

Julia Spencer Barthold, M.D.

Curriculum Vitae

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PERSONAL DATA

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EDUCATION

1975-81 Honors Program in Medical Education, Northwestern University
1979 B.A., Medical Science, Northwestern University Medical School
1981 M.D., Northwestern University Medical School

TRAINING

1981-84 General Surgery, Northwestern University/McGaw Medical Center
1984-88 Urology, Northwestern University/McGaw Medical Center
1988-89 Pediatric Urology, Wayne State University School of Medicine/Children's Hospital of Michigan
1989-91 American Foundation for Urological Disease Research Scholar, The New York Hospital/Cornell University Medical College

FACULTY AND OTHER POSITIONS

1987-88 Clinical Instructor, Urology, Northwestern University Medical School
1988-89 Clinical Assistant Professor, Urology, Wayne State University School of Medicine
1991-92 Assistant Professor, Surgery/Urology, Cornell University Medical College
1992-95 Assistant Professor, Urology and Pediatrics, University of Arkansas for Medical Sciences and Chief of Pediatric Urology, Arkansas Children's Hospital
1996-99 Associate Professor, Urology, Wayne State University School of Medicine and Director of Research, Department of Urology, Children's Hospital of Michigan
2000-18 Head, Pediatric Urology Research Laboratory, Nemours Biomedical Research
2000-11 Associate Professor, Urology and Pediatrics, Jefferson Medical College
2000-16 Associate Chief, Division of Urology, Alfred I. duPont Hospital for Children
2008-10 Program Director, Pediatric Urology Fellowship, Alfred I. DuPont Hospital for Children
2011-18 Professor, Urology and Pediatrics, Jefferson Medical College (2014: renamed Sidney Kimmel Medical College of Thomas Jefferson University)
2012-18 Adjunct Professor, College of Health Sciences, University of Delaware
2016-18 Affiliated Professor, Biomedical Engineering, University of Delaware
2016-18 Principal Research Scientist, Nemours/Alfred I. duPont Hospital for Children
2018-20 Scientific Review Officer, Digestive, Kidney and Urological Systems (DKUS) Integrated Review Group, Center for Scientific Review, National Institutes of Health
6-12/2020 Program Director, Division of Research Capacity Building, National Institute of General Medical Sciences, National Institutes of Health
2021- Senior Scientific Advisor, Division of Kidney, Urologic and Hematologic Diseases, National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health

CERTIFICATION

1982 Diplomat, National Board of Medical Examiners
1994-04 American Board of Urology
2004-14 American Board of Urology, renewed
2010-20 American Board of Urology Subspecialty Certification in Pediatric Urology
2020- American Board of Urology, Retired Status

LICENSURE

1981-90 Illinois, Medical License #036-066342
1988-92 Michigan, Medical License #52562
1989-92 New York, Medical License #177731-1
1992-96 Arkansas, Medical License #N-8236
1995-00 Michigan, Medical License #4301052562
1999-2018 Delaware, Medical License #C1-0005835
1999- Pennsylvania, Medical License #MD070020L

AWARDS/HONORS

1986 Research Prize, American Academy of Pediatrics, Section on Urology Annual Meeting
Traveling Fellowship Award, North Central Section/American Urological Association
Second Prize, Laboratory Research, American Urological Association Essay Contest
1990 Honorable Mention, American Urological Association Audio-Visual Award
Honorable Mention, Research Prize, American Academy of Pediatrics, Section on
Urology Annual Meeting
1999 Most Honored Faculty (Red Sash Award), University of Arkansas for Medical Sciences
2000 Philadelphia Magazine, "Top Docs for Kids"
2001 Delaware Today Magazine, "Top Docs"
2003- Best Doctors in America
2004- Who's Who in Medicine and Health Care; Main Line Today Magazine, "Great Doctors for
Kids"
2009 Visiting Professor, Department of Pediatric Urology, Hôpital St. Justine, Montreal
2010 Physician Excellence Award for Scholarship, Nemours Delaware Valley
2013 John W. Duckett Pediatric Urology Research Excellence Award, Urology Care
Foundation
2017 Researcher of the Year, Nemours Biomedical Research, Delaware Valley

GRANT FUNDING

1993 University of Arkansas Medical College Physicians Group/Children's University Medical
Group Research Development Fund Award
1996-97 NIEHS Pilot Project Grant, WSU Center for Molecular & Cellular Toxicology; "TCDD-
Induced Cryptorchidism in Fetal Swine", (PI)
1996 Wayne State University Graduate School Research Stimulation Award
1997-98 Children's Hospital of Michigan, Pilot Project Grant; "Renal PET for Diagnosis of
Pediatric Urinary Tract Obstruction", (Co-Investigator)
1997-98 Research Stimulation Fund, Wayne State University; "Molecular Characterization of
Early Testicular Development in Congenital Cryptorchidism in the Rat", (PI)
2000-02 Nemours Foundation; "Linkage Analysis of a Rat Model of Inherited Cryptorchidism",
(PI)
2001-03 Nemours Foundation; "Hormone Levels in Infants with Cryptorchidism", (PI)

- 2003-05 Nemours Foundation; “Analysis of Gene Expression During Normal Testicular Descent and Cryptorchidism” (PI)
- 2004 Nemours Foundation; “Candidate Gene and Receptor Expression Analysis of Human Cryptorchidism”, (PI)
- 2004-09 NIH P20RR20173 Center for Pediatric Research (COBRE); “Developmental Mechanisms of Undescended Testis”, (Target Investigator)
- 2010-20 NIH P20GM103464/P30GM114736 Center for Pediatric Research (COBRE); Medical Director (2010-16) and co-Director (2016-2018), Clinical Research Core
- 2008-10 NIH U01DK074064; “Randomized Intervention for Children with Vesicoureteral Reflux (RIVUR)”, (Co-investigator)
- 2010-15 NIH R01HD060769-01A1 “Genetic Basis of Cryptorchidism” (PI), \$2,059,898
- 2013-18 NIH U54GM104941 Delaware Clinical and Translational Research (DE-CTR) ACCEL Program; Nemours Site PI and Lead, Tracking and Evaluation Key Component Activity

SOCIETIES

- 1992-2018 Society for Fetal Urology
- 1994-2018 American Association of Pediatric Urologists
- 1995-2018 American Academy of Pediatrics, Section on Urology, Fellow
- 1995-2018 American Urological Association, Active Member
- 1996-99 North Central Section, American Urological Association
- 1996-2018 Society for Pediatric Urology, Active Member
- 1999-2018 Society for Pediatric Urology, Fellow
- 1999-2018 Mid-Atlantic Section, American Urological Association

COMMITTEES

- 1993 Research Prize Committee, American Academy of Pediatrics, Section on Urology Annual Meeting
- 1994-95 Executive Committee, Arkansas Children's Hospital
- 1994 Clinical Research Subcommittee, Arkansas Children's Hospital
- 1994-95 Search Committee, Chief of Pediatrics, Arkansas Children's Hospital
- 1995 Program Committee, American Academy of Pediatrics, Section on Urology Annual Meeting
- 1997-98 Research Committee, Children’s Hospital of Michigan
- 1998 Research Prize Committee, American Academy of Pediatrics, Section on Urology Annual Meeting
- 1999-01 North American Task Force on Intersex
- 2000 Research Prize Committee, American Academy of Pediatrics, Section on Urology Annual Meeting
- 2000-04 Research Review Committee, A.I. duPont Hospital for Children
- 2001-03 Ethics Committee, A.I. duPont Hospital for Children
- 2000-04 Epic EMR Advisory Committee, Nemours
- 2002-04 Bylaws Committee, A.I. duPont Hospital for Children
- 2002-06 Board of Directors, Mid-Atlantic Section, American Urological Association
- 2005-07 Scholarly Oversight Committee, Pediatric Intensive Care Fellowship, A.I. duPont Hospital for Children
- 2006 International Consultation on Congenital Anomalies of the Genitalia
- 2006-09 Executive Council, Society for Pediatric Urology
- 2007-10 Associate Editor, *Canadian Journal of Urology*

