

**E. Candidate CV**

**BIOGRAPHICAL**

**Home Address & Telephone**

619 N. Segoe Rd. Apt 301  
 Madison, WI 53705  
 Mobile: (317) 987-4484  
 Email: [bhatia@urology.wisc.edu](mailto:bhatia@urology.wisc.edu)

**Work Address & Telephone**

1685 Highland Ave  
 Madison, WI 53705  
 Office: (608) 265-2226  
 Fax: 608.262.6453

**EDUCATION AND TRAINING**

<i>Degree</i>	<i>Institution City, State</i>	<i>Dates Attended</i>	<i>Year Completed</i>
BS Mathematics with Honors	Loyola University of Chicago Chicago, IL	8/2006 – 5/2010	2010
Minor Bioethics	Loyola University of Chicago Chicago, IL	8/2006 – 5/2010	2010
MD	Loyola University of Chicago Stritch School of Medicine Chicago, IL	7/2010 – 5/2014	2014

**Post-doctoral training:**

<i>Title, Department</i>	<i>Institution City, State</i>	<i>Dates</i>
PGY 1, General Surgery	Department of General Surgery Zucker School of Medicine at Hofstra/Northwell	6/2014 – 6/2015
PGY 2-4, Urology	Smith Institute for Urology Zucker School of Medicine at Hofstra/Northwell	6/2015 – 6/2019
Fellowship, Pediatric Urology	Texas Children’s Hospital at Baylor College of Medicine	7/2019 – 7/2021
Certificate of Added Qualification in Clinical Science	Baylor College of Medicine Houston, TX	7/2019 – 7/2020

**CERTIFICATION AND LICENSURE**

State of Wisconsin Medical License: 75203-20      Issued: October 31 2021      Expires: Oct 31 2023  
 Drug Enforcement Agency: FB0572809      Issued: July 19 2021      Expires: July 31 2024  
 National Provider Identification: 1538589064      Issued: April 23 2014

American Board of Urology: 21534 – Board Eligible  
 Written Board Exam Passed July 11, 2019      Oral Board Exam Date TBA April 2023

**MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES**

American Urological Association	2014 – present
Society for Pediatric Urology	2022 – present
American Association of Pediatric Urologists	2021 – present

**HONORS AND AWARDS**

Texas Pediatric Society Foundation Grant	2020 -21
North American Robotic Urology Symposium Travel Award	2020
Winner – The Great Debate (American Urological Association)	2019
Winner—New York Section, Chief Resident Debate	2019
Best Video – Endourology Session (American Urologic Association)	2017
Honors in Research with Distinction (Loyola University – Stritch School of Medicine)	2014
Loyola University Summa Cum Laude	2010
Honors in Mathematics Major (Loyola University of Chicago)	2010
Mulcahy Scholar’s Research Grant (Loyola University of Chicago)	2009
Dean’s List (Loyola University of Chicago)	2007 -10

**TEACHING & RESEARCH:**

Director of Medical Student Programs for Urology, University of Wisconsin School of Medicine & Public Health Department of Urology	2022 - present
Assistant Professor, University of Wisconsin School of Medicine & Public Health Department of Urology	2021 – present
Research Fellow, Texas Children’s Hospital at Baylor College of Medicine	2019 – 2020
Summer Research Intern, Indiana University Department of Neonatology	2008

**SERVICE ACTIVITIES**

Quality Improvement Committee, Urology Department Northwell Health Systems	2013 – 2014
Resident representative to Haiti – Global Health Symposium Programs Northwell Health Systems	2018
Health Education Chair, New Life Volunteering Society, Chicago	2011

**PUBLICATIONS**

1. **Bhatia VP**, Adler A (\*Co-First Author), Chandrakantan A, Austin PF. Ultrasound Assessment of Penile Blood Flow Following Caudal Block in Children: A Pilot Study. *Urology*. April 2022. PMID: 35429493
2. **Bhatia VP**, Adler A (\*Co-First Author), Chandrakantan A, Nathanson BH, Ouellette L, Austin PF. Association of Analgesic Block with the Incidence of Complications Following Hypospadias Surgery; A Meta-Analysis. *Urology*. March 2022. PMID: 35292293.
3. Bates JN, Kim SJ, **Bhatia VP**, Austin PF. Ectopic Vas Deferens Causing Recurrent Epididymo-Orchitis. *Urology*. July 2021. PMID: 34363814.
4. **Bhatia VP**, Aro T, Shannon S, Samson P, Lynch E, Guanay G, Ren K, Rai A, Mikhail D, Smith A, Okeke Z, Hoenig D. Frailty as predictor of complications in patients undergoing percutaneous nephrolithotomy (PCNL). *World J Urol*. Apr 2021. doi: 10.1007/s00345-021-03681-x. PMID: 33797589.
5. **Bhatia VP**, Mittal AG, Austin PF, Hilliard ME. The hypospadias-specific health-related quality of life conceptual framework: a scoping review of the literature. *Quality of Life Research*. Feb 2021. PMID: 33559860.

