

Mary Brindle MD MPH FRCS
Director EQUIS (Efficiency Quality Innovation Safety) Research Platform
Associate Department Head, Surgery, University of Calgary
Associate Professor, Surgery, University of Calgary
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AFFILIATIONS:

April 2013-current	Associate Professor of Surgery, Cummings Medical School, University of Calgary
April 2016-current	Associate Professor of Community Health, Cummings Medical School, University of Calgary
August 2016-current	Affiliate Faculty, Ariadne Labs, Harvard Medical School, Brigham and Women's Hospital
August 2015-July 2016	Visiting Associate Professor, Harvard Medical School, Brigham and Women's Hospital
July 2006-April 2013	Assistant Professor of Surgery, Cummings Medical School, University of Calgary

POSITION:

2013-current	Associate Department Head of Surgery, Cummings Medical School, University of Calgary
2012-July 2015	Division Chief, Pediatric Surgery, Alberta Children
2006-current	Pediatric General Surgeon, Alberta Children's Hospital.
2010-2011	Co-Director of Pediatric Trauma, Southern Alberta
2006-2010	Surgical Director of Trauma, Alberta Children's Hospital

EDUCATION:

2010-2012	Masters of Public Health, Harvard University, Boston, Massachusetts.
2004-2006	Resident Pediatric Surgery, University of Toronto, Toronto, Ontario. FRCPCSC Pediatric Surgery 2006
2001-2002	Research Fellow, Department of Pediatrics, Stanford University Medical School, Palo Alto, California
2000-2002	Research Fellow, Division of Pediatric Surgery, Stanford University Medical School, Palo Alto, California
1998-2004	General Surgery Residency at University of British Columbia, FRCPCSC General Surgery 2004
1994-1998	Medical Doctorate at Dalhousie University, Halifax, Nova Scotia
1990-1994	BA in Art at Yale University, New Haven, Connecticut

AWARDS/SCHOLARSHIPS:

2013	Bronze medal for undergraduate medical teaching (Course 8)
2012	Finalist President's Award of Excellence (awarded by Alberta Health Services) in the field of research, as a member of the Children's Intestinal Rehabilitation Program, May 2012.
2008	Co-recipient People First Award from the Calgary Health Region as director of the inpatient trauma unit as part of the Calgary Pediatric Trauma Program
2008	Co-recipient Walter Berdon Award for the outstanding Clinical Paper appearing in Pediatric Radiology in 2007
2007	University of Calgary Medical Group Research Prize \$75,000/2 years (see grants below).
2004	Postgraduate Resident Teacher of the Year , Department of Surgery, University of British Columbia
2002	Outstanding Resident Research Award , WB and MH Chung Research Day, University of British Columbia October 2002
2001-2002	Clinical Investigators Program (salary support) from the Royal College of Physicians and Surgeons of Canada.
2001	Research Award , Surgical Residents' Research Day, April 19th, 2001. University of British Columbia.
1994	Dalhousie Medical School entrance scholarship
1994	Ethel Child Walker Award from Yale Undergraduate Art Department. Awarded to a single undergraduate student for exceptional artistic achievement.

GRANTS:

Awarded

2015-ongoing	Research Lead "EQUIS OR- Efficiency, Quality, Innovation and Safety" MacNeill Surgery Research Chair
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\$320,000 first year, \$200,000 yearly thereafter.

- 2016-2018 PI, "Audit of implanted device-associated infections at the Alberta Children's Hospital' **Clinical Research Fund Seed Grant, Calgary Center for Clinical Research.** (June 30th, 2016- June 2018).
\$20,000
- 2016-2017 PI, "The safety and efficacy of tranexamic acid in bleeding paediatric trauma patients: A systematic review of the literature" **Emergency Strategic Clinical Network (ESCN)** Systematic Review Grant Competition. (March 2nd, 2016-March, 2017)
\$15,000
- 2016-2017 PI, "Planning grant for health systems improvements in surgery: Expert focus group meeting" **Clinical Research Fund Planning Grant, Calgary Center for Clinical Research** (January 8, 2016-Jan 8, 2017)
\$9961.92
- 2016-2017 Co-Investigator (Thompson G, Brindle ME, Eccles RC)"Using gene expression profiles to identify children with appendicitis" **Surgery Strategic Clinical Network** (July 2016-July 2017)
\$10,000
- 2016-2017 Co-Investigator (Harrop R, Brauer C, Lardner D, Brindle M) "Improving access for urgent surgical cases at the Alberta Children's Hospital: a rapid realist review". **Surgery Strategic Clinical Network** (July 2016-July 2017)
\$10,000
- 2013-2015 PI "Improving outcomes following diaphragmatic hernia repair using national data, systematic review and prospective trials" ACHRI **Pediatric Surgery Chair** (May 2013-May2015)
\$60,000
- 2014 PI (Brindle M, Lai S, Chelikani P) "The effect of enteral fat infusion and glucagon-like peptide-2 hormonal therapy on intestinal adaptation in short bowel syndrome" **Calgary Research Development Fund.** (June 3rd, 2014-June 2016)
\$4000
- 2011-2014 Co-PI (Skarsgard ED, Brindle ME, Hazell A, Bassil K, Arbour L) "CIHR Secondary Analysis of Databases: Canadian Pediatric Surgery Network (CAPSNet)" **CIHR.** (2011-September 2014).
\$100,000
- 2012-2013 Co-Investigator (Boctor D, Brindle M) In office member grant. "Development of a patient education prototype for pediatric intestinal failure"**North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) Foundation.** (November 2012-Nov2013)
\$4000
- 2010-2013 Co-Investigator (Lodha, Brindle M, Amin H, Sigalet D) "Long-term Growth and Neurodevelopmental Outcomes of Newborns with Gastroschisis: A Cohort Study" **Alberta Children's Hospital Foundation** (Aug 2010-Aug 2013)
\$6074.00
- 2010-2012 Co-PI (MA IWY, Brindle ME) Effects of Educational Strategies on Cognitive Load for Teaching Medical and Surgical Procedures: An Exploratory Study. **UCMG**
\$10,000
- 2010-2011 Co-Investigator (Skarsgard ED, Puligandla P, Brindle ME, Laberge J-M, Yanchar N) The Canadian Pediatric Surgery Network (CAPSNet): Establishing Best Practices for Gastroschisis and Congenital Diaphragmatic Hernia **CIHR Operating Grant** (March 2010-March 2011)
\$100,000
- 2008-2010 PI (Brindle ME, Amrein M, Lodha A)"Overcoming Surfactant Inhibition in Neonates and Infants: A Clinical Prospective Cohort Study with an Animal Model Correlate" **ACH Foundation Grant** (May 2008-May 2010)
\$49,200
- 2008-2010 Co-PI (Amrein M, Brindle ME) "Reversing Surfactant Dysfunction" **Alberta Lung Foundation** (June 2008 June 2010)
\$40,000