2007-08 Scholarly Oversight Committee, Neonatology Fellowship, Thomas Jefferson University Hospital/A.I. duPont Hospital for Children
 2007-10 Pediatric Urology Editorial Committee, *The Journal of Urology*
 2007-14 Research Prize Committee, Society for Pediatric Urology
 2008-10 Pediatric Fellowship Scholarly Oversight Committee, A.I. duPont Hospital for Children
 2007-16 Clinical Research Review Committee (CRRC), Nemours Biomedical Research
 2016-18 Vice Chair, Clinical Research Review Committee (CRRC), Nemours Biomedical Research
 2010-14 Mentoring and Advisory Committee of the Center for Pediatric Clinical Research and Development, Nemours Biomedical Research
 2013-14 Vice Chair, American Urological Association Cryptorchidism Guidelines Panel
 2014,16 Program Committee, Society for Pediatric Urology Fall Congress
 2014-15 Chair, Research Prize Committee, Society for Pediatric Urology
 2015-18 Abstract Review Committee, Society for Pediatric Urology
 2016-18 External Advisory Board, South Carolina Clinical and Translational Research (SCTR) Institute
 2016-18 Chair, Search Committee, Nemours Precision Medicine Director
 2016-18 Co-Chair, Nemours Precision Medicine Working Group
 2016-17 President-Elect, Society for Pediatric Urology
 2017-18 President, Societies for Pediatric Urology
 2017-18 Nemours Research Funding Committee
 2017-18 Search Committee, Nemours Physician-in-Chief, Delaware Valley
 2022-25 Food and Drug Administration/Bone, Reproductive and Urologic Drugs Advisory Committee (BRUDAC)

AD HOC EDITORIAL REVIEW

1992-18 *Journal of Urology*
 1993-18 *Urology*
 1999 *Journal of Reproduction and Fertility*
 2004 *European Journal of Human Genetics*
 2005-18 *Pediatrics*
 2008-18 *Journal of Pediatric Urology*
 2008-18 *BJU International*
 2009 *Urologia Internationalis*
 2010 *PLoS Genetics*
 2010 *Fertility and Sterility*
 2011 *PNAS*
 2012 *Birth Defects Research Part A: Clinical and Molecular Teratology*
 2016 *Environmental Health Perspectives*
 2017 *Journal of Psychiatric Research*
 2017 *American Journal of Medical Genetics*

NIH PEER REVIEW PANELS

2009 ZRG1 DKUS-A (58) Challenge Grant Editorial Panel 18
 2012 Urologic and Genitourinary Physiology and Pathology (UGPP), Temporary Member
 2012 Integrative and Clinical Endocrinology and Reproduction (ICER), Temporary Member
 2014 ZTR1 CI-8 (01) Rare Disease Clinical Research Consortium (NIH/NCATS)
 2014 ZDK1 GRB-7 (02) U54 Urology Research Center Applications, Alternate Chair
 2014 ZRG1 DKUS-A (82) Digestive, Kidney and Toxicology AREA applications

2015 ZDK1 GRB-C (M1) Genomic Diagnosis for Chronic Kidney Disease, Chair
 2015 ZRG1 DKUS-G (90) Urology and Urogynecology Applications, Alternate Chair
 2016 ZRG1 DKUS-G (55) PAR15-162: Pilot and Feasibility Clinical Research Grants in Urologic Disorders
 2016-17 ZRG1 DKUS-G (90) Urology and Urogynecology Applications 6/2016 (Alternate Chair), 10/2016, 10/2017

BIBLIOGRAPHY

Peer Reviewed Publications

1. Ogunro EA, Lanman RB, **Spencer JR**, Ferguson A.J and Lesch M: Degradation of canine cardiac myosin and actin by cathepsin D isolated from homologous tissue. *Cardiovasc Res* 13:621-629, 1979.
2. **Spencer JR**, O'Connor VJ, Jr. and Schaeffer AJ: A comparison of endoscopic suspension of the vesical neck with suprapubic vesicourethropexy for the treatment of stress urinary incontinence. *J Urol* 137:411-415, 1987.
3. **Spencer JR** and Maizels M: Inhibition of protein glycosylation causes renal dysplasia in the chick embryo. *J Urol* 138:984-990, 1987.
4. **Spencer JR**, Brodin A and Ignatoff JM: Clear cell adenocarcinoma of the urethra: evidence for origin within paraurethral glands. *J Urol* 143:122-125, 1990.
5. **Spencer JR** and Perlmutter AD: Sleeve advancement distal hypospadias repair. *J Urol* 144:523-525, 1990.
6. **Spencer JR**, Torrado T, Sanchez RS, Vaughan ED, Jr. and Imperato-McGinley J: Effects of flutamide and finasteride on rat testicular descent. *Endocrinology* 129:741-748, 1990.
7. Filmer RB and **Spencer JR**: Malignancies in bladder augmentations and intestinal conduits. *J Urol* 143:671-678, 1990.
8. Imperato-McGinley J, Sanchez RS, **Spencer JR** and Vaughan ED, Jr.: Comparison of the effects of the 5 α -reductase inhibitor finasteride and the antiandrogen flutamide on prostate and genital differentiation: dose-response studies. *Endocrinology* 131:1149-1156, 1992.
9. Reinhart HH, **Spencer JR**, Zaki NF and Sobel JD: Quantitation of urinary Tamm-Horsfall protein in children with urinary tract infection. *Eur Urol* 22:194-199, 1992.
10. **Spencer JR**, Vaughan ED, Jr, and Imperato-McGinley J: Studies of the role of androgens in the postnatal phase of testicular descent in the rat. *J Urol* 149:618-623, 1993.
11. **Spencer JR**, Eriksen B and Garnett JE: Metastatic renal tumor presenting as ovarian clear cell carcinoma. *Urology* 41:582-584, 1993.
12. Poppas DP, Mininberg DT, Hyacinthe L, **Spencer JR** and Schlossberg SM: Patch graft urethroplasty using dye enhanced laser tissue welding with a human protein solder: a preclinical canine model. *J Urol* 150:648-650, 1993.

13. **Spencer JR**, Steckel J, May M, Marion D, Hernandez K and Vaughan ED, Jr.: Histological and bacteriological findings in long-term enterocystoplasty and colcystoplasty in the rat. *J Urol* 150:1321-1325, 1993.
14. **Barthold JS**, Mahler HR, Newton BW: Lack of feminization of the cremaster nucleus in cryptorchid androgen insensitive rats. *J Urol* 152:2280-2286, 1994.
15. Redman JF and **Barthold JS**: A technique for atraumatic scrotal pouch orchiopexy in the management of testicular torsion. *J Urol* 154:1511-1512, 1995.
16. **Barthold JS**, Teer TL, Redman JF: Modified Barcat balanic groove technique for hypospadias repair: experience with 295 cases. *J Urol* 155:1735-1737, 1996.
17. Redman JF and **Barthold JS**: Ileal augmentation cystoplasty using a short Pfannensteil incision. *J Urol* 155:1726-1727, 1996.
18. **Barthold JS**, Newton BW, Mahler HR, Sziszak TJ: Lack of feminization of the cremaster nucleus by prenatal flutamide administration in the rat and pig. *J Urol* 156:767-771, 1996.
19. **Barthold JS**, Redman JF: Association of epididymal anomalies with patent processus vaginalis in hernia, hydrocele and cryptorchidism. *J Urol* 156:2054-2056, 1996.
20. Denes ED, **Barthold JS** and González R: Early prognostic value of serum creatinine levels in children with posterior urethral valves. *J Urol* 157:1441-1443, 1997.
21. Gheiler EL, **Barthold JS** and González R: Benefits of laparoscopy and the Jones technique for the nonpalpable testis. *J Urol* 158:1948-1951, 1997.
22. Duel BP, González R., **Barthold JS**: Alternative techniques for augmentation cystoplasty. *J Urol* 159:998-1005, 1998.
23. Duel BP, **Barthold JS** and González R: Management of urethral strictures after hypospadias repair. *J Urol* 160:170-171, 1998.
24. Shekarriz B, Upadhyay J, **Barthold JS** and González R: Infected calyceal diverticulum in a horseshoe kidney. *J Urol* 160:842-843, 1998.
25. Duel BP, Mogbo K, **Barthold JS**, and González R: Prognostic value of initial renal ultrasound in patients with posterior urethral valves. *J Urol* 160:1998-2000, 1998.
26. Barroso U, Duel B, **Barthold JS** and González R: Orthotopic urethral substitution in females using the Mitrofanoff principle. *J Urol* 161:251-253, 1999.
27. **Barthold JS**, Rodriguez E, Freedman AL, Fleming PA and González R: Results of the rectus fascial sling and wrap procedures for treatment of neurogenic sphincteric incontinence. *J Urol* 161:272-274, 1999.
28. Duel BP, Vates TS, Heiser D, **Barthold JS** and González R: Antegrade pyelography before pyeloplasty via dorsal lumbar incision. *J Urol* 162:174-176, 1999.

