

CURRICULUM VITAE

ROBERT E. KELLY, JR., M.D.

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EDUCATION:	<u>SCHOOL OR HOSPITAL</u>	<u>DATES OF ATTENDANCE</u>	<u>DEGREE</u>	<u>FIELD</u>
UNDERGRADUATE:	Spring Hill College Mobile, AL	1977-1981	B.S.	Chemistry Mathematics Magna Cum Laude
GRADUATE:	The Johns Hopkins University Baltimore, MD	1981-1985	M.D.	
RESIDENCY:	Vanderbilt University School of Medicine, Nashville, TN	1985-1988 1990-1992		Surgery Surgery
FELLOWSHIPS & OTHER POSTDOCTORAL TRAINING:	UCLA School of Medicine Los Angeles, CA	1988-1990		ECMO and Surgical Research Fellowship
	Children's Hospital of Buffalo Buffalo, NY	1992-1994		Pediatric Surgery Fellowship

HOSPITAL STAFF MEMBERSHIPS: Children's Hospital of The King's Daughters, Active; Sentara Norfolk General Hospital, Active.

LICENSURE:

<u>STATE</u>	<u>YEAR</u>	<u>LICENSE NUMBER</u>
Virginia	1994	0101-050898

COMPLETED REQUIREMENTS FOR BOARD CERTIFICATION:

<u>SPECIALTY</u>	<u>YEAR</u>	<u>RECERTIFICATION</u>
Surgery	1993	2013
Pediatric Surgery	1996	2005

ACADEMIC POSITIONS:

<u>RANK</u>	<u>INSTITUTION</u>	<u>YEARS</u>
Adjunct Professor of Modeling and Simulation Engineering	Old Dominion University Batten College of Engineering and Technology Modeling, Simulation and Visualization Engineering	2014 – present
Professor	Department of Clinical Surgery/Pediatrics Eastern Virginia Medical School Norfolk, VA	2007 – present
Professor	Department of Pediatrics Eastern Virginia Medical School Norfolk, VA	2007-Present
Associate Professor	Department of Surgery Eastern Virginia Medical School Norfolk, VA	2000-2007
Associate Professor	Department of Pediatrics Eastern Virginia Medical School Norfolk, VA	2006-2007
Assistant Professor	Department of Pediatrics	1994-2005

Eastern Virginia Medical School
Norfolk, VA

Assistant Professor Department of Surgery 1994-2000
Eastern Virginia Medical School
Norfolk, VA

PROFESIONAL & HOSPITAL POSITIONS:

<u>RANK</u>	<u>INSTITUTION</u>	<u>YEARS</u>
Multi-Specialty Group Practice	Children's Surgical Specialty Group, Inc. Pediatric Surgery Norfolk, Virginia	1999-present
Private Practice	Children's Surgical Associates, Inc. Norfolk, Virginia	1994-1999
Chairman	Department of Surgery Children's Hospital of The King's Daughters Norfolk, Virginia	1998-Present

TEACHING EXPERIENCE:

Eastern Virginia Medical School

“Introduction to Pediatric Surgery” to medical students, 1994 - present.

Lectures in pediatric surgery to surgery and pediatric residents, 1994 - present.

Daily rounds with surgical residents, 1994 - present.

Responsible for organizing visiting professors to EVMS departments of surgery and pediatrics, 1996 - present:

Richard Azizkhan, M.D. – March 13, 1996

Carroll “Mac” Harmon, M.D. – August 20-22, 1997

Eric Fonkalsrud, M.D. – April 7-9, 1999

Jay Grosfeld, M.D. (assisted Dr. L.D. Britt of EVMS with arrangements) – March 1-3, 2001

Donna Caniano, M.D. – November 7, 2002

Dr. Dennis Carter- May 12, 2005

Dr. Robert Foglia – August 23-24, 2007

Responsible for organizing Pediatric Surgery Monthly Journal Club, 1994 - 2003

Participating Professor, Objective Structured Clinical Examination (OSCE), 1998 – 2004.

Weekly Pediatric Case Conferences with surgical residents, 2000 – 2004.

Instructor, Advanced Trauma Life Support course, 2000-present

HONORS AND AWARDS:

Miller-LeJeune Memorial Scholarship, 1977.

Alpha Sigma Nu Honor Society, 1981.

American Medical Association Physician's Recognition Award, 2000 and 2004.

EVMS Department of Surgery, Award for Outstanding and Dedicated Service to Resident Teaching and Education 2006 (Chosen by the surgical residents)

MEMBERSHIP ON LOCAL AND NATIONAL COMMITTEES AND BOARDS:

Children's Hospital of The King's Daughters

Medical Executive Committee, 1998-present

Surgical Authorities Committee, 1998-present

Continuing Medical Education Committee, 2001-present

Clinical Research Review Committee, 2001-present

Children's Surgical Specialty Group Board of Directors, 1999-present

Children's Health Network (Physician Hospital Organization) Board of Directors, 1996-present

Infection Control Sub-Committee, 2000-present

Mortality Review Committee, 1995- 2000

Pain Management Committee, 1994-1998

Physician Advisory Committee on Clinical Information Systems, 1994-2000

Chairman, Data Safety Monitoring Board, 2004-2005

(“Post-tonsillectomy morbidity and quality of life in pediatric patients with obstructive tonsils and adenoids: Microdebrider vs. Electrocautery” study, Principal Investigator is Craig S. Derkay, M.D.)