2006 PI (Brindle ME) "Using growth factors to prevent pulmonary hypoplasia in a rat model" Research Prize **University of Calgary Medical Group** (July 2006-July 2008)
\$75,000

SCIENTIFIC PUBLICATIONS

In Press (* indicates student, Underline indicates corresponding/senior author):

Gunasekara L, Al-Saiedy M, Green F, Pratt R, Bjornson C, Yang A, Schel WM, Mitchell I, Brindle M, Montgomery M, Keys E, Dennis J, Shrestha G, Amrein M "Pulmonary surfactant dysfunction in pediatric cystic fibrosis: Mechanisms and reversal with a lipid-sequestering drug" *Journal of Cystic Fibrosis*. Accepted. In Press

Lai SW*, de Heuvel E, Wallace LE, Hartmann B, Holst JJ, **Brindle ME**, Chelikani PK, Sigalet DL "Effects of exogenous glucagon-like peptide-2 and distal bowel resection on intestinal and systemic adaptive responses in rats". *PLOS ONE*. Revisions required.

Lagoo J*, Lopushinsky SR, Haynes AB, Bain P, Flageole H, Skarsgard ED, Brindle ME "The Effectiveness of Pediatric Surgical Safety Checklists: A Systematic Review with Narrative Synthesis" *BMJ Open*. Revisions required

Peer-reviewed Journal Articles:

Published (* indicates student, Underline indicates corresponding/senior author)

1. Holmes EM, Singh HHK, Kirk VG, **Brindle M**, Luntley J, Weber BA, Yunker WK "Incidence of children at risk for obstructive sleep apnea undergoing common day surgery procedures" *Journal of Pediatric Surgery*. Online May 2017.
2. Sigalet DL, **Brindle ME**, Boctor D, Lam V, Lu LS, de Heuvel E, Hartmann B, Holst JJ "A safety and pharmacokinetic dosing study of glucagon-like peptide 2 in infants with intestinal failure" *Journal of Pediatric Surgery* 52(5); 749-754, 2017
3. Hall N, Simon E, Abbo L, Arnaud A, Beaudin M, **Brindle M**, et al. "Appendectomy versus non-operative treatment for acute uncomplicated appendicitis in children: study protocol for a multicenter, open-label, non-inferiority, randomized controlled trial" *BMJ Paediatrics Open*. Online May 2017.
4. Brindle ME, Roberts D*, Daodu O*, Haynes A, Cauley C, Dixon E, LaFlamme C, Bain P, Berry W "Deriving literature-based benchmarks for surgical complications in high-income countries: A protocol for a systematic review and meta-analysis" *BMJ Open*. Online May 2017
5. Daodu O*, Brindle ME "Predicting Outcomes in Congenital Diaphragmatic Hernia" *Seminars in Pediatric Surgery*. Online April 2017
6. Daodu O*, **Brindle M**, Alvarez-Allende CR, Lockyer L, Weber B, Lopushinsky SR "Outcomes of an accelerated care pathway for pediatric blunt solid organ injuries in a public healthcare system" *Journal of Pediatric Surgery* Online January 2017
7. Harting MT, Hollinger L, Tsao K, Putnam LR, Wilson JM, Hirschl RB, Skarsgard ED, Tibboel D, **Brindle ME**, Lally PA, Miller CC, Kally KP "Aggressive surgical management of congenital diaphragmatic hernia - worth the effort? A multi-center, prospective, cohort study" *Annals of Surgery*, January, 2017
8. Urban D, Dehaeck R*, Lorenzetti D, Guilfoyle J, Poon M-C, Steel M, Lardner D, Ma IWY, Brindle ME "The safety and efficacy of tranexamic acid in bleeding paediatric trauma patients: A systematic review protocol". *BMJ Open* Sept 22; 6:e012947, 2016
9. Khanafer I*, Martin D-A, Mitra TP, Eccles R, **Brindle ME**, Nettel-Aguirre A, Thompson G "Test characteristics of common appendicitis scores with and without laboratory investigations: a prospective observational study". *BMC Pediatrics* Aug 30; 16(1):147, 2016.

