speer AL**, Schofield DE, Wang KS, Shin CE, Stein JE, Shaul DB, Mahour GH, Ford HR. Contemporary Management of Lipoblastoma. American Academy of Pediatrics 2006 National Conference. Atlanta, GA, October 7, 2006. (poster presentation)

3. Sala FG, Matthews JA, **Speer AL**, Grikscheit TC. Murine Tissue-Engineered Small Intestine Demonstrates Intact Tight and Adherens Junctions. 5th Annual Academic Surgical Congress. San Antonio, TX, February 3, 2010. (oral presentation)

4. **Speer AL**, Sala FG, Matthews JA, Grikscheit TC. Intestinal Subepithelial Myofibroblasts Demonstrate COX-2 Expression in Early Stages of Epithelial Proliferation in Tissue Engineered Small Intestine. 5th Annual Academic Surgical Congress. San Antonio, TX, February 3, 2010. (oral presentation)

5. **Speer AL**, Sala FG, Matthews JA, Skelton DC, Grikscheit TC. Tissue-Engineered Esophagus is a Versatile In Vivo Mouse Model with Intact Architecture. American Pediatric Surgical Association 41st Annual Meeting. Orlando, FL, May 16, 2010. (poster presentation)

6. Matthews JA, Sala FG, **Speer AL**, Grikscheit TC. A Novel Model for Investigating the Effects of Vascular Endothelial Growth Factor (VEGF) in the Mouse Mesenchyme. American Pediatric Surgical Association 41st Annual Meeting. Orlando, FL, May 16, 2010. (poster presentation)

7. Sala, FG, Matthews JA, **Speer AL**, Skelton DC, Grikscheit TC. Cell Lineage Tracing of Tissue-Engineered Small Intestine in the Mouse Model Demonstrates Contributions to the Stem Cell Niche and the Entire Epithelium. American Pediatric Surgical Association 41st Annual Meeting. Orlando, FL, May 16, 2010. (poster presentation)

8. **Speer AL,** Austin MT, Panossian A, Urata MM, Stein JE. Separation of an Epigastric Heteropagus Conjoined Twin. American College of Surgeons 96th Annual Clinical Congress. Washington, D.C. October 5, 2010. (poster presentation)

9. Matthews JA, Sala FG, **Speer AL**, Grikscheit TC. Mesenchymal Specific Inhibition of Vascular Endothelial Growth Factor (VEGF) Reduces Intestinal Development in Neonatal Mice. American College of Surgeons 96th Annual Clinical Congress. Washington, D. C. October 5, 2010. (oral presentation)

10. Matthews JA, Sala FG, **Speer AL**, Grikscheit TC. Ubiquitous Overexpression of Vascular

Endothelial Growth Factor (VEGF) Optimizes the Development of Tissue-Engineered Intestine. American College of Surgeons 96th Annual Clinical Congress. Washington, D. C. October 6, 2010. (oral presentation)

11. **Speer AL,** Sala FG, Matthews JA, Barthel ER, Grikscheit TC. Tissue-Engineered Stomach: a Useful Mechanistic *In Vivo* Model and Potential Replacement Option. 6th Annual Academic Surgical Congress. Huntington Beach, CA, February 1, 2011. (oral presentation)

12. Li Y, **Speer AL,** Matthews JA, Sala FG, Barthel ER, Torashima Y, Grikscheit TC. PGE2 Promotes the Growth of Tissue Engineered Small and Large Intestine. 6th Annual Academic Surgical Congress. Huntington Beach, CA, February 1, 2011. (oral presentation)

13. Sala FG, Matthews JA, **Speer AL**, Li Y, Grikscheit TC. Lgr5 Positive Stem Cells Contribute to the Formation of Tissue-Engineered Small Intestine in the Mouse Model. 6th Annual Academic Surgical Congress. Huntington Beach, CA, February 1, 2011. (oral presentation)

14. Matthews JA, Sala FG, **Speer AL**, Li Y, Grikscheit TC. Mesenchymal Specific Inhibition of Vascular Endothelial Growth Factor (VEGF) Attenuates Growth in Neonatal Mice. 6th Annual Academic Surgical Congress. Huntington Beach, CA, February 2, 2011. (oral presentation)