American College of Healthcare Executives, 2016 - present

Eastern Virginia Medical School

Residency Review Committee, 1998 – present

Admissions Committee, 1994 - 1998

eMedicine

Medical Editorial Board, 2001-2003

Children's Oncology Group

Associate Member, 2002-present

American Academy of Pediatrics

Local Virginia Chapter Contact Person, 2003-present

Program Committee of the Section on Surgery, 2004-2007

American Pediatric Surgical Association

Program Committee 2005-2008

Outcomes and Clinical Trials Committee 2001 - 2004

MEMBERSHIP IN PROFESSIONAL SOCIETIES:

Chest Wall International Group, President-elect 2014

Eastern Cardiothoracic Surgical Society (2014)

Fellow, American College of Surgeons

Fellow, American Academy of Pediatrics

American Pediatric Surgical Association

American Medical Association

Society American Gastrointestinal Endoscopic Surgeons (SAGES)

Medical Society of Virginia

Norfolk Academy of Medicine

Tidewater Pediatric Society

American Society of Abdominal Surgeons (Past Member)

Southern Medical Association (Past Member)

Southeastern Surgical Congress (Past Member)

BIBLIOGRAPHY:

Journal Articles

1. Tse-Tang MW, Gaffney BJ, Kelly RE. Syntheses of bifunctional spin label molecules and their orientations in membranes. *Heterocycles* 1980; 5: 3-6.
2. Dudgeon DL, Kelly R, Ghory MJ, Halden WJ, Kaufman SL, Wharam M. The efficacy of lymphangiography in the staging of pediatric Hodgkin's disease. *J Ped Surg* 1986; 21: 233-235.
3. Foglia RP, Bjerke HS, Adkins ES, Kelly R, Phillips JD, Chavez M, Barcliff L. Alteration of intracranial perfusion pressure during extracorporeal membrane oxygenation. *Surgical Forum* 1989; XL: 563-565.
4. Kelly RE Jr, Abedin MZ, Fonkalsrud EW, Masuda H, Huang EJ, Saunders K, Bjerke HS, Roslyn JJ. Early effects of colectomy and endorectal pullthrough operation on biliary lipid composition. *J Surg Res* 1990; 49: 111-115.
5. Foglia RP, Bjerke HS, Kelly RE, Phillips JD, Fonkalsrud EW. The use of extracorporeal membrane oxygenation in the treatment of neonatal respiratory failure. *Arch Surg* 1990; 125: 1286-1292.
6. Huang EJ, Kelly RE Jr, Masuda H, Bjerke HS, Fonkalsrud EW. Deleterious effects of testicular venous occlusion in young rats. *Surg Gynecol & Obstet* 1990; 171: 392-387.
7. Bjerke HS, Kelly R, Geffner ME, Fonkalsrud EW. Surgical management of islet cell dysmaturation syndrome in young children. *Surg Gynecol & Obstet* 1990; 171: 321-325.
8. Phillips JD, Stelzner M, Zeng H, Kelly RE, Fonkalsrud EW. Alterations in gastrointestinal motility during postoperative acute corticosteroid withdrawal. *Am J Surg* 1991; 162: 251-255.
9. Kelly RE Jr, Phillips JD, Foglia RP, Bjerke HS, Barcliff LT, Petrus L, Hall TR. Pulmonary edema and fluid mobilization as determinants of the duration of ECMO support. *J Ped Surg* 1991; 26: 1016-1022.
10. Phillips JD, Kelly RE, Mirzayan A, Kim CS, Fonkalsrud EW. An improved model of experimental gastroschisis in fetal rabbits. *J Ped Surg* 1991; 26: 784-787.
11. Kelly RE Jr, Phillips JD, Fonkalsrud EW, Dindar H. Fertility following simulated Fowler-Stephens orchiopexy in rats. *Am J Surg* 1992; 163: 270-272.
12. Bjerke HS, Kelly RE Jr, Foglia RP, Barcliff LT, Petz WP. Decreasing transfusion exposure risk during extracorporeal membrane oxygenation. *Transfusion Medicine* 1992; 2: 43-49.
13. Huang EJ, Kelly RE Jr, Fonkalsrud EW, Liu HW, Masuda H, Salman FT. Effects of simulated Fowler-Stephens orchiopexy on testicular structure and function in rats. *Amer Surg* 1992; 58: 153-157.
14. Kelly RE Jr, Phillips JD, Fonkalsrud EW. The effect of fetal urine on experimental gastroschisis in rabbits. *J Urology* (submitted).
15. Kelly RE Jr, Abedin MZ, Fonkalsrud EW, Masuda H, Huang EJ, Dhiman JK, Roslyn JJ. Effects of colectomy and endorectal pullthrough with reservoir on bile acid composition. *Ann Surg* 1993; 217(4): 321-328.