10. Bassil KL, Yang J, Arbour L, Moineddin R, **Brindle ME**, Hazell E, Skarsgard ED "Spatial variability of gastroschisis in Canada, 2006-2011: An exploratory analysis". *Canadian Journal of Public Health* Jun 27; 107(1):e62-7, 2016.
11. Englum BR, Rothman J, Leonard S, Reiter A, Thornburg C, **Brindle M** et al., on behalf of the Splenectomy in Congenital Hemolytic Anemia (SICHA) Consortium. "Hematologic outcomes after splenectomy for congenital hemolytic anemia: Use of random effects mixed modeling". *Journal of Pediatric Surgery* Jan 31; 51(1):122-127, 2016.
12. Lazier J, Mah JK, Wei X-C, Samedi V, Fajardo C, **Brindle M**, Perrier R, Thomas MA "Bilateral congenital lumbar hernias in a patient with central core disease- a case report" *Neuromuscular Disorders* Jan 31; 26(1): 56-59, 2016.
13. Sigalet DL, **Brindle M**, Boctor D, Casey L, Dicke B, Butterworth S, Lam V, Karnik V, de Heuvel E, Hartmann B, Holst J. "A safety and dosing study of Glucagon-Like Peptide 2 (GLP-2) in children with intestinal failure" *Journal of Parenteral and Enteral Nutrition* epub Oct 15th 2015.
14. Shariff F*, Peters PA, Arbour L, Greenwood M, Skarsgard ED, **Brindle ME** "Maternal and community predictors of gastroschisis and congenital diaphragmatic hernia in Canada". *Pediatric Surgery International* Sept;1-6, 2015.
15. Ma IWY, Pugh D, Mema B, **Brindle ME**, Cooke L, Stromer JN "Use of an error-focused checklist to identify incompetence in lumbar puncture performances" *Medical Education*. 49(10):1004-1015, 2015.
16. Lam JY*, Lospushinsky SR, Ma I, Dicke F, **Brindle ME** "Treatment options for the pediatric patent ductus arteriosus: systematic review and meta-analysis" *Chest*. Sept; 148(3): 784-793, 2015
17. Sanchez-Glanville C*, **Brindle ME**, Spence T, Blackwood J, Drews T, Menzies S, Martin S, Lopushinsky SR "Evaluating the introduction of extracorporeal life support technology to a tertiary-care pediatric institution: smoothing the learning curve through inter-professional simulation training". *Journal of Pediatric Surgery*. May; 50(5):798-804, 2015.
18. Skarsgard ED, Meaney C, Bassil, **Brindle M**, Arbour L, Moineddin R "Maternal risk factors for gastroschisis in Canada". *Birth Defects Research Part A: Clinical and Molecular Teratology*. Feb; 103(2):111-118, 2015.
19. Rice HE, Englum BR, Rothman J, Leonard S, Reiter A, Thornberg C, **Brindle M** et al. "Clinical outcomes of splenectomy in children: Report of the splenectomy in congenital hemolytic anemia (SICHA) registry". *American Journal of Hematology*. Mar; 90(3):187-193, 2015.
20. Turner B*, Dasgupta RD, **Brindle ME** "A contemporary prediction rule for esophageal atresia (EA) and trachea-esophageal fistula (TEF)". *Journal of Pediatric Surgery*. Dec; 49(12):1758-1761, 2014. (***Trainee award for best research design, University of Calgary, General Surgery**)
21. **Brindle ME**, Cook EF, Tibboel D, Lally P, Lally K "A clinical prediction rule for the severity of congenital diaphragmatic hernias in newborns". *Pediatrics*. Aug; 134(2) e413-e419 2014. (**identified by the Outcomes and Evidence-based Practice Committee as a recommended paper to help identify best practice and appropriate standards**)
22. Bjornson C, **Brindle M**, Bailey JM, Mitchell I, Soles M "Delayed diagnosis of a high tracheoesophageal fistula and a novel approach to the treatment of tracheomalacia by submanubrial tracheopexy". *Springerplus*. Feb; 3(1) 1-4, 2014.
23. Ma IWY, Sharma N, **Brindle ME**, Caird J, McLaughlin K "Measuring competence in central venous catheterization: a systematic review". *SpringerPlus*. Jan; 3(1), 33, 2014.
24. Ma IWY, Zalunardo N, **Brindle ME**, Hatala R, McLaughlin K. "Notes from the Field: Direct Observation Versus Rating by Videos for the Assessment of Central Venous Catheterization Skills". *Evaluation and the Health Professions*. Jan 12, 2014 epub