29. Vates TS, Fleming P, Leleszi JP, **Barthold JS**, González R and Perlmutter AD: Functional, social and psychosexual adjustment after vaginal reconstruction. *J Urol* 162:182-187, 1999.
30. Kryger JV, **Barthold JS**, Fleming P and González R: Outcome of artificial urinary sphincter placement after 15 years' mean follow-up in a pediatric population. *BJU Int* 83:1026, 1999.
31. Shekarriz B, Freedman A, Fleming P, **Barthold JS**, González R: Lack of morbidity of urodynamic studies in pediatric patients with asymptomatic bacteriuria. *Urology* 54:359, 1999.
32. **Barthold JS**, Kryger JV, Derusha AM, Duel BP, Jednak R, Skafar DF: Effects of an environmental endocrine disruptor on fetal development and on estrogen receptor α and epidermal growth factor receptor expression in the porcine male genital tract. *J Urol* 162:864-871, 1999.
33. Shekarriz B, Upadhyay J, Fleming P, González R, **Barthold JS**: Long-term outcome based on the initial surgical approach for extravesical ureterocele. *J Urol* 162:1072-1076, 1999.
34. **Barthold JS**, Martin-Crespo R, Kryger JV, González R: Quantitative nuclear cystography does not predict outcome in primary vesicoureteral reflux. *J Urol* 162:1193-1196, 1999.
35. Upadhyay J, Shekarriz B, Fleming P, González R, **Barthold JS**: Ureteral implantation in infancy: evaluation of long-term voiding function. *J Urol* 162:1209-1212, 1999.
36. Shekarriz B, Demirbilek S, Upadhyay J, **Barthold JS**, González R: Surgical complications of bladder augmentation: comparison between various enterocystoplasties in 133 patients. *Urology* 55:123-128, 2000.
37. Kryger JV, **Barthold JS**, González R: Surgical management of urinary incontinence in children with neurogenic sphincteric incompetence. *J Urol* 163:256-263, 2000.
38. Barroso U, Jednak R, Fleming P, **Barthold JS**, González R: Bladder calculi in children who perform clean intermittent catheterization. *BJU Int*, 85:879-84, 2000.
39. DeFilippo RE, **Barthold JS**, Gonzalez R. The application of magnetic resonance imaging for the preoperative localization of nonpalpable testis in obese children: an alternative to laparoscopy. *J Urol*, 164:154-155, 2000.
40. **Barthold JS**, Kumasi-Rivers K, Upadhyay J, Shekarriz B, Imperato-McGinley J: Testicular position in androgen insensitivity syndrome: implications for the role of androgens in testicular descent. *J Urol*, 164:497, 2000.
41. Jednak R, Barroso U, **Barthold JS**, González R: A simplified technique for upper pole heminephrectomy in duplex kidneys. *J Urol*, 164:1326-8, 2000.
42. Coplen DE, **Barthold JS**: Controversies in the management of ectopic ureterocele. *Urology*, 56:665-668, 2000.
43. Jednak R., Schimke CM, Barroso U, **Barthold JS**, Gonzalez R: Further experience with seromuscular colocolocystoplasty lined with urothelium. *J Urol*, 164:2045-2049, 2000.

44. Barroso U, Jednak R., **Barthold JS**, González R: Further experience with the double onlay preputial flap for hypospadias repair. *J Urol*, 164:998-1001, 2000.
45. Jednak R, Hernandez N, **Barthold JS**, González R: Correcting chordee without hypospadias and with deficient ventral skin: a new technique. *BJU Int*, 87:528-530, 2001.
46. Barroso U, Jednak R, **Barthold JS**, González R: A technique for constructing an umbilicus and a concealed catheterizable stoma. *BJU Int*, 87:117-120, 2001.
47. González R, DeFilippo R, Jednak R, **Barthold JS**: Urethral atresia. Long term outcome in six children that survived the neonatal period. *J Urol*, 165:2241-4, 2001.
48. Barroso U, Jednak R, **Barthold JS**, González R: Outcome of ureteral reimplantation in children with urge syndrome. *J Urol*, 166:1032-36, 2001.
49. **Barthold JS**, Gonzalez R: The epidemiology of congenital cryptorchidism, testicular ascent and orchidopexy. *J Urol*, 170:2396-2401, 2003.
50. **Barthold JS**, Manson J, Regan V, Si X, Hassink SG, Coughlin MT and Lee PA: Reproductive hormone levels in cryptorchid infants during postnatal activation of the pituitary-testicular axis. *J Urol*, 172:1736-1741, 2004.
51. **Barthold JS**: Commentary: Is adjuvant hormonal therapy indicated in cryptorchidism? *Nature Clinical Practice Urology*, 2:366-367, 2005.
52. Piaggio L, Franc-Guimond J, Figueroa TE, **Barthold JS**, Gonzalez R: Comparison of laparoscopic and open partial nephrectomy for duplication anomalies in children. *J Urol* 175:2269-2273, 2006.
53. **Barthold JS**, Si X, Stabley D, Sol-Church K, McCahan SM: Failure of shortening and inversion of the perinatal gubernaculum in the cryptorchid LE/orl rat. *J Urol*, 176:1612-1617, 2006.
54. Wang Y, **Barthold J**, Kanetsky PA, Casalunovo T, Pearson E, Manson J. Allelic variants in HOX genes in cryptorchidism. *Birth Defects Res A Clin Mol Teratol*, 79:269-75, 2007.
55. Piaggio L, Myers S, Figueroa TE, **Barthold JS**, González R: Influence of type of conduit and site of implantation on the outcome of continent catheterizable channels. *Journal of Pediatric Urology*, 2007; 3:230-234.
56. Piaggio LA, Franc-Guimond J, Noh PH, Wehry M, Figueroa TE, **Barthold J**, Gonzalez R. Transperitoneal laparoscopic pyeloplasty for primary repair of ureteropelvic junction obstruction in infants and children: comparison with open surgery. *J Urol*. 178:1579-83, 2007.
57. **Barthold JS**, McCahan SM, Singh AV, Knudsen TB, Si X, Campion L and Akins RE: Altered expression of muscle- and cytoskeleton-related genes in a rat strain with inherited cryptorchidism. *J Androl* 2008; 29:352-66. Epub 2008 Jan 24.
58. Wang Y, **Barthold J**, Figueroa E, González R, Noh PH, Wang M and Manson J: Analysis of five single nucleotide polymorphisms in the ESR1 gene in cryptorchidism. *Birth Defects Res A*

Clin Mol Teratol. 82:482-5, 2008. Epub 2008 May 1.