16. Kelly RE Jr, Glick PL, Azizkhan RG. Extracorporeal Membrane Oxygenation (ECMO) and Congenital Diaphragmatic Hernia." *Current Surgery* 1994 November/December; 51(9): 528-531.
17. Bass WT, Wharton KN, Cicero MA, Kelly RE, Dory CE. Diaphragmatic Hernia with Abnormal Migration of the Kidney. *Arch Pediatr Adolesc Med* 1996 April; 150: 427.
18. Kelly RE Jr. Recent Progress in Finding the Etiology of Hirschsprung's Disease. *Current Surgery* 1996 June; 53(5): 1-4.
19. Kelly RE Jr, Croitoru DP, Nuss D, Flemmer LS, Bass WT. Choosing Venous Access in the Extremely Low Birth Weight (ELBW) Infant: Percutaneous Central Venous Lines and Peripherally Inserted Catheters. *Neonatal Intensive Care* 1997; 10(5): 15-17.
20. Nuss D, Kelly RE Jr, Croitoru DP, Katz ME. A 10 Year Review of a Minimally Invasive Technique for the Correction of Pectus Excavatum. *J Pediatr Surg* 1998 April; 33(4): 545-552.
21. Kelly CS, Kelly RE Jr. Lymphadenopathy in children. *Pediatric Clinics of North America* 1998; 45: 875-888.
22. Kelly RE Jr. Biliary Problems in Infancy and Childhood. Souper NJ, Foglia RP (eds). *Problems in General Surgery*. Vol 16, No 1. Maryland: Lippincott Williams & Wilkins; March 1999. p. 101-107.
23. Kelly RE Jr, Wenger A, Horton C Jr, Nuss D, Croitoru DP, Pestian J. The Effects of a Pediatric Unilateral Inguinal Hernia Clinical Pathway on Quality and Cost. *J Pediatric Surg* 2000 July; 35(7): 1045-1048.
24. Dutson E, Kelly RE Jr, Aguiar MA, Croitoru DP, Nuss D. Kaposiform Hemangioendothelioma of the Jejunum Associated with Anorectal Malformation. *Abdominal Surgery* 2000 Fall; 2-5.
25. Duane TM, Kelly RE Jr, Buescher ES, Croitoru DP, Nuss D. Unilateral Inguinal Hernia in Children: Use of Laparoscopy To Evaluate For A Contralateral Hernia At The Time Of Repair. *Abdominal Surgery* 2000 Fall; 6-11.
26. Karlowicz MG, Hashimoto LN, Kelly RE Jr, Buescher ES. Should Central Venous Catheters Be Removed as Soon as Candidemia Is Detected in Neonates? *Pediatrics* 2000 November; 106(5): e63.
27. Croitoru DP, Kelly RE Jr, Goretsky MJ, Lawson ML, Swoveland B, Nuss D. Experience and Modification Update for the Minimally Invasive Nuss Technique for Pectus Excavatum Repair in 303 Patients. *Journal of Pediatric Surgery*, Vol 37, No 3 (March), 2002: pp437-445.
28. Nuss D, Kelly Jr RE, Croitoru DP, Goretsky MJ, Nuss KJ, Gustin TS. Review and Discussion of the Complications of Minimally Invasive Pectus Excavatum Repair. *Eur J Pediatr Surg* 2002. 12:230-234.
29. Nazemi KJ, Karlowicz MG, Kelly RE Jr, Buescher, ES. Central Venous Catheter Removal Versus in situ Treatment in Neonates with Enterobacteriaceae Bacteremia. *Pediatrics* 2003 March; 111: 269-274.
30. Lawson ML, Cash TF, Akers RA, Vasser E, Burke B, Tabangin M, Welch C, Croitoru DP, Goretsky MJ, Nuss D, Kelly RE: A Pilot Study of the Impact of Surgical Repair on Disease-Specific Quality of Life Among Patients with Pectus Excavatum. *The Journal of Pediatric Surgery* 38:916-918, 2003.
31. Goretsky MJ, Kelly RE Jr, Croitoru D, Nuss D. "Chest wall anomalies: Pectus excavatum and pectus carinatum" *Adolescent Medicine Clinics*, Vol 15(3)Elsevier Saunders, 2004
32. Lawson ML, Mellins RB, Tabangin M. Kelly RE Jr, Croitoru DP, Goretsky MJ, Nuss D. Impact of Pectus Excavatum on Pulmonary Function Before and After Repair with the Nuss Procedure. *Journal of Ped Surgery*. (2005), 40: 174-180.
33. Croitoru DP, Kelly RE Jr, Goretsky MJ, Nuss D. The Minimally Invasive Nuss Technique for Recurrent or Failed Pectus Excavatum Repair in 50 Patients. *Journal of Pediatric Surgery*. (2005) 40:181-187.
34. Kelly RE, Lawson ML, Paidas CN, Hruban RH. Pectus Excavatum in a 112-year Autopsy Series: Anatomic Findings and the Effect on Survival. *Journal of Pediatric Surgery*. (2005) 40, 1275-1278.
35. Lawson ML, Barnes-Eley M, Burke BL, Mitchell K, Katz, ME, Dory CL, Miller SF, Nuss D, Croitoru DP, Goretsky MJ, Kelly RE. Reliability of a Standardized Protocol to Calculate Cross-sectional Chest Area and Severity Indices to Evaluate Pectus Excavatum. *Journal of Pediatric Surgery* 2006 41:174-80.
36. Rushing, GD, Goretsky, MJ, Gustin, T, Morales, M, Kelly Jr., RE, Nuss, D: "When it's not an infection: Metal Allergy after the Nuss Procedure for Repair of Pectus Excavatum." *Journal of Pediatric Surgery*. (2007),42, 93-7
37. Shin, S, Goretsky, MJ, Kelly, Jr, RE, Gustin, T, Nuss, D: "Infectious Complications After the Nuss Repair in a Series of 863 Patients", *Journal of Pediatric Surgery*. (2007), 42, 87-92
38. Cartoski M, Kelly RE, Nuss D, et al. Classification of the dysmorphology of pectus excavatum. *Journal of Pediatric Surgery*. (2006) 41: 1573-1581.
39. Creswick HA, Stacey MW, Kelly RE, et al. Family Study of the Inheritance of Pectus Excavatum. *Journal of Pediatric Surgery*. (2006) 41:1699-1703.
40. Kelly RE, Shamberger RC, Mellins, R, et al. Prospective Multicenter Study of Surgical Correction of Pectus Excavatum: Design, Perioperative Complications, Pain, and Baseline Pulmonary Function Facilitated by Internet-Based Data Collection. *Journal of The American College of Surgeons*. (2007) 205(2):205-216.
41. Kelly RE, Wenger A, Horton C, Nuss D, Croitoru DP, Pestian JP. The effects of a pediatric unilateral inguinal hernia clinical pathway on quality and cost. British NHS Economic Evaluation Database by the NHS Centre for Reviews and Disseminations, Univeristy of York, UK. Document 294767, <http://144.32.150.197/scripts/WEBC.EXE/nhscred>.
42. Kelly RE Jr. Pectus excavatum: historical background, clinical picture, preoperative evaluation and criteria for operation. *Seminars in Pediatric Surgery* (2008)17:181-193.
43. Kelly, RE, Cash, TF, Shamberger, RC, Mitchell, KK, Mellins, RB, Lawson, ML, Oldham, K, Azizkhan, RG, Hebra, AV, Nuss, D, Goretsky, MJ, Sharp, RJ, Holcomb III, GW, Shim, WKT, Megison, SM, Moss, RL, Fecteau, AH, Colombani, PM, Bagley, Quinn, A, TC, Moskowitz: "Surgical Repair of Pectus Excavatum Markedly Improves Body Image and Perceived Ability for Physical Activity: Multicenter Study." *Pediatrics*. (2008), Vol 122, No 6, 1218 – 1222.
44. Redlinger, Jr, RE, Rushing, GD, Moskowitz, AB, Kelly, Jr, RE, Nuss, D, Kuhn, MA, Obermeyer, RJ, Goretsky, MJ: "Minimally Invasive Repair of Pectus Excavatum in Patients with Marfan Syndrome and Marfanoid Features." *Journal of Pediatric Surgery*. (2010) 45(1):193-199.