15. Li Y, Matthews JA, Sala FG, **Speer AL,** Torashima Y, Barthel ER, Grikscheit TC. Tissue-Engineered Small Intestine Forms from Multicellular Clusters Maintained In Vitro Without Growth Factors. 6th Annual Academic Surgical Congress. Huntington Beach, CA, February 3, 2011. (oral presentation)

16. Li Y, Sala FG, Matthews JA, **Speer AL,** Torashima Y, Barthel ER, Grikscheit TC. Murine Intestinal Subepithelial Myofibroblast Cells (ISEMF) Provide Necessary Support for Lgr5-EGFP Positive and Negative Cells to Grow in a Matrigel Culture System. 6th Annual Academic Surgical Congress. Huntington Beach, CA, February 3, 2011. (oral presentation)

17. **Speer AL**, Sala FG, Barthel ER, Matthews JA, Grikscheit TC. Mesenchymal Expression of Fibroblast Growth Factor 10 May Be Essential For Generation of Tissue-Engineered Stomach. The Society of Black Academic Surgeons 21st Annual Meeting. Boston, MA, April 30, 2011. (poster presentation)

18. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. Fibroblast Growth Factor-10 (FGF10) is Expressed in the Mesenchyme of Mouse Tissue-Engineered Small Intestine. The Society of Black Academic Surgeons 21st Annual Meeting. Boston, MA, April 30, 2011. (poster presentation)

19. Matthew JA, Sala FG, **Speer AL**, Grikscheit TC. Vascular Endothelial Growth Factor (VEGF) Increases Growth Rate of Tissue-Engineered Intestine and Drives Crypt Epithelial Proliferation. The Society of Black Academic Surgeons 21st Annual Meeting. Boston, MA, April 30, 2011. (poster presentation)

20. **Speer AL**, Giuliani S, Panossian A. Arkader A, Stanley P, Anselmo D, Nowicki D. Extremity Amputations for Vascular Anomalies: a Single-Center Experience Over 10 Years. American Pediatric Surgical Nurses Association Annual Meeting. Palm Desert, CA, May 20, 2011. (oral

presentation)

21. Matthews JA, Sala FG, **Speer AL**, Barthel ER, Grikscheit TC. Inhibition of Vascular Endothelial Growth Factor Directs Absorptive Lineage Differentiation of the Intestinal Epithelium via Notch Activation. American Pediatric Surgical Association 42nd Annual Meeting. Palm Desert, CA, May 22, 2011. (poster presentation)

22. Sala FG, Matthews JA, **Speer AL**, Barthel ER, Grikscheit TC. Key Mesenchymal Components of Tissue-Engineered Small Intestine Do Not Derive from Bone Marrow Stem Cells. American Pediatric Surgical Association 42nd Annual Meeting. Palm Desert, CA, May 24, 2011. (oral presentation)

23. **Speer AL**, Patel MM, Grikscheit TG. Solid Pseudopapillary Tumor of the Pancreas: A Single Institution 20-Year Series of Pediatric Patients. American Academy of Pediatrics 2011 National Conference. Boston, MA, October 15, 2011. (poster presentation)

24. **Speer AL**, Torashima Y, Bernard JK, Grikscheit TC, Frey MR. Interleukin-1Beta Stimulates Intestinal Subepithelial Myofibroblasts to Release Factors that Promote Intestinal Epithelial Restitution. American College of Surgeons 97th Annual Clinical Congress. San Francisco, CA. October 24, 2011. (oral presentation)

25. Barthel ER, Matthews JA, Sala FG, **Speer AL**, Torashima Y, Grikscheit TC. Postnatal Human Colon Organoid Units Can Be Grown in Culture and Form Full-Thickness Intestinal Tissue in a Murine Host. American College of Surgeons 97th Annual Clinical Congress. San Francisco, CA. October 24, 2011. (oral presentation)

26. **Speer AL**, Sala FG, Matthews JA, Barthel ER, Torashima Y, Grikscheit TC. Tissue-Engineered Small Intestine Regenerates from Frozen Organoid Units: A Novel Long-Term Storage Method. American College of Surgeons 97th Annual Clinical Congress. San Francisco, CA. October 25, 2011. (oral presentation)