59. Chacko JK, Noh PS, **Barthold JS**, Figueroa TE, Gonzalez R. Iatrogenic ureteral injury after laparoscopic cholecystectomy in a 13-year-old boy. *J Pediatr Urol*. 2008 4:322-4. Epub 2008 Feb 25.
60. Johnson KJ, McCahan SM, Si X, Campion L, Herrmann R, **Barthold JS**. The orl rat with inherited cryptorchidism has increased susceptibility to the testicular effects of in utero dibutyl phthalate exposure. *Toxicol Sci*. 2008 105:360-7; Epub 2008 Jul 10.
61. Johnson KJ, Robbins AK, Wang Y, McCahan SM, Chacko JK, **Barthold JS**: INSL3 exposure of the fetal rat gubernaculum modulates expression of genes involved in neural pathways. 83:774-82, 2010. Epub 2010 Jul 14. Comment in: *Biol Reprod*. 83:687-9, 2010.
62. **Barthold JS**: Disorders of sex differentiation: a pediatric urologist's perspective of new terminology and recommendations. *J Urol*. 185:393-400, 2011.
63. **Barthold JS**, Wang Y, Reilly A, Robbins A, Figueroa TE, BaniHani A, Hagerty J and Akins RE: Reduced expression of androgen receptor and myosin heavy chain mRNA in cremaster muscle of boys with nonsyndromic cryptorchidism. *J Urol* 188:1411-6, 2012.
64. **Barthold JS**, Hossain J, Olivant-Fisher A, Reilly A, Figueroa TE, BaniHani A, Hagerty J, González R, Noh PH and Manson JM: Altered infant feeding patterns in boys with acquired nonsyndromic cryptorchidism. *Birth Defects Res A Clin Mol Teratol*, 94:900-7, 2012. PMC3501569
65. **Barthold JS**, Wang Y, Robbins A, Pike J, McDowell E, Johnson KJ, McCahan SM. Transcriptome analysis of the dihydrotestosterone-exposed fetal rat gubernaculum identifies common androgen and insulin-like 3 targets. *Biol Reprod*. 89:143, 2013.
66. Kolon TF, Anthony Herndon CD, Baker LA, Baskin LS, Baxter CG, Cheng EY, Diaz M, Lee PA, Seashore CJ, Tasian GE, **Barthold JS**. Evaluation and Treatment of Cryptorchidism: AUA Guideline. *J Urol*, 193:1637, 2014.
67. **Barthold JS**, Robbins A, Wang Y, Pugarelli J, Mateson A, Anand-Ivell R, Ivell R, McCahan SM, Akins RE: Cryptorchidism in the orl rat is associated with muscle patterning defects in the fetal gubernaculum and altered hormonal signaling. *Biol Reprod*, 91:41, 2014.
68. Rodriguez E, **Barthold JS**, Kreiger PA, Armani MH, Wang J, Michelini KA, Wolfson MR, Boyce R, Barone CA, Zhu Y, Waldman SA, Shaffer TH: The orl rat is more responsive to methacholine challenge than wild type. *Pulm Pharmacol Ther*, 29:199, 2014.
69. **Barthold JS**, Wang Y, Kolon TF, Kollin C, Nordenskjöld A, Olivant Fisher A, Figueroa TE, Bani Hani AH, Hagerty JA, Gonzalez R, Noh PH, Chiavacci RM, Harden, KR, Abrams DJ, Kim CE, Mateson AB, Robbins AK, Li J, Akins RE, Hakonarson H and Devoto M: Phenotype-specific association of the *TGFBR3* locus with nonsyndromic cryptorchidism. *J Urol*, 193:1637, 2015. Comment in: Baskin LS: This Month in Pediatric Urology. *J Urol*, 193:1457, 2015.
70. **Barthold JS**: What regulates neonatal gonocyte migration? *J Urol*, 193:1087, 2015.

71. **Barthold JS**, Wang Y, Kolon TF, Kollin C, Nordenskjöld A, Olivant Fisher A, Figueroa TE, Bani Hani AH, Hagerty JA, Gonzalez R, Noh PH, Chiavacci RM, Harden KR, Abrams DJ, Kim CE, Li J, Hakonarson H and Devoto M: Pathway analysis supports association of nonsyndromic cryptorchidism with genetic loci linked to cytoskeleton-dependent functions. *Hum Reprod*, 30:2439, 2015.
72. **Barthold JS**, Pugarelli J, MacDonald ML, Ren J, Adetunji MO, Polson SW, Mateson A, Wang Y, Sol-Church K, McCahan SM, Akins Jr, RE, Devoto M, Robbins A: Polygenic inheritance of cryptorchidism susceptibility in the LE/orl rat. *Mol Hum Reprod*, 22:18-34, 2016.
73. Robbins AK, Mateson AB, Khanda A, Pugarelli J, Buchanan T, Akins RE Jr, **Barthold JS**: Fetal rat gubernaculum mesenchymal cells adopt myogenic and myofibroblast-like phenotypes. *J Urol*, 196:270-8, 2016. Comment in: Andersson K.-E: This Month in Investigative Urology. *J Urol*, 196:5, 2016.
74. Wang Y, Li J, Kolon TF, Olivant Fisher A, Figueroa TE, Bani Hani AH, Hagerty JA, Gonzalez R, Noh PH, Chiavacci RM, Harden KR, Abrams DJ, Stabley D, Kim CE, Sol-Church K, Hakonarson H, Devoto M, **Barthold JS**. Genomic copy number variation association study in Caucasian patients with nonsyndromic cryptorchidism. *BMC Urol*, 16:62, 2016.
75. Sathyanarayana S, Grady R, Barrett ES, Redmon B, Nguyen RHN, **Barthold JS**, Bush NR and Swan SH: First trimester phthalate exposure and male newborn genital anomalies. *Environ Res*, 151:777-82, 2016.
76. Wang Y, Gray DR, Robbins AK, Crowgey EL, Chanock SJ, Greene MH, McGlynn K, Nathanson K, Turnbull C, Wang Z, Devoto M and **Barthold JS** for the Testicular Cancer Consortium: Subphenotype meta-analysis of testicular cancer genome-wide association study (GWAS) data suggests a role for RBFOX family genes in cryptorchidism susceptibility. *Hum Reprod*, 33:967, 2018.
77. **Barthold JS**, Wintner A, Hagerty JA and Hossain MJ: Cryptorchidism in boys with cerebral palsy is associated with the severity of disease and co-occurrence of other congenital anomalies. *Front Endocrinol*, 9:151, 2018.
78. **Barthold JS** and Ivell R: Perspective: A systems approach to understanding the complexity of cryptorchidism susceptibility. *Front Endocrinol*, 9:401, 2018.
79. Morgan JT, Robbins AK, Mateson AB, Sawamoto K, Tomatsu S, Gray DR, Gleghorn JP, **Barthold JS**: Regional variation in androgen receptor expression and biomechanical properties may contribute to cryptorchidism susceptibility in the LE/orl rat. *Front Endocrinol*, 9:738, 2018.

Non-Peer Reviewed Publications

Chapters and Review Articles

1. **Spencer JR** and Schaeffer AJ: Pediatric urinary tract infections. *Urol Clin North Am*, 13:661-672, 1986.