45. Rechowicz KJ, Kelly RE Jr, Goretsky MJ, Frantz FF, Knisley S, Nuss D, McKenzie FD. "Development of an average chest shape for objective evaluation of the aesthetic outcome in the Nuss procedure planning process." SBEC 2010 Proceedings 32:528-531.
46. Rechowicz KJ, Kelly REjr, Goretsky MJ, Frantz FW, Knisley S, Nuss D, McKenzie FD. "A Design for Simulating and Validating the Nuss Procedure for the Minimally Invasive Correction of Pectus Excavatum." Stud Health Technol Inform. (2011) Vol 163, 473-475.
47. Kelly RE JR, Goretsky MJ, Obermeyer RJ, et al. "Twenty-one years of experience with minimally invasive repair of pectus excavatum by the Nuss procedure in 1215 patients." Annals of Surgery (2010);252(6):1072-1081.
48. Stacey M, Neumann SA, Dooley A, Segna K, Kelly Jr RE, Nuss D, Kuhn MA, Goretsky MJ, Fecteau AH, Pastor A, Proud V: "Variable Number of Tandem Repeat Polymorphisms (VNTR's) in the *ACAN* Gene Associated with Pectus Excavatum." Clinical Genetics. 2010 78:5.
49. Lawson ML, Mellins RB, Paulson JF, Shamberger RC, Oldham K, Azizkhan RG, Hebra AV, Nuss D, Goretsky MJ, Sharp RJ, Holcomb GW III, Shim WKT, Megison SM, Moss RL, Fecteau AH, Colombani PM, Moskowitz AB, Hill J, Kelly RE Jr. "Increasing severity of pectus excavatum is associated with reduced pulmonary function." The Journal of Pediatrics (2011) 159(2):256-261.e2.
50. Redlinger RE Jr, Kelly RE Jr, Nuss D, Goretsky MJ, Kuhn MA, Sullivan K, Wooten AE, Obermeyer RJ. "Regional Chest Wall Motion Dysfunction in Patients with Pectus Excavatum Demonstrated via Optoelectronic Plethysmography." Journal of Pediatric Surgery; 2011 Vol 46(6), 1172 – 1176.
51. Redlinger Jr, RE, Kelly Jr. RE, Nuss, D, Kuhn, MA, Obermeyer, RJ, Goretsky, MJ. "One hundred patients with recurrent pectus excavatum repaired via the minimally invasive Nuss technique - effective in most regardless of initial operative approach." Journal of Pediatric Surgery 2011 Vol 46(6), 1177-81.
52. Redlinger Jr, RE, Wooten, AE, Kelly Jr. RE, Nuss, D, Goretsky, MJ, Kuhn, MA, Sullivan, K, Obermeyer, RJ. "Optoelectronic Plethysmography Demonstrates Abrogation of Regional Chest Wall Motion Dysfunction in Patients with Pectus Excavatum after Nuss Repair." Journal of Pediatric Surgery 2012 Vol 47(1), 160-4.
53. Kelly Jr RE, Quinn A, Varela P, Redlinger RE Jr, Nuss D. "Dysmorphology of Chest Wall Deformities: Frequency Distribution of Subtypes of Typical Pectus Excavatum and Rare Subtypes." Archivos de Bronconeumologia 2013.
54. Stacey M, Dutta D, Cao W, Asmar A, Elsayed-Ali H, Kelly Jr R, Beskok A. "Atomic Force Microscopy Characterization of Collagen 'nanostraws' in Human Costal Cartilage." Micron 2013, Vol 44:483-487.
55. Sesia SB, Haecker FM, Shah B, Goretsky MJ, Kelly RE Jr, Obermeyer RJ. "Development of metal allergy after Nuss procedure for repair of pectus excavatum despite preoperative negative skin test." J Ped Surg Case Reports I 2013;152-155.
56. Kelly Jr RE, Mellins RB, Shamberger RC, Mitchell RK, Lawson ML, Oldham KT, Azizkhan RG, Hebra AV, Nuss D, Goretsky MJ, Sharp RJ, Holcomb III, GW, Shim WKT, Megison SM, Moss L, Fecteau AH, Colombani PM, Cooper D, Bagley T, Quinn A, Moskowitz AB, Paulson JF. "Multicenter study of pectus excavatum, final report: complications, static/exercise pulmonary function, anatomic outcomes." J Am Coll Surg 2013;217(6):1080-1089.
57. Rechowicz KJ, Kelly R, Goretsky M, Frantz F, Knisley S, Nuss D, McKenzie FD. "Development of an average chest shape for objective Evaluation of the aesthetic outcome in the Nuss procedure planning process." SBEC 2010, IFMBE Proceedings 32, pp528-531.
58. Shah B, Cohee A, Deyerle A, Kelly SC, Frantz F, Kelly RE, Kuhn MA, Lombardo M, Obermeyer R, Goretsky MJ. "High rates of metal allergy amongst Nuss procedure patients dictate broader pre-operative testing." J Pediatr Surg 2014;49(3):451-454.
59. McKenzie FD, Chemlal S, Hubbard T, Kelly RE, Borgie RC, Besachio DA, Audette M. "Engineering collaborations in medical modeling and simulation." JMSR 2014. Accepted.
60. Chemlal S, Rechowicz KJ, Obeid MF, Kelly RE, McKenzie, FD. Developing clinically relevant aspects of the Nuss procedure surgical simulator. Proceedings of Medicine Meets Virtual Reality 21; J.D. Westwood et al. (Eds.), IOS Press, 2014, 51-55.
61. Asmar A, Werner A, Kelly RE Jr, Fecteau A, Stacey MW. Presence and localization for pro- and mature forms of biglycan and decorin in human costal cartilage derived from chest wall deformities. Austin J Musculoskelet Disord. 2015;2(1):1012.
62. Obermeyer R, Godbout E, Goretsky MG, Paulson JF, Frantz FQ, Kuhn MA, Lombardo ML, Buescher SL, Deyerle A, Kelly RE Jr. "Risk factors and management of Nuss bar infections in 1717 patients over 25 years." J Pediatr Surg 2016; 51(1):154-158.
63. Stacey M, Kelly RK Jr. Membrane channel gene expression in human costal and articular chondrocytes. Organogenesis 2015.
64. Zeng Q, Obeid MF, Kidane N, Chen C, Kelly RE Jr, McKenzie FD. "Pre- and postoperative Nuss procedure CT analysis to assess pectus excavatum indices."
65. Zeng Q, Kidane N, Obeid MF, Chen C, Shen R, Kelly RE Jr, McKenzie FD. "Utilizing Pre- and postoperative CT to validate an instrument for quantifying pectus excavatum severity." Springer-Verlag Berlin Heidelberg 2016