25. Sigalet D, Lam V, Boctor D, **Brindle M** "Nutritional support of infants with intestinal failure: something more than fishy is going on here!" *Pediatric Surgery International*. Oct;29(10):975-81, 2013.
26. Beres A*, Puligandla P, **Brindle ME** "Conformity to stability criteria for the surgical correction of congenital diaphragmatic Hernia: Is it Necessary?" *Journal of Pediatric Surgery*. May;48(5):1060-4, 2013.
27. Beres A*, Wales PW, Christison-Lagay ER, McLure ME, Fallat ME, **Brindle ME** "Non-operative management of high-grade pancreatic trauma: is it worth the wait?" *Journal of Pediatric Surgery*. May;48(5):919-23, 2013.
28. **Brindle M**, Flageole H, Wales PW "Influence of maternal factors on health outcomes in gastroschisis: a Canadian population-based study", *Neonatology*. Apr;102(1) 45-52,2012.
29. Oliveira C, Nasr A, **Brindle M**, Wales PW "Ethanol locks to prevent catheter-related bloodstream infections in pediatric intestinal failure: systematic review and meta-analysis", *Pediatrics*. Feb;129(2) 318-29, 2012.
30. Rice HE, Crary SE, Langer JC, Kemper AR; Splenectomy in Hemolytic Anemia Consortium (one of 30 authors) "Comparative effectiveness of different types of splenectomy for children with hemolytic anemia", *Journal of Pediatrics*. April; 160(4):684-689, 2012.
31. Ma IW, **Brindle ME**, Ronksley PE, Lorenzetti DL, Sauve RS, Ghali WA "Use of Simulation-Based Education to Improve Outcomes of Central Venous Catheterization: A Systematic Review and Meta-Analysis", *Academic Medicine*. Sept;86(9)1137-47,2011.
32. **Brindle M**, Brar M*, Skarsgard ED "Patch Repair is an Independent Predictor of Morbidity and Mortality in Congenital Diaphragmatic Hernia", *Pediatric Surgery International*. Sept;27(9):969-74, 2011.
33. Sigalet DL, Boctor D, **Brindle M**, Lam V, Robertson M "Elements of Successful Intestinal Rehabilitation" *Journal of Pediatric Surgery*. Jan;46(1):150-6, 2011.
34. **Brindle M**, Ma I, Skarsgard ED "Impact of target blood gases on outcome in Congenital Diaphragmatic Hernia (CDH)" *European Journal of Pediatric Surgery*; 20:1-4, 2010.
35. Sigalet D, Boctor D, Robertson M, Lam V, **Brindle M**, Sarkosh K, Dreidger L, Sajedi, M. "Improved outcomes in paediatric intestinal failure with aggressive prevention of liver disease" *European Journal of Pediatric Surgery*, Dec;19(6):348-53, 2009.
36. Ein SH, **Brindle M**. "The best 10 clinical articles for the last 50 years from the Division of General Surgery, Hospital for Sick Children, Toronto, Ontario, Canada". *Journal of Pediatric Surgery*, April;43(4):734-9, 2008.
37. Wales PW, **Brindle M**, Sauer CJ, Patel S, de Silva N, Chait P. "Percutaneous cholangiography for the treatment of parenteral nutrition-associated cholestasis in surgical neonates: preliminary experience". *Journal of Pediatric Surgery*, Nov;42(11):1913-1918, 2007.
38. Silva C, Daneman A, Moore A, Navarro O, **Brindle M**, Moinedden PHD et al. "Correlation of sonographic findings and outcome in necrotizing enterocolitis" *Pediatric Radiology*, Mar;37(3):274-82, 2007.
39. Lodha A, Ly L, **Brindle M**, Daneman A, McNamara PJ "Intraurethral knot in a very low-birth-weight infant: radiological recognition, surgical management and prevention" *Pediatric Radiology*, 35(7):713-6, 2005
40. Dimmitt RA, Glew R, **Brindle M**, Skarsgard E, Moss RL "Serum cytosolic beta-glucosidase activity in a rat model of necrotizing enterocolitis" *Pediatric Research*, 54(4): 462-5, 2003
41. Lipshutz GS, Titre D, **Brindle M**, Bisconte AR, Hardy J, Contag CH, Gaensler KML "Comparison of Gene Expression After Intraperitoneal Delivery of AAV2 or AAV5 *In Utero*", *Molecular Therapy*, 8(1):90-8, 2003

42. Rangel SJ, Henry MC, **Brindle ME**, Moss RL "Small evidence for small incisions: pediatric laparoscopy and the need for more rigorous evaluation of novel surgical therapies" *Journal of Pediatric Surgery*, 38(10):1429-33, 2003.
43. Drohan L, Colby CE, **Brindle ME**, Sanislo S, Ariagno RL "Candida (amphotericin-sensitive) lens abscess associated with decreasing arterial bloodflow in a very low birthweight preterm infant" *Pediatrics*, 110(5):e65
44. Colby C, **Brindle M**, Moss RL "Minimally Invasive Laparotomy for Treatment of Neonatal Ovarian Cysts" *Journal of Pediatric Surgery*. 36(6):868-9, 2001
45. Skarsgard ED, Amii LA, Dimmitt RA, Sakamoto G, **Brindle ME**, Moss RL "Exogenous administration of rhIGF-1 in a rabbit model of intrauterine growth retardation" *Journal of Surgical Research*, 99:142-146, 2001.
46. Porier C, Van Arsdell GS, **Brindle M** et al. "Surgical treatment of aortic arch hypoplasia in children with biventricular hearts" *Annals of Thoracic Surgery*, 68:2293-97, 1999.
47. **Brindle M**, Ludman M "A Structured Diary to Promote Reflection and Active Learning", *Academic Medicine*, 71(5), 1996.
48. Brindle, ID, **Brindle ME**, Le, X-c, Chen H "Preconcentration by Coprecipitation: Part I Rapid Method for the Determination of Ultratrace Amounts of Germanium in Natural Waters by Hydride Generation - Atomic Emission Spectrometry," *Journal of Analytic Atomic Spectrometry*, 6: 129, 1991.

Abstracts:

1. Shawyer A, Rajapakse N, **Brindle M**, Vayalumkal JV "Prophylactic antibiotics in appendicitis- Are we getting the timing right?" *Open Forum Infectious Diseases* 3(suppl 1): 1447. 2016.
2. Platt JM, Mitchel IM, Fairservice L, Soles M, Bailey JAM, Bjornson C, **Brindle M** "What mothers think of communication about their child with tracheoesophageal fistula (TEF)" *Diseases of the Esophagus* 29(3): 301. 2016
3. Kurnet VH, Soliman N, Cooper S, Brindle M "Gastroschisis with associated bladder herniation: an antenatal presentation of a rare complication". *Ultrasound in Obstetrics and Gynecology* 44(S1): 244-244. 2014.
4. Gunesekara LC, Lodha A, Brindle M, Yang A, Amrein M "Pulmonary surfactant function is not affected by blood plasma in-vitro" *Epithelial Cells in Injury and Repair. American Thoracic Society* A3449. 2014
5. Khan A, Martin SR, Brindle M, Parsons S, Haider S, Prokopishyn N, Yap J "Liver cell transplantation as a "bridge" therapy for urea cycle disorders: The Calgary experience". *Clinical Biochemistry* 47(15):150-151. 2014
6. Emre S, Brindle M, Opladen T, Khan A, Barshop B, Burton B, Lindner M, Martin S, Meyberg J, Haberle J, Shenck J, Seashore M, Yudkoff M, Kasting S, Ruedinger W, Hoffman G "Outcome in children with urea cycle defect after hepatocyte transplantation". *Transplantation* 98:299-299. 2014.
7. Adeleye A, Brindle M, Bailey M, Bjornson C, Nettel-Aguirre A, Mitchell I "Proton pump inhibitor in esophageal atresia/tracheoesophageal fistula: dilation outcome study (protect study)". *Am J Respir Crit Care Med* 189. 2014
8. Lai SW, de Heuvel E, Wallace LE, Brindle ME, Chelikani PK, Sigalet DL "Outstanding abstract: Medium chain triglycerides are more potent than long chain triglycerides in inducing jejunal adaptation after massive ileocecal resection in rats" *Clinical Nutrition* 33: S116-S117. 2014. **Recognized as an outstanding abstract at the European Society for Parenteral and Enteral Nutrition, Sept 2014.**
9. Opladen T, Khan A, Barshop BA, **Brindle M**, Burton BK, Emre SH, Lindner M, Martin SR, Meyburg J, Haeberle J, Schenk J-P, Seashore MR, Yudkoff M, Rennecke M, Ruedinger W, Hoffmann GF "Clinical outcome in children with UCD after liver cell therapy in comparison to a control population". *Molecular Genetics and Metabolism*, 11(3): 237-238. 2014.