2. **Spencer JR** and O'Connor VJ, Jr.: Comparison of procedures for stress urinary incontinence. AUA Update Series, Vol. VI, Lesson 28, 1987.
3. **Spencer JR** and Filmer RB: Malignancy associated with urinary tract reconstruction using enteric segments. *Cancer Treatment and Research*, 59:75-87, 1992.
4. **Spencer JR** (Guest Editor): Mechanisms of testicular descent. *Dial Ped Urol*, Jan. 1992.
5. **Spencer JR** and Filmer RB: Malignant potential of lower urinary tract reconstruction using bowel. AUA Update Series, Vol. XII, Lesson 38, 1993.
6. **Spencer JR**: The endocrinology of testicular descent. AUA Update Series, Vol. XIII, Lesson 12, 1994.
7. **Barthold JS**: Cryptorchidism. Campbell's Urology, Update #11. P.C. Walsh, A.B. Retik, T.A. Stamey and E.D. Vaughan, Jr (Eds), Philadelphia: WB Saunders, 1994.
8. Filmer RB and **Spencer JR**: Malignant potential in urinary diversions. In: Pediatric Urology (3rd Edition). B. O'Donnell and S.A. Koff (Eds), Oxford: Butterworth/Heinemann, 1997.
9. **Barthold JS** and Redman JF: Congenital abnormalities of the testis and scrotum. In: Textbook of Genito-Urinary Surgery. H. Whitfield, W.F. Hendry, R. Kirby and J. Duckett (Eds), Oxford: Blackwell Science, 1998.
10. Redman JF, **Barthold JS**: The Barcat balanic groove technique for the repair of distal hypospadias. In: Reconstructive and Plastic Surgery of the External Genitalia: Adult and Pediatric. RM Ehrlich and GJ Alter (Eds), Philadelphia:WB Saunders, 1999.
11. **Barthold JS**, González, R: Intersex States. In: Pediatric Urology Practice. E Gonzales and S Bauer (Eds), Philadelphia: Lippincott Williams and Wilkins, 1999.
12. González R, **Barthold JS**: Urogenital Sinus and Cloacal Anomalies. In: Pediatric Urology Practice. E Gonzales and S Bauer (Eds), Philadelphia: Lippincott Williams & Wilkins, 1999.
13. **Barthold JS**, Kass EJ: Abnormalities of the Penis and Scrotum. In: Clinical Pediatric Urology, 4th Edition. LR King, AB Belman and SA Kramer (Eds), London: Martin Dunitz, 2001.
14. **Barthold JS**, Aaronson I (Guest Editors): Intersex: Gender identification, outcomes and controversies, Parts I and II. *Dial Pediatr Urol*, June/July 2002.
15. **Barthold JS**: Undescended Testis. In: Surgical Directives: Pediatric Surgery. P. Mattei (Ed), Philadelphia: Lippincott Williams & Wilkins, 2003.
16. **Barthold JS**: Is adjuvant hormonal therapy indicated in cryptorchidism? *Nat Clin Pract Urol*, 2:366-367, 2005.
17. **Barthold JS**: Basic Science of the Testis. In: Docimo SG, Canning DA, Khoury AE, eds. Clinical Pediatric Urology, 5th Edition. Informa, London, 2007;1127-1138.
18. MacDonald MF, **Barthold JS**, Kass EJ. Abnormalities of the penis and scrotum. In: Docimo

- SG, Canning DA, Khoury AE, eds. Clinical Pediatric Urology, 5th Edition. Informa, London, 2007;1239-1270.
19. Hauser R, **Barthold JS**, Meeker JD. Epidemiologic evidence on the relationship between environmental endocrine disruptors and male reproductive and developmental health. In: Gore AC, ed. Endocrine-disrupting Chemicals: From Basic Research to Clinical Practice. Humana Press, Totowa, NJ. 2007;225-252.
 20. **Barthold JS**: Undescended testis: current theories of etiology. *Curr Opin Urol*, 18:395, 2008.
 21. Chacko J and **Barthold JS**: Genetic and environmental contributors to cryptorchidism. *Pediatr Endocrinol Rev*. 2009 6:476-80.
 22. **Barthold JS**: Urologic Surgical Diseases of the Newborn. In: Gomella TL, Cunningham MD, Eyal FG, eds. Neonatology: Management, Procedures, On Call Problems, Diseases and Drugs. Lange Clinical Science, 2009.
 23. Metzdorf MM and **Barthold JS**: Torsion: Testis and Testicular Appendages. In: Gomella LG, ed. The 5 Minute Urology Consult, Lippincott Williams and Wilkins, Philadelphia, 2010, 452-3.
 24. Metzdorf MM and **Barthold JS**: Pediatric Sexual Abuse. In: Gomella LG, ed. The 5 Minute Urology Consult, Lippincott Williams and Wilkins, Philadelphia, 2010, 206-7.
 25. Metzdorf MM and **Barthold JS**: Ureterocele. In: Gomella LG, ed. The 5 Minute Urology Consult, Lippincott Williams and Wilkins, Philadelphia, 2010, 480-1.
 26. Ashley RA, **Barthold JS**, Kolon TF: Cryptorchidism: pathogenesis, diagnosis, treatment and prognosis. *Urol Clin North Am*. 37:183-93, 2010.
 27. **Barthold JS**: Abnormalities of the Testis and Scrotum and their Surgical Management. In: Wein AJ, Kavoussi LR, Novick AC, Partin AW and Peters CA (eds): Campbell's Urology (10th Edition), Philadelphia, Elsevier, 2011.
 28. **Barthold JS**: Cryptorchidism. AUA Update Series, American Urological Association, 2011.
 29. **Barthold JS** and Hagerty JA: Etiology, Diagnosis and Management of the Undescended Testis. In: Wein AJ, Kavoussi LR, Novick AC, Partin AW and Peters CA (Eds): Campbell-Walsh Urology (11th Edition). Philadelphia, Elsevier, 2015.
 30. **Barthold JS**, Reinhardt S and Thorup J: Genetic, maternal and environmental risk factors for cryptorchidism: an update. *Eur J Pediatr Surg*, 26:399-408, 2016.
 31. **Barthold JS**: Basic Science of the Testis. In: Docimo SG, Canning DA, Khoury AE, eds. Clinical Pediatric Urology (6th Edition). Informa, London, 2018.
 32. **Barthold JS** and Hagerty JA: Undescended testis in boys with cerebral palsy. In: Miller F, Bachrach S, Lennon N and O'Neil M: Cerebral Palsy. Springer, 2018.
 33. **Barthold JS** and Hagerty JA: Etiology, Diagnosis and Management of the Undescended Testis. In: Wein AJ, Kavoussi LR, Novick AC, Partin AW and Peters CA (Eds): Campbell-

Editorial Material

1. **Barthold JS**: Editorial comment. J Urol, 158:1195, 1997.
2. **Barthold, JS**: Editorial: Individualized approach to the prenatally diagnosed ureterocele. J Urol, 159:1011-1012, 1998.
3. **Barthold JS**: Letter: re: Editorial: Testicular descent - a proposed interaction between Müllerian inhibiting substance and epidermal growth factor. J Urol, 160:1438-1440, 1998.
4. Gonzalez R, **Barthold JS**: Letter to the editor. Proximal hypospadias. Eur Urol, 41:575, 2002.
5. **Barthold JS**: Editorial Comment, re: Genomic Variants of ATF3 in Patients With Hypospadias. J Urol, 2008.
6. **Barthold JS** and Ivell R (co-editors): *Cryptorchidism: Causes and Consequences*. Front Endocrinology, 2018.

Abstracts/Presentations

1. Inhibition of Protein Glycosylation Causes Renal Dysplasia. **JR Spencer** and M Maizels, American Academy of Pediatrics (AAP), Section on Urology Annual Meeting, Washington, D.C., 1986; North Central Section, American Urological Association (AUA), Palm Springs, 1986; AUA Annual Meeting, Anaheim, 1987.
2. Long Term Results of Endoscopic Suspension of the Vesical Neck and Suprapubic Vesicourethropexy for the Treatment of Stress Urinary Incontinence. **JR Spencer**, VJ O'Connor, Jr. and A.J. Schaeffer, North Central Section, AUA, Palm Springs, 1986.
3. Detrusorrhaphy for the Megaureter. AH Chaviano, **JR Spencer**, MR Zaontz and M Maizels, North Central Section, AUA, Palm Springs, 1986.
4. Metastatic Renal Tumor Presenting as Clear Cell Carcinoma: Difficulty in Diagnosis. **JR Spencer**, BL Erikson and JE Garnett, North Central Section, AUA, Detroit, 1987.
5. The Sting: Postoperative Evaluation for Granuloma Formation in the Pediatric Patient. **JR Spencer**, JS Donaldson, MR Zaontz and WE Kaplan, AUA Annual Meeting, Abstract #93, Boston, 1988.
6. Sleeve Advancement Urethroplasty for Distal Hypospadias. **JR Spencer** and AD Perlmutter, American Academy of Pediatrics (AAP), Section on Urology Annual Meeting, Chicago, 1989.
7. Quantitation of Native and Disaggregated Tamm-Horsfall Protein in Children With and Without Urinary Tract Infections. **JR Spencer**, HH Reinhart and JD Sobel, AUA Annual Meeting, Abstract #426, New Orleans, 1990.
8. Failure of Complete Feminization of the External Genitalia and Abolition of Prostate Differentiation in Adult Male Rats Treated in Utero with the 5 α -Reductase Inhibitor MK906 -