Abstracts and Presentations

1. Kelly RE Jr, Abedin MZ, Fonkalsrud EW, Masuda H, Huang EJ, Saunders K, Roslyn JJ. Early effects of colectomy and endorectal pullthrough on biliary lipid metabolism. Association for Academic Surgery. Louisville, Kentucky. November 15-18, 1989.
2. Kelly RE, Abedin MZ, Fonkalsrud EW, Masuda M, Huang EJ, Dhiman JK, Roslyn JJ. Effects of colectomy, mucosal proctectomy, and endorectal pullthrough procedure on bile acid composition. Society of University Surgeons Residents' Conference. Los Angeles, California. February 10, 1990.
3. Kelly RE Jr, Phillips JE, Bjerke HS, Barcliff LT, Foglia RP. Body weight, fluid balance, and ECMO duration (Poster). 6th Annual Children's Hospital National Medical Center ECMO Symposium. Breckenridge, Colorado. February 24-March 1, 1990.
4. Phillips JD, Kelly RE, Mirzayan A, Kim CS, Zeng H, Diamond J, Fonkalsrud EW. Uptake and distribution of continuously-infused intra-amniotic nutrients in fetal rabbits. Southwestern Pediatric Society. Los Angeles, California. April 4, 1990.
5. Kelly RE Jr, Abedin MZ, Fonkalsrud EW, Masuda H, Huang EJ, Dhiman JK, Roslyn JJ. Effects of colectomy, mucosal proctectomy, and endorectal pullthrough on bile acid composition. Society for Surgery of the Alimentary Tract Residents' Meeting. San Antonio, Texas. May 1990.