27. Matthews JA, Sala FG, **Speer AL**, Barthel ER, Grikscheit TC. Vascular Endothelial Growth Factor (VEGF) Improves the Growth of Tissue-Engineered Colon. American College of Surgeons 97th Annual Clinical Congress. San Francisco, CA. October 25, 2011. (oral presentation)

28. Barthel ER, Hou X, Matthews JA, **Speer AL**, Sala FG, Grikscheit TC. Single Lgr+ intestinal stem cells co-cultured with intestinal subepithelial myofibroblasts (ISEMF) differentiate into absorptive and secretory cell lineages without exogenous growth factors. 7th Annual Academic Surgical Congress. Las Vegas, NV. February 14, 2012. (oral presentation)

29. Norgaard SM, Matthews JA, Hou X, Sala FG, **Speer AL**, Barthel ER, Grikscheit TC. Reduction of bioavailable vascular endothelial growth factor (VEGF) alters terminal differentiation of the absorptive and secretory lineages in neonatal mouse intestine. 7th Annual Academic Surgical Congress. Las Vegas, NV. February 14, 2012. (oral presentation)

30. **Speer AL**, Sala FG, Barthel ER, Torashima Y, Hou X, Levin DE, Grikscheit TC. Fibroblast growth factor 10 overexpression in murine tissue-engineered stomach attenuates growth, reduces

epithelial proliferation, and promotes mucous cell differentiation. 7th Annual Academic Surgical Congress. Las Vegas, NV. February 16, 2012. (oral presentation)

31. Hill JR, Sala FG, **Speer AL**, Barthel ER, Grikscheit TC. Tissue-engineered small intestine demonstrates digestive and absorptive capability. 7th Annual Academic Surgical Congress. Las Vegas, NV. February 16, 2012. (oral presentation)

32. Torashima Y, Barthel ER, **Speer AL**, Hou X, Sala FG, Grikscheit TC. Long-term observation of intestinal ischemic injury in the mouse. 7th Annual Academic Surgical Congress. Las Vegas, NV. February 16, 2012. (oral presentation)

33. Barthel ER, Levin DE, Hou X, **Speer AL**, Sala FG, Torashima Y, Matthews JA, Grikscheit TC. Human tissue-engineered small intestine forms from postnatal tissue as a mouse xenograft. American Pediatric Surgical Association 43st Annual Meeting. San Antonio, TX, May 22, 2012. (oral presentation)

34. **Speer AL**, Sala FG, Barthel ER, Torashima Y, Hou X, Dreyfuss JML, Levin DE, Grikscheit TC. Tissue-engineered stomach epithelium develops few parietal cells but is not metaplastic. American College of Surgeons 98th Annual Clinical Congress. Chicago, IL. October 1, 2012. (oral presentation)

35. Levin DE, Sala FG, Barthel ER, **Speer AL**, Hou X, Torashima Y, Dreyfuss JML, Grikscheit TC. Tissue-engineered small intestine (TESI) forms normal architecture following a period of hyper-proliferation. American College of Surgeons 98th Annual Clinical Congress. Chicago, IL. October 1, 2012. (oral presentation)

36. Nosanov LB, Ma IT, Okoye O, **Speer AL**, Chan LS, Upperman JS, Ford HR, Pierce JR. Models of preoperative clinical predictors of perforation in pediatric appendicitis. American College of Surgeons 98th Annual Clinical Congress. Chicago, IL. October 1, 2012. (poster presentation) (Nosanov LB received the Outstanding Medical Student Poster Award, Clinical and Educational Research, First Place in the Medical Student Program Poster Session).