10. Sigalet DL, Lam V, **Brindle M**, Boctor DL, Hartmann B, Wallace L, Stanger JD, Holst JJ "Glucagon-like peptide-2 production and sensitivity in infants post-resection or gastroschisis". *Gastroenterology* 146(5): s-544. 2014
11. Sigalet DL, Lam B, Karnik V, **Brindle M**, Hartmann B, Boctor DL, Dicken B, Stoffman S, de Heuvel E, Wrightwilson G, Wallace L, Host JJ "Safety and dosing study of glucagon-like peptide-2 in children with intestinal failure. *Gastroenterology* 146(5): s-544. 2014
12. Lodha A, Brindle M, Yang A, Amrein M, Gunasekara LC "Pulmonary surfactant function is not affected by blood plasma in vitro study" *American Journal of Respiratory and Critical Care Medicine* 189:A3449. 2014
13. Oliveira C, Nasr A, **Brindle M**, Wales PW. "Ethanol locks to prevent catheter-related bloodstream infections in pediatric intestinal failure: systematic review and meta-analysis". *Pediatric Transplantation*, 15(SI) s1: 120
14. Ma I, **Brindle M**, Ronsky P, Lorenzetti D, Sauve R, Ghali W. "Outcomes of simulation-based education in central venous catheterization: a systematic review and meta-analysis". *Academic Medicine*, 5(3):62. 2011
15. Silva C, Daneman A, Moore A, Navarro O, **Brindle M**, Moinedden PHD et al. "Correlation of sonographic findings and outcome in necrotizing enterocolitis" *Pediatric Radiology*, 36(S13):69, 2006
16. **Brindle M**, Dimmitt R, Colby C, Kay MA, Skarsgard E. "Infusion techniques for the delivery of gene therapy to the fetus" *Molecular Therapy*, 3(5):S393, 2001.

BOOK CHAPTERS:

- 2017 Senior author "Breast Disorders" in **Surgical Council on Resident Education (SCORE)** on-line text book.
- 2016 Co-author "Breast Disorders" in **Not a Text Book**, American Pediatric Surgical Association
- 2012 **Brindle M**, Sigalet DL "Congenital Diaphragmatic Hernia" in **Succeeding in Pediatric Surgery Examinations Volume 1- A Complete Resource for MCQs**, Radcliffe. 2012.
- 2012 Sigalet DL, **Brindle M**, "Diseases of Mediastinum and Mediastinal Masses" in **Succeeding in Pediatric Surgery Examinations Volume 1- A Complete Resource for MCQs**, Radcliffe. 2012.
- 2008 **Brindle M**, Langer J. "Reoperative Gastric Surgery" in **Reoperative Pediatric Surgery** Humana Press. 2008
- 2002 **Brindle ME**, Ma I, Moss L. "Pulmonary Infections" In **Surgical Directives: Pediatric Surgery**, Lippincott Williams and Wilkins. 2002
- 2002 **Brindle ME**, Moss L. "Metastatic Disease" In **Surgical Directives: Pediatric Surgery**, Lippincott Williams and Wilkins. 2002

MEDICAL ILLUSTRATION:

- 2016 3 images "Breast Disorders" in **Not a Text Book**, American Pediatric Surgical Association (In Press)
- 2015 2 images Irene Ma "Basics of Ultrasound". Illustrations in **Ultrasonography in the ICU: Practical Applications**, Springer. 2015
- 2001 2 images Colby C "Minimally Invasive Laparotomy for Treatment of Neonatal Ovarian Cysts" *Journal of Pediatric Surgery*. 36(6):868-9, 2001
- 2001 1 image Dimmitt RA, Moss RL "Clinical Management of Necrotizing enterocolitis" Illustration in *Neoreviews* 2:e110-e117. 2001

NON-PEER REVIEWED WORK:

- 2016 Blog "Designing a Checklist that Makes Surgery Safer for Children" Ariande Labs: Lab Notes
<https://www.ariadnelabs.org/2016/03/31/designing-a-checklist-that-makes-surgery-safer-for-children/>

CONFERENCE PRESENTATIONS:

Conference Presentations:

- 2016 Lagoo J, Lopushinsky SR, Haynes AB, Skarsgard ED, Flageole H, **Brindle ME** "Pediatric Surgical Safety Checklists: A Systematic Review with Narrative Synthesis", **Canadian Association of Paediatric Surgery**. September 2016