6. Kelly RE Jr, Bjerke HS, Foglia RP, Phillips JD, Barcliff LT, Petrus L, Hall TR. Pulmonary edema and fluid mobilization as determinants of the duration of ECMO support. Surgical Section, American Academy of Pediatrics. Boston, Massachusetts. October 6, 1990.
7. Kelly RE Jr, Stovroff MC, Glick PL, Azizkhan RG, Allen JE. Intussusception after operation: Management guidelines for an uncommon problem. Canadian Paediatric Surgical Association 26th Annual Meeting. Toronto, Ontario, Canada. September 20, 1994.
8. Neves S, Croitoru DP, Kelly Jr RE, Nuss D, Buescher S, Werner E, Flemmer L. Central Venous Catheter (CVC) Utilization and Complications in a Pediatric Oncology Population. Virginia Medical Quarterly 1997; 124(2): 120. Virginia Chapter of the American College of Surgeons and the Virginia Surgical Society. Williamsburg, VA. Spring 1997.
9. Duane TM, Kelly RE Jr, Croitoru DP, Nuss D, Buescher ES. The Use of Contralateral Transinguinal Laparoscopic Exploration (CTLE) in Children to Diagnose a Patent Processus Vaginalis During Unilateral Repair. Virginia Medical Quarterly 1998; 125(2): 156. Virginia Chapter of the American College of Surgeons and the Virginia Surgical Society. Williamsburg, VA. Spring 1997.
10. Kelly RE Jr, Wenger A, Horton C Jr, Nuss D, Croitoru DP, Pestian J. The Effects of a Pediatric Unilateral Inguinal Hernia Clinical Pathway on Quality and Cost. American Academy of Pediatrics. San Francisco, CA. October 1998.
11. Kelly RE Jr. Hirschsprung's Disease. 39th Clinical Congress of the American Society of Abdominal Surgeons. Tampa, FL. May 2, 1998.
12. Kelly RE Jr. Minimally Invasive Management of Pectus Excavatum. American College of Surgeons. San Francisco, CA. October 11, 1999.
13. Kelly RE Jr. Abdominal Wall Defects in Childhood. 41st Clinical Congress of the American Society of Abdominal Surgeons. Tampa, FL. November 5, 1999.
14. Hashimoto LN, Karlowicz MG, Kelly RE Jr, Buescher ES. The Role of Central Venous Catheters in Persistent Candidemia. Southern Society of Pediatric Research. New Orleans, LA. February 19, 2000.
15. Hashimoto LN, Karlowicz MG, Kelly RE Jr, Buescher ES. Should central venous catheters be removed as soon as candidemia is detected in neonates? Pediatric Academic Societies (Poster presentation). Boston, MA. May 15, 2000.
16. Hashimoto LN, Karlowicz MG, Kelly RE Jr, Buescher ES. The role of central venous catheters in persistent neonatal candidemia. Pediatric Academic Societies. Boston, MA. May 15, 2000.
17. Kelly RE Jr. Surgical diseases of the infant. American Society of Abdominal Surgeons 42nd Clinical Congress. Atlantic City, NJ. May 07, 2001.
18. Kelly RE Jr. Surgical diseases of childhood. American Society of Abdominal Surgeons 42nd Clinical Congress. Atlantic City, NJ. May 07, 2001.
19. Kelly RE Jr, Nuss D, Croitoru, DP, Goretsky MJ, Gustin TS. Pectus Excavatum and Carinatum. American Academy of Pediatrics National Conference and Exhibition. October 19-24, 2001.
20. Kelly RE Jr. Pectus Excavatum Surgery Improves Quality of Life for Children. American Academy of Pediatrics National Conference and Exhibition. October 20, 2001.
21. Kelly RE Jr. Pediatric Reflux. Society for Ear, Nose and Throat Advances in Children/American Academy of Pediatrics New Orleans. November 1, 2003.
22. Kelly, RE Jr. Operating Room Safety. Society for Ear, Nose and Throat Advances in Children/American Academy of Pediatrics New Orleans. November 1, 2003.
23. Lawson ML, Mellins RB, Tabangin M, Kelly RE, Croitoru DP, Goretsky MJ, Nuss D. Pulmonary Function in Pectus Excavatum. 35th Annual Meeting, American Pediatric Surgical Association. Ponte Vedra Beach, FL, May 2004.
24. Goretsky MJ, Burke BL, Kever RR, Kelly RE, Croitoru DP, Nuss D. AAP Section on Surgery. San Francisco, CA, October 2004
25. Kelly RE Jr. Minimally Invasive Surgery. IPEG/SAGES meeting. April 26-29, 2006.
26. Gozzo Y, Karlowicz G, Kelly RE Jr, Buescher E. Clinical Feasibility and Outcome of Prompt Removal of Central Venous Catheters in Neonates with Candidemia (Poster). Pediatric Academic Societies Meeting. San Francisco, CA. April 29, 2006.
27. Rushing, GD, Goretsky, MJ, Gustin, T, Morales, M, Kelly Jr., RE, Nuss, D: "When it's not an infection: Metal Allergy after the Nuss Procedure for Repair of Pectus Excavatum." Journal of Pediatric Surgery.
28. Shin, S, Goretsky, MJ, Kelly, Jr, RE, Gustin, T, Nuss, D: "Infectious Complications After the Nuss Repair in a Series of 863 Patients", Journal of Pediatric Surgery.
29. Proud VK, Stacey M, Gustin T, Kelly R, Nuss D, McPadden K: Anterior Chest Wall and Sternum: Malformations and Deformations Provide a Model for Understanding Complex Genetics and Environmental Factors. D. W. Smith Conference. Williamsburg, VA. August 2007.
30. Kelly R, Stacey M, Haney T, Nuss D. Allele Frequency of The COL2A1 Gene In Patients With Pectus Excavatum. American Academy of Pediatrics 2007 Section on Surgery Meeting. San Francisco, CA. October 26-28, 2007.
31. Kelly RE Jr. Congenital Chest Wall Deformities. Women & Children's Hospital of Buffalo, Division of Pediatric Surgery. 2008 James E. Allen, M.D. Memorial Lectureship. Buffalo, NY. September 25, 2008.
32. Redlinger, R Jr, Kelly RE Jr. Minimally Invasive Repair of Pectus Excavatum in Patients with Marfan Syndrome and Marfanoid Features. Virginia Chapter, American College of Surgeons Meeting. Virginia Beach, VA. April 24-26, 2009.
33. Kelly RE Jr. Moderator, Panel Discussion, Bringing the Latest and Best to your Patients: Introducing Surgical Innovation to Clinical Practice, Virginia Chapter, American College of Surgeons Meeting, Roanoke, Virginia. April 23-25, 2010.
34. Kelly RE Jr. Treatment of Pectus Carinatum. Virginia State Coding Conference, Virginia Beach, Virginia. October 15, 2010.
35. Guest Speaker, Pediatric Chest Wall Deformities Web Symposium, Cleveland, Ohio, August 24, 2011.
36. Rechowicz, Kelly RE Jr, Goretsky MJ, Frantz FW, Knisley SB, Nuss D, McKenzie FD. Comparison of Pre- and Post-operative Scans as a Means to the Objective Measurement of Improvement of the Nuss Procedure and Validation of the Planning Process. The International Meeting on Simulation in Healthcare. New Orleans, Louisiana, 2011.
37. Kelly RE Jr. Invited Lecturer, Sociedad Ecuatoriana de cirugia Pediatrica, Curso de Ensenanza Internacional. 2do curso Hands on Workshop, Hospital de Los Valles, Quito, Ecuador, March 23-24, 2012.
38. Cohee AH, Lin JR, Frantz FW, Kelly RE Jr. Staged Management of Pectus Carinatum. British Association of Paediatric Surgeons