37. Barthel ER, Pierce JR, Levin DE, **Speer AL,** Goodhue CJ, Ford HR, Grikscheit TC, Upperman JS. Delayed family reunification of pediatric disaster survivors increases inpatient hospital costs: a simulation study. 8th Annual Academic Surgical Congress. New Orleans, LA. February 7, 2013. (oral presentation)

38. Torashima Y, Levin DE, Barthel ER, **Speer AL**, Sala FG, Hou X, Grikscheit TC. Fgf10 Overexpression Optimizes the Formation of Tissue-Engineered Small Intestine. 8th Annual Academic Surgical Congress. New Orleans, LA. February 7, 2013. (oral presentation)

39. Nosanov LB, Ma IT, DeMaster KJ, Okoye O, **Speer AL**, Upperman JS, Ford HR, Pierce JR. Predictors of failure in the non-operative management of pediatric perforated appendicitis. American Pediatric Surgical Association 44th Annual Meeting. Marco Island, FL, May 2, 2013. (poster presentation)

40. Spurrier RG, **Speer AL**, Grikscheit TC. Preservation of epithelial-mesenchymal contact is not required for formation of tissue-engineered intestine. American College of Surgeons 99th Annual Clinical Congress. Washington, DC. October 8, 2013. (oral presentation)

41. Hou X, Barthel ER, **Speer AL**, Levin DE, Grant CN, Spurrier RG, Garcia S, Grikscheit TC. Small intestine organoid units can be maintained in long-term culture without exogenous growth factors, with subsequent formation of tissue-engineered small intestine. 9th Annual Academic Surgical Congress. San Diego, CA. February 6, 2014. (oral presentation)

42. Spurrier RG, Grant CN, Levin DE, **Speer AL**, Grikscheit TC. Vitrification Preserves Murine and Human Donor Cells for Delayed Generation of Tissue-Engineered Small Intestine. 9th Annual Academic Surgical Congress. San Diego, CA. February 6, 2014. (oral presentation)

43. Spurrier RG, **Speer AL**, Hou X, El-Nachef W, Grikscheit TC. Sufficient Progenitor Cells Do Not Require Microdesigned Biomaterials to Generate Murine and Human Tissue-Engineered Esophagus. American College of Surgeons 100th Annual Clinical Congress. San Francisco, CA. October 25-30, 2014. (oral presentation)

44. **Speer AL**, Parekh J, Qureshi FG, Nadler EP. 30-day Outcomes for Children and Adolescents undergoing Sleeve Gastrectomy at a Children's Hospital. 11th Annual Academic Surgical Congress. Jacksonville, FL. February 4, 2016. (oral presentation)

45. Park JC, **Speer A**, Rubio E, Badillo A, Pena M. Chronic esophageal foreign body as a source of severe tracheomalacia. American Academy of Otolaryngology - Head and Neck Surgery Foundation 2016 Annual Meeting & OTO EXPO. San Diego, CA, September 19-20, 2016. (poster presentation)

46. Martin RF, Anderson KT, Bartz-Kurycki MA, Garwood GM, Wythe SN, Supak DN, Gutierrez R, Austin MT, Kawaguchi AL, **Speer AL**, Imseis E, Lally KP, Tsao K. Tunneled Central Venous Catheters in Pediatric Intestinal Failure Patients: A Single Center Review. 13th Annual Academic Surgical Congress. Jacksonville, FL. January 31, 2018. (oral presentation)

47. Yan G, Anderson KT, Chica JK, Ferguson DM, Hatton GE, Chapman JC, Kawaguchi A, Imseis EM, **Speer AL**. Predictors of Enteral Autonomy in Pediatric Intestinal Failure. 14th Annual Academic Surgical Congress. Houston, TX. February 5, 2019. (oral presentation)

48. Patel S, Bhattarai D, Sequeira D, Criss II ZK, Shroyer NF, **Speer AL**. Exploring GLP2 activity and cellular targets in human intestinal enteroids and organoids. Digestive Disease Week 2019. San Diego, CA, May 19, 2019. (poster presentation)

49. Patel S, Sequeira D, Bhattarai D, Criss II ZK, Shroyer NF, **Speer AL**. Intestinotrophic glucagon-like peptide-2 (GLP-2) does not induce growth nor proliferation in human intestinal enteroids (HIEs) and organoids (HIOs). American Academy of Pediatrics 2019 National Conference. New Orleans, LA. October 26, 2019. (poster presentation)

50. Patel S, Sequeira D, Bhattarai D, Criss II ZK, Burrin D, Shroyer NF, **Speer AL**. Exploring the mechanism of intestinal adaptation and circulating humoral factors in human intestinal enteroids

and organoids. American College of Surgeons 105th Annual Clinical Congress. San Francisco, CA. October 29, 2019. (oral presentation)