- 2016 Daodu T, **Brindle ME**, Alvarez-Allende C, Lopushinsky "A solid organ injury protocol to decrease length of stay" , **Canadian Association of Paediatric Surgery**. September 2016
- 2015 Ma I, Pugh D, Mema B, **Brindle M**, Cooke L, Stromer J "Procedural Incompetence: error based checklist vs conventionally constructed checklist" **An International Association for Medical Education (AMEE)**, September 7 2015.
- 2014 Lam J, **Brindle ME** "Treatment options for the pediatric patent ductus arteriosus: systematic review and meta-analysis" **Canadian Association of Paediatric Surgery**. September 2014
- 2014 Ben Turner, **Brindle ME** "Sociodemographic predictors of gastroschisis outcomes in the United States" **Canadian Association of Paediatric Surgery**. September 2014
- 2014 Ben Turner, Dasgupta R, **Brindle ME** "A contemporary prediction rule for esophageal atresia (EA) and trachea-esophageal fistula (TEF)" Pacific Association of Pediatric Surgery. May 2014
- 2013 **Brindle ME**, Cook EF, Lally P, Lally K "A Clinical Prediction Rule for CDH". **International CDH Workshop**, Rotterdam June 10th, 2013.
- 2012 Hazell A, Bassil K, Arbour L, **Brindle M**, Skarsgard E, Canadian Pediatric Surgery Network. Geographic variation and clustering of gastroschisis in Canada. **The 39th ICBDSR and 10th CCASN Joint Annual Scientific Meeting**, Ottawa October 30th, 2012.
- 2012 Beres A, Wales PW, **Brindle ME**. Non-operative management of pancreatic trauma: is it worth the wait? **Canadian Association of Pediatric Surgery**, Victoria Sept 20th, 2012.
- 2011 Walzak A, **Brindle ME**, Bacchus CM, Schaefer J, Ma I. Development of a Comprehensive Set of Assessment Tools for Evaluation of Procedural Skills in Internal Medicine. **Simulation Summit**, Montreal, November, 2011.
- 2011 **Brindle ME**, Flageole H, Wales PW. Influence of Maternal Factors and Health Outcomes in Gastroschisis: A population-based study **Canadian Association of Pediatric Surgery**, September, 2011.
- 2010 **Brindle ME**, Skarsgard ED. Morbidity and Mortality Associated with Patch Repair in Congenital Diaphragmatic Hernia. **Pediatric Academic Society**, Vancouver, BC, May, 2010.
- 2009 **Brindle ME**, Ma IWY, Skarsgard ED. Establishment of pre-treatment blood gas targets improves survival in infants with congenital diaphragmatic hernia (CDH)". **American Pediatric Surgical Association Meeting**, Fajardo, Puerto Rico, May, 2009.
- 2009 **Brindle ME**, Brar M, Skarsgard ED. Patch repair is associated with significant morbidity and mortality in infants with congenital diaphragmatic hernia (CDH). **American Pediatric Surgical Association Meeting**, Fajardo, Puerto Rico, May, 2009.
- 2008 Ein S, **Brindle ME**. The best 10 clinical articles for the last 50 years from the Division of General Surgery, Hospital for Sick Children, Toronto, Ontario, Canada. **British Association of Paediatric Surgeons**, Salamanca, Spain, July 2008.
- 2003 **Brindle ME**, Skarsgard ED. Dynamic esophageal lengthening for long-gap esophageal atresia" **Resident's Research Day**, University of British Columbia. April, 2003.
- 2002 **Brindle M**, Bachmann M, Skarsgard E, Contag C. Achievement of long-term expression and wide-distribution with pulmonary delivery of adeno-associated viral vector **WB &MH Chung Lectureship**, University of British Columbia.
- 2002 **Brindle M**, Bachmann M, Skarsgard E, Contag C. "Long-term statement and wide distribution of serotype 5 adeno-associated virus (AAV5) achieved with perfluorocarbon-aided delivery". **American Academy of Pediatrics**, Boston MA. October, 2002.
- 2002 **Brindle ME**, Skarsgard ED. Improving DNA-based therapies for the Lung. **Resident's Research Day**, University of British Columbia. April, 2002.
- 2002 **Brindle ME**, Skarsgard ED. Development of DNA-based therapies for the Fetus. **Fetal Surgery Symposium**, University of British Columbia, April, 2002.
- 2001 **Brindle ME**, Skarsgard ED. Gene Delivery to the Lung. **Royal College of Physicians and Surgeons, Canadian Association of General Surgery, Resident Retreat**, Quebec, QC. September, 2001.
- 2001 **Brindle ME**, Skarsgard ED. Delivery and Monitoring of Gene Therapy in the Lung **Residents' Research Day**, University of British Columbia, April 19th, 2001.
- 1999 **Brindle ME**, Murphy J. Correlation of prenatal ultrasound findings with clinical outcome in gastroschisis. **WB & MH Chung Lectureship**, University of British Columbia.

Posters:

- 2012 Beres A, Puligandla P, **Brindle ME** "Conformity to stability criteria for the surgical correction of congenital diaphragmatic Hernia: Is it Necessary?". **Canadian Association of Paediatric Surgery**, Victoria BC, September 2012.
- 2011 Beres A; Wales P; Sawyer A; Vartian B; Brindle M. "Pediatric vascular trauma: Implications for resource utilization". **Trauma Association of Canada**, Banff AB, April 2011
- 2010 Brindle M; Oddonne E; Ma I; Skarsgard ED. "Morbidity and mortality of patch repair in a contemporary national database". **Pediatric Academic Society**. Vancouver BC, May 2010

- 2008 Brindle M, Mills J, Li Y, MacNab YC, Skarsgard ED. "Does overnight birth influence surgical management or outcome in neonates with gastroschisis?" **Pediatric Academic Society**. Oahu, Hawaii, May, 2008.
- 2005 Brindle M, Sauer CJ, Patel S, de Silva N, Chait P, Wales PW "Percutaneous transhepatic cholangiography for the treatment of parenteral nutrition associated cholestasis in surgical neonates". **British Association of Paediatric Surgeons**, Dublin, Ireland. July 12th to 15th, 2005
- 2002 Brindle M, Bachmann M, Skarsgard E, Contag C. "Efficient gene delivery to the lung demonstrated by in vivo bioluminescent imaging". **The Society for Molecular Imaging**, Boston, MA. August, 2002
- 2001 Brindle M, Moss RL, Skarsgard E "Infusion techniques for the delivery of gene therapy to the fetus", **American Society of Gene Therapy**, Seattle, WA. May 30th to June 3rd, 2001.