- (BAPS) Meeting, Rome, Italy, June 13-16, 2012.
39. Kelly RE Jr. Guest Lecturer, V Congreso Iberoamericano de Cirugia Pediatrica, XVIII Congreso Colombiano de Cirugia, Pediatrica Y Encuentro Mundial Annual de Area de la WOFAPS, Cartagena de Indias, Columbia, August 21-25, 2012.
 40. Kelly RE Jr. Guest Lecturer, Turkish Association of Pediatric Surgery, Ankara, Turkey, 2012.
 41. Kelly RE Jr. Invited Presenter for the Department of Pediatrics and Department of Surgery at The Sheba Medical Center at Tel Hashomer, Tel Aviv, Israel, April 22, 2013.
 42. Kelly RE Jr. Invited Presenter, The Chest Wall Interest Group (CWIG) Meeting, Seoul, Korea. June 13-15, 2013.
 43. Kelly RE Jr. Symposium director: Chest Wall Deformities, 4th World congress of Pediatric Surgery, October 16, 2013, Berlin, Germany
 44. Rechowicz K, Knisley S, et al. Validation of Surface 3D Scanning for Measurement of Post-surgical improvement preference following Nuss procedure for Pectus excavatum. Poster Presentation, American College of Surgeons Clinical Congress, Washington, DC. October 6-10, 2013.
 45. Knisley S, Rechowicz K, et al. Poster presentation, A Non-invasive method to determine the optimal time for Nuss bar Removal: A preliminary study. , American College of Surgeons Clinical Congress, Washington, DC. October 6-10, 2013.
 46. Kelly RE, Jr. Faculty, Operation Smile Training Meeting, including demonstration Nuss procedure live from CHKD to OpSmile headquarters in Virginia Beach; surgeons from 40 countries in attendance. May 19, 2014.
 47. Kelly RE Jr. Faculty, Advanced Pectus Course, a Joint CHKD/Phoenix Children's meeting, including speaking, Live surgery demonstration operations. May 27-28, 2014.
 48. Kelly RE Jr. Invited presenter, "Updates in Donald Nuss Technique", and "Movement of the Chest Wall Before/After MIRPE", 15th Chest Wall International Group meeting, Aarhus, Denmark, June 12-14, 2014.
 49. Kelly RE Jr. "Pectus carinatum: from dynamic compression brace to modified Ravitch," 22nd European Conference on General Thoracic Surgery, Copenhagen, Denmark, June 15-18, 2014.
 50. Kelly RE Jr. Visiting surgeon, Montreal Children's Hospital of McGill University, including performing two "Reverse Nuss" procedures of Abramson with Montreal surgeons; visiting speaker, "Pectus excavatum and carinatum", Shriner's Hospital of Montreal. July 8-10, 2014.
 51. Kelly RE Jr. Invited Lecturer. The Chest Wall International Group (CWIG) meeting, Hong Kong, May 13-15, 2015.
 52. Kelly RE Jr. Invited Lecturer. Workshop on Chestwall Deformities, Saint Etienne, France, September 9- October 2, 2015.
 53. Kelly RE Jr. Invited Presenter. "Changing the paradigm in chest wall deformities: Isn't less surgery better?" The 2nd China International Forum of Pediatric Development. Beijing, China. October 9-11, 2015.

Book Chapters

1. Kelly RE Jr, Isaacman DJ. Thoracic Emergencies. In: Fleischer GR, Ludwig S (eds). Textbook of Pediatric Emergency Medicine. 4th ed. Philadelphia: Lippincott Williams & Wilkins; 1999.
2. Kelly RE. Cervical Lymphadenopathy. Pediatric Surgery Secrets. (2001)
3. Goretsky MJ, Kelly RE Jr, Croitoru D, Nuss D. Adolescent Medicine Clinics, Vol 15(3)Elsevier Saunders, 2004.
4. Nuss D, Kelly RE Jr, Croitoru DP, Goretsky MJ. Congenital Chest Wall Deformities. Pediatric Surgery 4th ed. Saunders, 2005.
5. Nuss D, Kelly RE Jr. The Nuss Procedure for Pectus Excavatum. Pediatric Surgery, 6th ed. Mosby; 2006.
6. Kelly RE Jr., Nuss D. Complications of Pectus Excavatum and Carinatum Repair, Reoperative Pediatric Surgery. Humana Press 2008.
7. Kelly RE Jr, Nuss D. Pectus Excavatum. Pediatric Thoracic Surgery. Springer, 2009.
8. Nuss, D, Kelly RE Jr. Chest Wall Deformities. Pediatric Surgery: Diagnosis and Management. Springer. In press 2007.
9. Kelly RE Jr, Kuhn MA. Complications of Thoracic Surgery. Complications in Pediatric Surgery. Informa Healthcare 2009.
10. Kelly RE Jr, Kuhn MA. Pediatric Thoracic Surgery Complications – Prevention and Management. In press.
11. Nuss D, Kelly RE Jr. Minimally invasive surgical correction of chest wall deformities in children (Nuss Procedure). Advances in Pediatrics. (2008).
12. Nuss D, Kelly RE Jr. The Minimally Invasive Pectus Excavatum Repair (Nuss Procedure). Atlas of Pediatric Laparoscopy and Thoracoscopy. Saunders. 2008.
13. Nuss D, Kelly RE Jr. Congenital Chest Wall Deformities. Ashcraft's Pediatric Surgery (5th ed.) Edited by Holcomb GW, Murphy JP. Elsevier Saunders, pp 249-265, 2010.
14. Nuss D, Kelly RE Jr. "Indications and technique of Nuss procedure for pectus excavatum." Chest Wall Surgery, Thoracic Surgery Clinics, Volume 20, Number 4. Saunders, pp 583-597, 2010.
15. Lombardo ML, Kelly RE Jr. "Self and social perception in chest wall deformities." Chest Wall Deformities. Springer
16. Nuss, D, Kelly RE Jr. "The minimally invasive repair of pectus excavatum." Operative Techniques in Thoracic and Cardiovascular Surgery, 19:324-327, 2014.