- Comparison with the Antiandrogen Flutamide. J Imperato-McGinley, RS Sanchez, **JR Spencer** and ED Vaughan, Jr., The Endocrine Society, Abstract #1445, Atlanta, 1990.
9. The Role of Androgens in Testicular Descent in the Rat. **JR Spencer**, RS Sanchez, ED Vaughan, Jr. and J Imperato-McGinley, AAP Section on Urology Annual Meeting, Boston, 1990.
 10. The Fate of Long Term Enterocystoplasty in the Rat. **JR Spencer**, M May, K Hernandez, D Marion and ED Vaughan, Jr., AUA Annual Meeting, Abstract #869, Washington, D.C., 1992.
 11. Cremaster Motoneurons of Sprague-Dawley Rats Lack Calcitonin Gene-Related Peptide Immunoreactivity During Perinatal Ontogeny and Resist Its Up-Regulation in Adulthood. BW Newton and **JR Spencer**, AAP Section on Urology Annual Meeting, Washington D.C., 1993.
 12. Lack of Feminization of the Cremaster Motor Nucleus in Cryptorchid Androgen-Resistant (*Tfm*) Rats. **JS Barthold**, YM Vega, HR Mahler, BW Newton, AAP Section on Urology Annual Meeting, Dallas, 1994.
 13. Lack of Feminization of the Cremaster Nucleus by Prenatal Flutamide in the Pig and Rat. **JS Barthold**, BW Newton, HR Mahler, T J Sziszak, AAP Section on Urology Annual Meeting, San Francisco, 1995.
 14. Association of Epididymal Anomalies with Patent Processus Vaginalis in Hernia, Hydrocele and Cryptorchidism. **JS Barthold**, JF Redman, AAP Section on Urology Annual Meeting, San Francisco, 1995.
 15. Characterization of the Sexually Dimorphic Pig Cremaster Nucleus: Partial Androgen Insensitivity as Revealed by Flutamide Treatment. BW Newton, **JS Barthold**, HR Mahler, T J Sziszak, Society for Neuroscience, San Diego, 1995.
 16. Practice Patterns of Primary Care Physicians in the Evaluation of Pediatric Urinary Tract Infections and Vesicoureteral Reflux. TS Vates, O Suzer, **JS Barthold**, AL Freedman, CA Smith, R R González. AAP Section on Urology Annual Meeting, Boston, 1996.
 17. Laparoscopy for the Impalpable Testis: A Case for the Jones Approach. EL Gheiler, O Suzer, TS Vates, AL Freedman, CA Smith, **JS Barthold**, R González. AAP Section on Urology Annual Meeting, Boston, 1996.
 18. Use of a Modified Bladder Neck Fascial Cinch for the Treatment of Neurogenic Sphincteric Incompetence. E Rodriguez, AL Freedman, **JS Barthold**, CA Smith and R González. AUA Annual Meeting, New Orleans, 1997.
 19. Functional, Social and Psychosexual Adjustment After Vaginal Reconstruction. TS Vates, P Fleming, JP Leleszi, **JS Barthold**, R González and AD Perlmutter. AAP Section on Urology Annual Meeting, New Orleans, 1997.
 20. Prognostic Value of Initial Renal Ultrasound in Patients with Posterior Urethral Valves. BP Duel, K Mogbo, **JS Barthold** and R González. AAP Section on Urology Annual Meeting, New Orleans, 1997.

21. Decreasing Revision Rate for Artificial Urinary Sphincters with Longer Follow-up. JV Kryger, **JS Barthold**, P Fleming, R González. European Society for Paediatric Urology, Salzburg, 1998.
22. Simplified Technique for the Excision of the Duplicated Upper Pole. R González, C O'Connor, JV Kryger, **JS Barthold**. European Society for Paediatric Urology, Salzburg, 1998.
23. 2,3,7,8-Tetrachlorodibenzo- ρ -dioxin Exposure Produces Developmental Anomalies and Downregulates ER α mRNA and Protein in the Reproductive Tract of the Male Porcine Fetus. JY Kryger, HA Moore, DF Skafar and **JS Barthold**, The Endocrine Society, New Orleans, 1998.
24. The Significance of Asymptomatic Bacteriuria for Urodynamic Studies in Children. B Shekarriz, A Freedman, P Fleming, **JS Barthold**, R González. AUA Annual Meeting, San Diego, 1998.
25. Total Urogenital Mobilization (TUM): Expanded Applications. B Ludwikowski, I Oesch Hayward, **JS Barthold**, R González. AUA Annual Meeting, San Diego, 1998.
26. Comparison of Doppler Ultrasonography and Surgical Findings in Children with Acute Scrotal Disease. J Javidan, R González, **JS Barthold**. AAP Section on Urology Annual Meeting, San Francisco, 1998.
27. Ureteral Reimplantation in Infancy: Evaluation of Long Term Voiding Function. J Upadhyay, B Shekarriz, P Fleming, R González, **JS Barthold**. AAP Section on Urology Annual Meeting, San Francisco, 1998.
28. Quantitative Nuclear Cystography Does Not Predict Outcome in Primary Vesicoureteral Reflux. JV Kryger, **JS Barthold**, R González, R Martin Crespo. AAP Section on Urology Annual Meeting, San Francisco, 1998.
29. Long Term Outcome Based on the Initial Surgical Approach for Extravesical Ureteroceles. B Shekarriz, J Upadhyay, P Fleming, R González, **JS Barthold**. AAP Section on Urology Annual Meeting, San Francisco, 1998.
30. Effects of an Environmental Endocrine Disruptor on Fetal Development and Estrogen Receptor Expression in the Male Genital Tract. JV Kryger, BP Duel, HA Moore, DF Skafar, **JS Barthold**. AAP Section on Urology Annual Meeting, San Francisco, 1998.
31. Outcomes of Ureteral Reimplantation in Children with Dysfunctional Voiding. U Barroso, R Jednak, **JS Barthold**, R González. European Society for Paediatric Urology, Istanbul, and AUA Annual Meeting, Dallas, 1999.
32. Bladder Calculi in Children who Perform Clean Intermittent Catheterization. U Barroso, R Jednak, P Fleming, **JS Barthold**, R González. European Society for Paediatric Urology, Istanbul, and AUA Annual Meeting, Dallas, 1999.
33. Further Experience with Seromuscular Colocystoplasty Lined with Urolthelium (SCLU). U Barroso, R Jednak, **JS Barthold**, R González. European Society for Paediatric Urology, Istanbul, and AUA Annual Meeting, Dallas, 1999.