51. Patel S, Sequeira D, Bhattarai D, Criss II ZK, Shroyer NF, **Speer AL**. Intestinotrophic hormone glucagon-like-peptide 2 (GLP2) does not induce growth nor proliferation in human intestinal enteroids (HIEs) and organoids (HIOs). American College of Surgeons 105th Annual Clinical Congress. San Francisco, CA. October 29, 2019. (oral presentation)

52. Boyle MA, Sequeira D, Bhattarai D, Criss II ZK, Shroyer NF, **Speer AL**. Transplanted Human Intestinal Organoids (HIOs) Demonstrate Enhanced Tight Junctions Compared to HIOs. 15th Annual Academic Surgical Congress. Orlando, FL. February 5, 2020. (oral presentation)

53. Cabrera TB, **Speer AL**, Greives MR, Goff DA, Menon NM, Reynolds EW. Sirolimus for Kaposiform Hemangioendothelioma in a Neonate. Southern Regional Meeting. New Orleans, LA. February 13, 2020. (oral presentation)

54. McNeill EP, Sequeira DJ, Shroyer NF, **Speer AL**. Integration of the Enteric Nervous System (ENS) within Human Intestinal Organoids (HIOs) alters epithelial differentiation. American Academy of Pediatrics 2020 National Conference. Virtual. October 3, 2020. (virtual poster presentation)

55. McNeill EP, Sequeira DJ, Shroyer NF, **Speer AL**. Optimizing the Integration of the Enteric Nervous System (ENS) into Human Intestinal Organoids (HIOs). American College of Surgeons 106th Annual Clinical Congress. Virtual. October 3, 2020. (oral/video presentation)

International

1. **Speer AL**, Sydorak R, Stein J, Mahour GH, Shaul D. Minimally Invasive Pectus Excavatum Repair: Getting it Just Right. 39th Annual Meeting of the Pacific Association of Pediatric Surgeons. Taipei, Taiwan, May 2006. (oral presentation)

2. Austin MT, Woo R, Giuliani S, **Speer AL**, Panossian A, Stanley P, Anselmo D. Primary Intestinal Lymphangiectasia associated with Abdominal Lymphatic Malformation requiring Surgical Debulking. The International Society for the Study of Vascular Anomalies' 18th International Workshop on Vascular Anomalies. Brussels, Belgium, April 23, 2010. (oral presentation)

3. **Speer AL**, Austin MT, Arkader A, Panossian A, Stanley P, Anselmo D. Klippel-Trenaunay Syndrome associated with a Capillary Lymphatic Venous Malformation and Limb Hypertrophy requiring Left Hip Disarticulation. The International Society for the Study of Vascular Anomalies' 18th International Workshop on Vascular Anomalies. Brussels, Belgium, April 23, 2010. (oral presentation)

4. **Speer AL**, Giuliani S, Panossian A, Arkader A, Femino JD, Tolo V, Stanley P, Anselmo D. Extremity amputations for vascular anomalies: single-center experience over 10 years. The International Society for the Study of Vascular Anomalies' 18th International Workshop on Vascular Anomalies. Brussels, Belgium, April 23, 2010. (poster presentation)

5. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. Murine tissue-engineered small intestine can be grown from organoid units cultured *in vitro*. British Association

of Paediatric Surgeons. Belfast, Northern Ireland UK. July 21, 2011. (oral presentation)

6. **Speer AL**, Sala FG, Matthews JA, Grikscheit TC. Tissue-Engineered Stomach Demonstrates Epithelial Differentiation and Proliferation in a Mouse Model. Federation of American Societies for Experimental Biology (FASEB) Science Research Conference. Gastrointestinal Tract XIV: Stem Cells, Adaptation, Inflammation and Cancer. Steamboat Springs, CO. August 15, 2011. (poster presentation)

7. Sala FG, Matthews JA, **Speer AL**, Torashima Y, Barthel ER, Grikscheit TC. A multicellular approach forms a significant amount of tissue-engineered small intestine in the mouse. Federation of American Societies for Experimental Biology (FASEB) Science Research Conference. Gastrointestinal Tract XIV: Stem Cells, Adaptation, Inflammation and Cancer. Steamboat Springs, CO. August 15, 2011. (poster presentation)