Other

1. Wu SY, Aguiar MA, Werner AL, Kelly RE Jr. Exam questions – Anatomic Pathology No. AP II. Eastern Virginia Medical School and Children's Hospital of The King's Daughters. Norfolk, Virginia. In press 2000.

Grand Rounds

1. Gastroesophageal Reflux in Infants. Eastern Virginia Medical School Surgery Grand Rounds. Norfolk, Virginia. July 14, 1995.
2. Hirschsprung's Disease. Eastern Virginia Medical School Surgery Grand Rounds. Norfolk, Virginia. January 10, 1997.
3. Surgical Hepatobiliary Disease in Children. Eastern Virginia Medical School Surgery Grand Rounds. Norfolk, Virginia. November 12, 1999.
4. Cervical Masses and Lesions in Children, EVMS Pediatric Grand Rounds, Norfolk, Virginia. May 2005
5. Solid Tumors in Children, EVMS Surgery Grand Rounds, Norfolk, Virginia. October 2005.
6. Hirschsprung's Disease. EVMS Pediatric Grand Rounds, Norfolk, Virginia. December 2007.

Advanced Courses Taught

1. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. April 3-4, 2003
2. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. April 15-16, 2004
3. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. March 17 - 18, 2005
4. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. April 6 – 7, 2006
5. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. May 28 - 29, 2007
6. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. March 31 – April 1, 2008
7. Minimally Invasive Correction of Pectus Excavatum: The Nuss Procedure, Workshop & Training Norfolk, Virginia. June 11 – 12, 2009
8. 8th Annual International Nuss Pectus Excavatum and Carinatum Lecture Series Norfolk, Virginia. March 25 – 26, 2010
9. 9th Annual International Nuss Pectus Excavatum and Carinatum Lecture Series Norfolk, Virginia. June 23 – 24, 2011
10. 10th Annual International Nuss Pectus Excavatum and Carinatum Lecture Series Norfolk, Virginia. March 29-30, 2012
11. 11th Annual International Nuss Thoracic Deformity Lecture Series Norfolk, Virginia. March 21-22, 2013
12. Advanced Pectus Course
Phoenix, Arizona. May 27-28, 2014
13. Advanced Pectus Course
Norfolk, Virginia. March 26-27, 2015
14. Chest Wall International Group Conference
Norfolk, Virginia. June 15-17, 2016

Funded Research

1. Principal Investigator, Multi-center Study of Operative Repair of Pectus Excavatum. Awarded \$1,000,000 research grant. Children's Hospital of The King's Daughters and Eastern Virginia Medical School. Norfolk, Virginia. July, 2001.
2. Principal Investigator, A Multi-center Comparison of Cardio-Pulmonary Function Before and After Surgical Repair of Pectus Excavatum. Amendment to #1. Awarded \$150,000 research grant by W. Lorenz Corporation. Jacksonville, FL, October 2003.
3. Co-Investigator, Genetics of Pectus Excavatum. Awarded \$534,877 total - \$58,000 in 2004; \$61,742 in 2005, \$62,364 in 2006, \$71,106 in 2007 and \$74,825 in 2008 from the Norfolk Foundation; \$177,240 from Children's Hospital of The King's Daughters, 2006-2007; \$29,600 from Jeffress Memorial Foundation, 2006.
4. Co-Investigator, OEP Study. Awarded \$65,500 research grant. Norfolk Foundation. January 2009.
5. Co-Investigator, Pectus Multicenter Study and Nuss Procedure Simulator. Awarded \$300,000 in February 2010 from Children's Hospital Foundation.
6. Co-Investigator, with ODU Research Foundation for Nuss Procedure Simulator. \$50,000 in February 2010 from Children's Surgical Specialty Group.

Other

1. Kelly RE Jr. IPEG Hands-On Robotics Lab. 3rd Annual International Symposium on Robotically-Assisted Pediatric Surgery. April 2006.
2. Kelly RE Jr. American Board of Surgery, Examination Consultant. November 2012.
3. Kelly RE Jr. American Board of Surgery, Examination Consultant. November 2013.

Journal Review and Editing Positions

1. Reviewer, Journal Pediatric Surgery, 2000 – present.
2. Nuss, D, Kelly RE Jr. Guest Editors for Seminars in Pediatric Surgery, Chest Wall Deformities, Vol. 17, Number 3, August 2008.
3. Reviewer, Health and Quality of Life Outcomes, 2010.
4. Reviewer, European Respiratory Journal, 2011.
5. Reviewer, Pediatrics (Journal), 2011.
6. Editorial Board Member, Journal of Pediatric Surgery Case Reports, 2014.