RESEARCH SUPERVISION:

Masters Review Committee

2012 Saima Nausheen, Primary Supervisor Prasanth Chelikani. December, 2012.

Masters Committee

2012 Sarah Lai, Masters of Science Student, Department of Surgery, Primary Supervisor David L Sigalet.

Primary Research Supervisor

2016-current Rueben Dehaek, General Surgery Resident, UBC
 2016-current Tito Daodu, General Surgery Resident, UBC
 2014-2015 Carlos Sanchez-Glanville, Pediatric Surgery Fellow, UofC
 2013-2015 Farhana Shariff, General Surgery Resident, UBC
 2012-2014 Jennifer Lam, General Surgery Resident, UofC
 2012-2013 Alana Beres, Pediatric General Surgery Fellow, McGill
 2011-2014 Ben Turner, General Surgery Resident, UofC
 2007-2010 Brian Vartian- CIHR funded research- vascular injuries in pediatric patients.
 2007 Mantaj Brar- CDH outcomes CAPSNet research

INVITED NATIONAL SPEAKER:

2013 Invited Speaker "Operative Management of Pancreatic Injuries". Canadian Association of Pediatric Surgery, September 26th, 2013

2012 Invited Speaker. "CAPSNet: Evolution of a multidisciplinary national database. Society for Obstetrics and Gynecology. June, 2012

2011 Invited Panel Member: Controversies in Pediatric Trauma Management. Trauma Association of Canada, April 2011

2010 Key Note Speaker OR Nurses Annual Conference, Calgary, AB

2009 Early Risk Assessment Conference "Prenatal Screening and Diagnosis: Implications of New Technologies" September 26th, 2009

2009 Plenary Speaker "Scientifically Yours" Educational Conference for High School Students pursuing Scientific Careers.

KNOWLEDGE TRANSLATION:

2017-current Lead of International ERAS group to address neonatal abdominal surgeries
 2016-current Knowledge Lead for Clinical Information System EBM care pathway for appendicitis
 2016-current Co-lead of Pediatric Surgery working group to translate cost-effective EBM into practice for appendicitis.

REVIEWING/EDITORIAL WORK:

Publications

2012- 2017 Reviewer *Pediatrics* (2014: July, Sept, Oct; 2015: Mar, Aug; 2016 Feb; 2017 Mar, Apr)

2016 Reviewer *British Medical Journal-Open* (2016 May)

2016 Reviewer *Journal of the American College of Surgeons* (2016: Jan)

2015-2016 Reviewer *JAMA Pediatrics* (2015: Aug; 2016: Aug)

2015 Reviewer *Neonatology* (2015: Dec)

2013-2016 Reviewer *Canadian Medical Association Journal* (2013: May, June; 2014: Sept; 2015: June, July, Nov; 2016: Jan, April)

2014-2016 Publications Committee *PAPS Journal of Pediatric Surgery* (April 2014-10, April 2015-9, April 2016-11)

2014-2015 Reviewer *American Journal of Perinatology* (2014: Sept, Oct, 2015: Aug)

2014 Abstracts Committee PAPS
 2012, 2013 Reviewer *Journal of Pediatric Surgery*
 2009-2011 Publications Committee CAPS (*Journal of Pediatric Surgery*)
 2011 Reviewer *Journal of Medical Case Reports*
 2009-current Reviewer *Fetal Diagnosis and Therapy*
 2009-2016 Reviewer *Canadian Journal of Surgery*(2016 Jan)

Grants

2017 Reviewer *Michael Smith Foundation for Health Research*
 2016 Reviewer *CIHR Analyses of Existing Canadian Cohorts & Databases - Reproductive Maternal & Child Health*, Starting November 2016
 2016 Reviewer *Clinical Research Fund, Calgary Center for Clinical Research*, September, 2016
 2016 Reviewer *CDH, Sparks Grant*, August, 2016
 2015 Reviewer *Veni Grant, Netherlands Organization for Health Research and Development* (1 grant), April, 2015
 2011 Reviewer *Alberta Children’s Hospital Foundation* (3 grants)
 2012 Reviewer *Physician’s Services Incorporated Foundation* (1 grant)

Awards

2013 Reviewer *Department of Surgery Surgical Scientist Award*. Aug, 2013
 2013 Reviewer *Department of Surgery Education Award*. Aug, 2013
 2013 Reviewer *Department of Surgery Research Award*. Aug, 2013

ADMINISTRATION:

Research Chair, Department of Surgery

2017-current Chair

Department of Surgery Events

2015-current Co-organizer Departmental Gala Dinner
 2017 Organizer Departmental Retreat

Academic Alternate Relationship Program for Department of Surgery

2016-current Chair and developer

Onboarding of New Faculty for Department of Surgery

2016-current Departmental lead

Harvard School of Public Health

2014 Participant “Executive Leadership in Medicine”, 2-week course.

University of Calgary Medical School

2006-current Member Neonatology Resident Training Committee
 2006-current Member Pediatric Surgery Resident Training Committee
 2006-current Member Maternal Fetal Medicine Resident Training Committee
 2012-2015 Member Faculty of Medicine Accommodations Committee
 2006-2011 Member General Surgery Resident Training Committee