34. Double Onlay Preputial Flap for Hypospadias Repair: Experience with a New Technique in 46 Patients. R Jednak, U Barroso, **JS Barthold**, R González. AAP Section on Urology Annual Meeting, Washington D.C., 1999.
35. The Natural History of Urethral Atresia: A Report on the Clinical Outcome and Long-Term Follow-up of Six Patients who Survived Infancy. RE deFilippo, R Jednak, V Narain, **JS Barthold** and R González. European Society for Pediatric Urology, Tours, France, 2000.
36. Correction of Chordee Without Hypospadias with Deficient Ventral Skin: A New Technique. R González, N Hernandez, R Jednak, **JS Barthold**. European Society for Pediatric Urology, Tours, France, 2000.
37. The Insulin-3 (INSL3) Gene: Lack of a Genetic Basis for Human Cryptorchidism. MT Nguyen, S Nef, LF Parada, LA Baker, H Pohl, **JS Barthold**. AUA Annual Meeting, Anaheim, 2001.
38. Further Experience with Seromuscular Colocystoplasty Lined with Urothelium (SCLU). R. Jednak, CM Schimke, U Baroso Jr, **JS Barthold**, R González. Canadian Urological Association, Toronto, 2001.
39. Hormone Levels in Infants with Cryptorchidism. **JS Barthold**, G Regan, X Si, J Manson, P Lee. AAP Section on Urology Annual Meeting, New Orleans, 2003.
40. Success of the Catheterizable Channels Implanted into Intestinal Segments. J Franc-Guimond, **JS Barthold**, T. Figueroa, R. Gonzalez, C. Schimke. European Society for Pediatric Urology, Regensburg; AUA Annual Meeting, San Francisco, 2004.
41. Genome-Wide Linkage Analysis Reveals Two Susceptibility Loci Associated with Cryptorchidism in the LE/orl Rat. **JS Barthold**, X Si, M Devoto. AAP Section on Urology Annual Meeting/European Society of Pediatric Urology, Uppsala, 2005.
42. Failure of Shortening and Inversion of the Perinatal Gubernaculum in the Cryptorchid LE/Orl Rat. **JS Barthold**, X Si, K Sol-Church. AAP Section on Urology Annual Meeting/European Society of Pediatric Urology, Uppsala, 2005.
43. Increased Susceptibility Of Spontaneously Cryptorchid Rats To The Inhibitory Effects Of Di-N-Butyl Phthalate. **JS Barthold**, SM McCahan, X Si and JM Manson, Gordon Conference on Environmental Endocrine Disruptors, Lucca, Italy, June 2006.
44. Transperitoneal Laparoscopic Pyeloplasty in Infants and Children. Any Benefit? Comparison with a Cohort of Open Pyeloplasty. LA Piaggio, PH Noh, TE Figueroa, **JS Barthold**, R Gonzalez. AAP Section on Urology Annual Meeting, Atlanta, Oct 2006.
45. Allelic Variants in Hox Genes in Cryptorchidism. Y Wang, **JS Barthold**, PA Kanetsky, T Casalunovo, E Pearson, J Manson. AAP Section on Urology Annual Meeting, Atlanta, Oct 2006.
46. A Gene-Environment Model of Cryptorchidism in the Rat. **JS Barthold**, American Association of Pediatric Urologists (AAPU) Annual Meeting, Steamboat, CO, Jan 2007.
47. Testicular Cysts in Infancy. **JS Barthold**, AAPU Annual Meeting, Steamboat, CO, Jan 2007.

48. Altered Expression of Muscle- and Cytoskeleton-Related genes in a Rat Strain with Inherited Cryptorchidism. **JS Barthold**, SM McCahan, A Singh, T Knudsen, X Si, L Campion and R E Akins. AAP Section on Urology Annual Meeting, San Francisco, Oct 2007.
49. The Estrogen Receptor Beta (ER β) Gene Is Associated with Cryptorchidism in Rat and Man. **JS Barthold**, Kamin Johnson, Suzanne McCahan, Yanping Wang, Alan Robbins, Katia Sol-Church and Marcella Devoto. AAP Section on Urology, Washington DC, Oct 2009.
50. Hormonal Regulation of Gene Expression in the Fetal Rat Gubernaculum. **JS Barthold**, Job Chacko, Alan Robbins, Yanping Wang, Suzanne McCahan and Kamin Johnson. AAP Section on Urology Annual Meeting, San Francisco, Oct 2009.
51. The Utility of Uroflowmetry in Long-Term Follow Up for Distal Hypospadias Repair, RA Ashley, JC Routh, AH Bani-Hani, **JS Barthold**, TE Figueroa, World Congress of Pediatric Urology/AUA Annual Meeting, San Francisco, May 2010.
52. Cryptorchidism in the Long-Evans ORL Rat: Is Delay Causing Disarray? JM Hutson, A Asairinachan, S Buraundi, A Balic, B Southwell and **JS Barthold**, AAP Section on Urology Annual Meeting, San Francisco, Oct 2010.
53. Urologic Impact of Intrathecal Baclofen Therapy. RA Ashley, JC Routh, AH Bani-Hani, **JS Barthold**, TE Figueroa, AAP Section on Urology Annual Meeting, San Francisco, Oct 2010.
54. Maternal, Familial and Postnatal Risk Factors Associated with Nonsyndromic Cryptorchidism. **JS Barthold**, A Reilly, TE Figueroa, A BaniHani, P Noh, R Gonzalez and JM Manson. AUA Annual Meeting, May 2011.
55. Genetic Basis of Cryptorchidism, **JS Barthold**, 8th Annual NICHD Structural Birth Defects Meeting, Rockville, MD, Aug 2011.
56. Reduced Expression of Cremasteric Androgen Receptor mRNA In Boys with Cryptorchidism. **JS Barthold**, A Reilly, A Robbins, TE Figueroa, A BaniHani, J Hagerty and Y Wang. AAP Section on Urology Annual Meeting, Boston, Oct 2011.
57. A Susceptibility Locus for Cryptorchidism in the ORL Rat is Associated with Altered Levels of Muscle- and Hormone Receptor-Specific Transcripts in Fetal Gubernaculum and Cremaster. **JS Barthold**, A Robbins, Y Wang, J Pugarelli and RE Akins. AAP Section on Urology Annual Meeting, New Orleans, Oct 2012.
58. Transcriptome Analysis of the Fetal Gubernaculum Following DHT Exposure Identifies Common Androgen and Insulin-Like 3 Targets. **JS Barthold**, Y Wang, A Robbins, J Pike, E McDowell, KJ Johnson and SM McCahan. AAP Section on Urology Annual Meeting, New Orleans, Oct 2012.
59. Defining Risk Alleles for Nonsyndromic Cryptorchidism in Man and Rat. **JS Barthold**, 9th Annual NICHD Structural Birth Defects Meeting, Rockville, MD, Apr 2013.
60. Novel Rat Gubernaculum Cell Lines: Towards Development of an In Vitro Model of cryptorchidism. A Robbins, RE Akins, J Pugarelli, AF Mateson, K Robinson, Y Wang and **JS Barthold**. 5th Biennial Northeast Regional IDeA Conference, Newark DE, Aug 2013.

61. AUA Guideline: Cryptorchidism. **JS Barthold**. Plenary Session, AUA Annual Meeting, Orlando FL, May 2014.
62. Genetic Basis of Nonsyndromic Cryptorchidism. **JS Barthold**, 10th Annual NICHD Structural Birth Defects Meeting, Rockville MD, Dec 2014.
63. Pathway Analysis Supports Association of Nonsyndromic Cryptorchidism with Genetic Loci Linked to Cytoskeleton-Dependent Functions. **Barthold JS**, Wang Y, Kolon TF, Kollin C, Nordenskjöld A, Olivant Fisher A, Figueroa TE, BaniHani AH, Hagerty JA, Gonzalez R, Noh PH, Chiavacci RM, Harden KR, Abrams DJ, Kim CE, Li J, Hakonarson H and Devoto M. 26th ESPU Congress, Prague, Czech Republic, Oct 2015.
64. Does Varicocele Repair Improve Total Motile Sperm Count (TMSC) in Adolescents? A Pilot Study. Shah MS, **Barthold JS**, Xie L and Bani Hani AH. Society for Pediatric Urology, San Diego, May 2016.
65. Subphenotype Meta-Analysis of Testicular Cancer Genome-Wide Association Study (GWAS) Data Suggests a Potential Role for Fox Family RNA-Binding Proteins in Cryptorchidism Susceptibility. Wang Y, Gray DR, Robbins AK, Crowgey EL, Nathanson K, McGlynn K, Turnbull C, Wang Z, Chanock SJ, Devoto M and **Barthold JS** for the Testicular Cancer Consortium. Pediatric Urology Fall Congress, Societies for Pediatric Urology, Montreal, Sept 2017.