8. Sala FG, Matthews JA, **Speer AL**, Torashima Y, Barthel ER, Grikscheit TC. Tissue-engineered small intestine forms primarily from donor cells. Federation of American Societies for Experimental Biology (FASEB) Science Research Conference. Gastrointestinal Tract XIV: Stem Cells, Adaptation, Inflammation and Cancer. Steamboat Springs, CO. August 15, 2011. (poster presentation)

9. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. Novel mesenchymal expression of fibroblast growth factor-10 (FGF-10) in developing mouse tissue-engineered small intestine. Federation of American Societies for Experimental Biology (FASEB) Science Research Conference. Gastrointestinal Tract XIV: Stem Cells, Adaptation, Inflammation and Cancer. Steamboat Springs, CO. August 15, 2011. (poster presentation)

10. Barthel ER, Sala FG, Matthews JA, **Speer AL**, Torashima Y, Grikscheit TC. Proof-of-principle for *in vitro* culture support of murine small intestinal organoids prior to *in vivo* implantation for tissue engineering. 2011 World Stem Cell Summit. Pasadena, CA. October 3-5, 2011. (poster presentation)

11. **Speer AL,** Pierce JR, Arkader A, Stanley P, Panossian A, Anselmo DM. Room for Improvement: Patterns of Referral Misdiagnosis to a Multidisciplinary Vascular Anomalies Center. The International Society for the Study of Vascular Anomalies' 19th International Workshop on Vascular Anomalies. Malmo, Sweden, June 17-19, 2012. (poster presentation)

12. Zebda D, Hollinger L, **Speer A**, Wadhwa N, Jiang ZY. Esophageal Foreign Body: A Delayed Presentation with Stridor. Society for Ear, Nose and Throat Advances in Children (SENTAC) 2017 Annual Meeting. Toronto, Canada, November 30-December 3, 2017. (poster presentation)

13. Patel S, Sequeira D, Bhattarai D, Criss II ZK, Boyle MA, Shroyer NF, **Speer AL**. Intestinotrophic glucagon-like peptide-2 (GLP-2) does not induce growth nor proliferation in human intestinal enteroids (HIEs) and organoids (HIOs). Federation of American Societies for Experimental Biology (FASEB) Science Research Conference. Gastrointestinal Tract XVIII: Integrated Biology of the GI Super-Organ. Steamboat Springs, CO. July 28 – August 2, 2019. (poster presentation)

2. Non-refereed Publications
3. Letters to the Editor

4. Scientific Exhibits
5. Videos
6. Other

1. **Speer AL**, Panossian A, Arkader A, Stanley P, Anselmo DM. Vascular Surgery for Arteriovenous Malformations. eMedicine from WebMD. Updated August 09, 2010. Available at: http://emedicine.medscape.com/article/459927-overview. 10,564 page views from January 1, 2010 to December 31, 2010.

2. **Speer AL**. Death is not failure. Bull Am Coll Surg. 2011 Nov;96(11):29. PMID: 22319944. 3rd Annual Resident and Associate Society (RAS) Essay Contest: "My experience with a dying patient." Top 10 essays selected for publication.

3. Press release: American College of Surgeons. "Surgeons Successfully Regenerate Tissue-Engineered Small Intestine from Frozen Intestinal Cells."
http://www.facs.org/clincon2011/press/speer.html
Medical News Today. MediLexicon, Intl., 26 Oct. 2011. Web. 26 Oct. 2011.
http://www.medicalnewstoday.com/releases/236581.php
http://www.newswise.com/articles/surgeons-successfully-regenerate-tissue-engineered-small-intestine-from-frozen-intestinal-cells

4. Radio Show Appearance: "Minds That Matter" interview by George Willy, KLVL 1480AM. Recordings at: https://synergyradionetwork.com/team_mf/george-willy/
November 8, 2017.

5. **Speer, AL**. Neonatal Small Bowel Obstruction. The SCORE Portal. http://www.surgicalcore.org. Published April 6, 2018. Accessed October 8, 2018.

G. Visiting Professorships

None.