Alberta Health Services

2017-current Member of Surgery Strategic Care Network
 2016-current Member Pediatric Surgery Working Group
 2013-2014 Co-Chair Hand Hygiene Committee, Alberta Children’s Hospital
 2011-2012 Co-Director Southern Alberta Pediatric Trauma, AHS
 2008-2014 Coordinator for Pediatric General Surgery electronic order sets

Alberta Children's Hospital

2015-current	Lead of EQUIS (Efficiency, Quality, Innovation and Safety) Research Platform
2010-current	Member Alberta Congenital Anomalies Surveillance System
2006-current	Member Surgical Executive Committee
2006-current	Member of Operating Room Committee
2006-current	Member Trauma Committee
2006-current	Member Trauma Safety Committee
2012-2013	Surgical Lead Trauma, Alberta Children's Hospital
2011-2012	President Medical Staff Association, Alberta Children's Hospital.
2006-2012	Surgical Director of Pediatric Trauma, Alberta Children's Hospital
2010-2011	Vice president Medical Staff Association, Alberta Children's Hospital
2009-2011	Co-Chair Southern Alberta Fetal Therapy Initiative (SAFTI)
2008	Chair "Western Canadian Fetal Therapy Meeting", September, 2009

National

2017	Local Host of Canadian Association of Pediatric Surgery National Meeting (Banff, October, 2017)
2015-current	Executive Board Member Canadian Association of Pediatric Surgery
2008-current	Member Steering Committee for Canadian Association of Pediatric Surgery Network CAPSNet (National)

International

2017-current	Lead of ERAS : Neonatal Abdominal Surgery
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Other

1997-1998	Member-at-Large, Dalhousie University Student Union, Halifax Nova Scotia.
1996-1997	Dalhousie Student Union Representative for Dalhousie Medical School, Halifax, Nova Scotia.
1992-1993	Coordinator for university volunteers at the Yale-New Haven Hospital Emergency Department

EDUCATION:

Educational Leadership

2016-2017	Leadership committee of Perioperative Crisis Management (POCM) team-training initiative
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Undergraduate

2014, 2006-2010	Evidence-Based Medicine Supervisor for 4 students (80+ hours each)
2010, 2014	Instructor for Surgical Skills workshop (suturing)
2013	Instructor, Undergraduate Medicine 4 hour procedural skills teaching (thoracentesis) August 2013, October 2013.
2013	Instructor, Undergraduate Medicine 3 hour ultrasound anatomy teaching (liver, IVC and aorta) August, 2013
2013	Examiner Undergraduate Medicine (thoracentesis) January, 2013
2011	Examiner, Undergraduate Medicine Surgical skills (chest tube insertion) January 2011
2006-2010	Instructor for Undergraduate Medicine Clerkship Pediatric Surgery education rounds (every 2 months)
2006-2008	Lecturer Undergraduate Medicine Pediatrics/Development (yearly).
2001-2002	Pediatric surgery lecturer for Stanford University Medical School students.

Resident/Graduate Student

2017	Instructor First Year Surgery Resident Critical Thinking Course, Creating Research Teams
2014	Facilitator, Surgery Research Day. January, 2014
2013-2014	Instructor First Year Surgery Resident Critical Thinking Course, Diagnostic Tests, October, 2013, October 2014.
2013	Facilitator Resident Research Day and Basic Science Day, January, 2013
2012	Lecturer and facilitator: Pediatric Hematology Half Day, November, 2012
2007-2014	Lecturer: Pediatrics Half Day (yearly)
2007-2013	Lecturer: General Surgery Half Day (yearly)
2009	Lecturer: Oncology half-day. Surgical considerations of Wilm's Tumour
2007-2009	Lecturer: Neonatology half-day. Neonatal thoracic surgical emergencies

Faculty/CME

- 2015 Director, 2 day Workshop. Realist Reviews (run by Dr. Gill Westhorp, methodologist) Nov 23rd, 24th, 2015
- 2014 Instructor, 3 hour workshop, 15 participants “Ultrasound and peripheral line access for pediatricians”; W21C, Calgary, March, 2014
- 2013 Instructor, 3 hour workshop, 12 participants. “GIM CME – Ultrasound introduction, Thoracentesis, Paracentesis and CVC.” Participants: Jennifer Landry, John Walsh, Susan Huan, Mike Fisher, Anna Purdy, Michelle Burns, Bob Herman, Gab Fabreau, Evan Minty, Fiona Dunne, Janet Gilmour, Doug Hamilton, June 4th 2013
- 2012 Trauma Rounds, Alberta Children’s Hospital: Pancreatic Trauma. September, 2012
- 2007-2014 Instructor for ATLS (Student and Instructor courses)
- 2010 Pediatric Surgery Grand Rounds
- 2010, 2012, 2017 Neonatology Grand Rounds
- 2007 Lecturer “Coagulopathy in the Trauma Patient” Trauma Rounds, Alberta Children’s Hospital

Nursing/Allied Health

- 2014 Guest Speaker: OR Nurses Educational day.
- 2013 Education session “Intestinal failure in infants”, Nursing education session.
- 2012 Post-anaesthetic nursing rounds: Patent Ductus Arteriosus
- 2010 Guest Speaker: OR Nurses Educational day.
- 2009 Lecturer and Facilitator: Neonatal Nursing Issues Educational Day
- 2008 Lecturer “Abdominal Trauma” Nursing Education Rounds, Alberta Children’s Hospital.

Department of Science/University

- 2008 Lecturer “Abnormal Pulmonary Development with CDH” for Respiratory Research Group, University of Calgary.

National/International

- 2001 Instructor: Surgical Skills Workshop, **American Academy of Pediatrics**, San Francisco, CA.

MEMBERSHIPS:

- 2012- Pacific Association of Pediatric Surgery (PAPS)
- 2012- Institute for Population Health
- 2010- current Institute for Maternal Child Health (IMCH)
- 2007-current Canadian Association of Pediatric Surgery (CAPS)