Invited Lectures

1. The Stamey Procedure for Stress Urinary Incontinence. Chicago Urological Society, 1987.
2. Testicular Function: Fetus, Infant, Child. Society for Pediatric Urology, Toronto, 1991.
3. Hormonal Research: New Directions. Society for Pediatric Urology, Toronto, 1991.
4. Hormone Actions on the Central and Peripheral Innervations of the Reproductive Tract. BW Newton, JS Barthold, Workshop on Steroid Hormones and Brain Function, Breckenridge, Colorado, 1995.
5. 2,3,7,8-Tetrachlorodibenzo-p-dioxin Causes Cryptorchidism in the Fetal Pig: A Preliminary Report. International Congress on Pediatric Andrology, Philadelphia, 1995.
6. Cryptorchidism: Current Concepts. Michigan Urological Society, 1998.
7. Ureteroceles: The Argument for Excision. Society for Fetal Urology, Washington D.C., 1999.
8. Current Management of the Child with Ambiguous Genitalia. Pediatric Grand Rounds, Alfred I. duPont Hospital for Children, Wilmington, DE, Dec 1999.
9. Common Genital Problems in Pediatric Urology. Pediatric/Neonatal Grand Rounds, Christiana Hospital, Newark, DE, Apr 2000.
10. Management of Ambiguous Genitalia. Pediatric Grand Rounds, Milton S. Hershey Medical

- Center, Penn State University, Hershey, PA, June 2000.
11. Common Genital Problems in Pediatric Urology. Family Practice Noon Conference, Montgomery Hospital, Norristown, PA, Nov 2000.
 12. Pediatric Urology Emergencies. Emergency Room Department Conference, A.I. duPont Hospital for Children, Wilmington, DE, Dec 2000.
 13. Common Problems in Pediatric Urology, Kent General Hospital Physician Seminar, Milford, DE, Jan 2001.
 14. Hormone Status of Infants with Cryptorchidism. Pediatric/Neonatal Grand Rounds, Christiana Hospital, Newark, DE, Dec 2001.
 15. Intersex and Gender Assignment in the Newborn. Pediatric Grand Rounds, Thomas Jefferson University/Jefferson Medical College, Jan 2002.
 16. Mechanisms of Normal and Abnormal Testicular Descent. Developmental Biology and Teratology Seminar Series, Dept. of Pathology, Anatomy and Cell Biology, Jefferson Medical College, Sept 2002.
 17. Acute Genital Problems, Kent General Hospital Physician Seminar, Milford DE, May 2003.
 18. Common Genitourinary Abnormalities, Pediatric Kaleidoscope, A.I. duPont Hospital for Children, May 2003.
 19. Undescended Testis, Pediatric Urology Panel, AUA Mid-Atlantic Section Annual Meeting, Cambridge, MD, Oct 2004.
 20. Cryptorchidism, Christiana Neonatal Grand Rounds, Jan 2005.
 21. Intersex and Gender Assignment, Neonatal Fellowship Physiology Lecture Series, Jefferson Medical College, Apr 2005.
 22. Genes, Hormones, Environment: Contributing Factors to Nonsyndromic Cryptorchidism. Spotlight on Nemours Research, Mar 2006.
 23. Genes, Hormones, Environment: Contributing Factors to Nonsyndromic Cryptorchidism. Center of Excellence in Environmental Toxicology, University of Pennsylvania, May 2006.
 24. Cryptorchidism: Update 2007. Neonatology Grand Rounds, Christiana Hospital, Apr 2007.
 25. Disorders of Sexual Differentiation. Neonatology Grand Rounds, Thomas Jefferson University Hospital, May 2007.
 26. Pathogenesis of the Undescended and Ascending Testis. AAP Section on Urology Annual Meeting, San Francisco, Oct 2007.
 27. UTI and GU Reflux: Diagnosis, Workup, Treatment and Prevention. Warren Seminar, duPont Hospital for Children, Nov 2008.

28. Genetic and Environmental Factors in Cryptorchidism Susceptibility. Visiting Professor, Hôpital St. Justine, Montreal, Canada, Feb 2009.
29. Newer Concepts and Controversies in the Diagnosis and Treatment of Vesicoureteral Reflux. Visiting Professor, Hôpital St. Justine, Montreal, Canada, Feb 2009.
30. New Concepts in Pediatric VUR and UTI. Perspectives in Pediatrics. Nemours/Bryn Mawr Hospital Health Center, Oct 2009.
31. Cryptorchidism Update 2009. Neonatology Grand Rounds, Christiana Care, Dec 2009.
32. Cryptorchidism Update 2010. Pediatrics CME Lecture, Bryn Mawr Hospital, Sept 2010.
33. Strategies for Candidate Gene Discovery in Nonsyndromic Cryptorchidism. Genes, Genomes, and Pediatric Disease Seminar, Children's Hospital of Philadelphia/University of Pennsylvania, May 2012.
34. Genetic Basis of Cryptorchidism in Human and Animal Models. Seattle Children's Hospital, Dec 2012.
35. Disorders of Sex Differentiation (DSD): A Pediatric Urologist's Perspective. Seattle Children's Hospital, Dec 2012.
36. Evaluation and Treatment of Cryptorchidism: AUA Guideline. AUA Annual Meeting, Plenary Session and Educational Course, Orlando FL, May 2014.
37. Cryptorchidism Susceptibility in Pediatric Patients and in Animal Models. Teratology Society Annual Meeting: Testicular Dysgenesis Syndrome Symposium, Bellevue WA, July 2014.
38. Genetic Basis of Cryptorchidism. Thomas Jefferson University Avalon Urology Symposium, Avalon NJ, Sept 2014.
39. Genetic Basis of Nonsyndromic Cryptorchidism, NIH Structural Birth Defects Meeting, Dec 2014.
40. Validation of Cryptorchidism Risk Loci. Julia Barthold, Marcella Devoto, Nandita Mitra and Katherine Nathanson. Testicular Cancer Consortium (TECAC) Annual Meeting, University of Pennsylvania, Apr 2015.
41. Tools for Studying the Genetics of a Complex Disease. Innovative Discovery Series, DE-CTR ACCEL Program, June 2016.
42. Cryptorchidism: Diagnosis, Treatment and Sequelae. Visiting Professor, Department of Urology, Brown University, Providence RI, Feb 2017.
43. Developmental Mechanisms of Undescended Testis. Pediatric Research Colloquium, Women and Infants Hospital, Brown University, Providence RI, Feb 2017.
44. Genetic and Environmental Factors and Cryptorchidism Susceptibility. Keynote Speaker, 27th Annual McGill Urology Research Day, Montreal Canada, Apr 2017.

45. Androgen Receptor Signaling in Cryptorchidism. Invited Speaker, Department of Pharmacology & Therapeutics, McGill University, Montreal Canada, Apr 2017.

Moderator/Scientific Sessions

1. Testis. AAP Section on Urology Annual Meeting, New Orleans, 1991.
2. Basic Science Posters. AAP Section on Urology Annual Meeting, Washington, D.C., 1993.
3. Andrology. AAP Section on Urology Annual Meeting, San Francisco, 1995.
4. Basic Science Posters. AAP Section on Urology Annual Meeting, New Orleans, 1997.
5. Basic Science Posters. AAP Section on Urology Annual Meeting, San Francisco, 1998.
6. Hypospadias/Intersex. AAP Section on Urology Annual Meeting, Chicago, 2000.
7. Pediatrics IV Poster Session. AUA Annual Meeting, Anaheim, 2001.
8. AUA Mid-Atlantic Section Annual Meeting, Boca Raton, 2003.
9. Intersex. AAP Section on Urology Annual Meeting, New Orleans, 2003.
10. Testis. AAP Section on Urology Annual Meeting/European Society of Pediatric Urology, Uppsala, 2005.
11. Testis. AAP Section on Urology Annual Meeting, San Francisco, 2007.
12. Testis. AAP Section on Urology Annual Meeting, Boston, 2008.
13. Laparoscopy for the Non-Palpable Testis. Plenary Session, AAP Section on Urology Annual Meeting, Chicago, 2009.
14. Endocrine. AAP Section on Urology Annual Meeting, Washington, DC, 2009.
15. Testis. World Congress of Pediatric Urology, San Francisco, 2010.
16. Cryptorchidism and Pediatric Andrology. AAP Section on Urology Annual Meeting, San Francisco, 2011.
17. Testis and Varicocele. Pediatric Urology Fall Congress, Miami, 2014.
18. Testis/Andrology. Pediatric Urology Fall Congress, Dallas, 2016.
19. Pediatrics: Testis, Varicocele & Stones. AUA Annual Meeting, Boston, 2017.
20. Testis, Varicocele & Stones. Societies for Pediatric Urology Fall Congress, Montreal, 2017.