- O'Flynn O'Brien KL, **Bhatia VP**, Homafar M, Gong YY, Winsten MT, Gerber J, Dietrich JE. The Prevalence of Mullerian Anomalies in Women with a Diagnosed Renal Anomaly. *J Pediatr Adolesc Gynecol*. April 2021. PMID: 33242594
- Bhatia VP**, Hilliard ME, Austin PF, Mittal AG. Evaluating quality of patient-reported outcome measures in patients with hypospadias. *Journal of Pediatric Urology*. Dec 2020. PMID: 33371965
- Vasudevan V**, Johnson E, Wong K, Iskander M, Javed S, Gupta N, McCabe John, Kavoussi L. "Contemporary Management of Ureteral Strictures." *Journal of Clinical Urology*. 12 (Jan 2019): 20-3.
- Morganstern BA, **Vasudevan V**, Mistry PK, Howe AO, Wu W, Palmer LS. "Influential Factors in Pursuit of Pediatric Urology Fellowship Training." *Urology Practice*. 6 (Jan 2019): 64-68.
- Griffiths L, **Vasudevan V**, Myers A, Morganstern BA, Palmer LS. "The role of inheritance in the development of adolescent varicoceles." *Translational andrology and urology*. 7 (Dec 2018): 920-925. PMID 30505728.
- Lim, LT, **Vasudevan V**, Shelton J, Vitale AT, Moorthy R. Macula Retinal Vasculitis and Choroiditis Associated with Granulomatosis with Polyangiitis. *Retinal Cases and Brief Reports*. 11(2017): 119-122.
- Vasudevan V**, Samson P, Hoenig D, Smith AD, Okeke Z. "The genetic framework for development of nephrolithiasis." *Asian Journal of Urology* 4.1 (Jan 2017): 18-26. PMID: 29264202.
- Vasudevan V**, Moldwin R. "Addressing quality of life in the patient with interstitial cystitis/bladder pain syndrome." *Asian Journal of Urology* 4.1 (Jan 2017): 50–54. PMID: 29264207.
- Howe AO, **Vasudevan V**, Kongnyuy M, Rychik R, Thomas LA, Matuskova M, Friedman SC, Gitlin JS, Reda EF, Palmer LS. "Degree of twisting and duration of symptoms are prognostic factors of testis salvage during episodes of testicular torsion." *Translational andrology and urology*. 6.6 (Dec 2017): 1159-1166.
- Vasudevan V**, Strine AC, and Kaefer M. "A novel technique for endoscopic management of stones in a continent urinary reservoir." *Urology* 83.6 (June 2014): 1398-1400. PMID: 24726150.

#### BOOK CHAPTERS:

- Bhatia VP**, Farhat WA. "Use of Patient-Reported Outcomes in Pediatric Urology Research and Clinical Practice." *Pediatric Urology Book*. GBC Online Productions. 2022. *In Press*.
- Bhatia V**, Gilbert BR. "History of Ultrasound in Urology." *Practical Urological Ultrasound*. Springer International Publishing. 2019: 1-11.
- Vasudevan V**, Okeke Z. "How to Avoid Complications in PCNL." *BJUI Knowledge*. BJUI May 2017.
- Vasudevan V**, Waingankar N, Gilbert BR. "History of Ultrasound in Urology." *Practical Urological Ultrasound*. Springer International Publishing. 2017: 1-11.
- Vasudevan V**, Smith AD. "Access Related Complications of Percutaneous Nephrolithotomy." *Smith's Textbook of Endourology*. Wiley Publishing. 2017.

#### PRESENTATIONS: ABSTRACTS

- O'Kelly F, **Bhatia, VP**, Lewis B, Gralnek DR, Eliceiri KW, Wolf J, Farhat WA. External Validation of a Low Fidelity Dry-Lab Platform to enhance microsurgical techniques for Hypospadias Repair. *Society for Pediatric Urology Fall Congress*. Dec 2021.
- Bhatia VP**, Grant C, Ingrahm C, King J CK, Kim, SJ, VanderBrink BA, Austin PF. Vaginal Obstruction in Cloacal Anomalies – Is Vaginostomy Tube Placement the Procedure of Choice? A Multi-center Case Series. *Society for Pediatric Urology Fall Congress*. Dec 2021.
- Bhatia VP**, Gerber J, Borden A, Tu D, Zhu H, Seth A. Evaluating Risk Factors for Bladder Neck Sling Failure in Spina Bifida Patients Undergoing Reconstruction. *American Urologic Association*. May 2020
- Bhatia VP**, Broda JG, Gerber J, Tu D, Austin P, Roth D, Wang MH, Koh C, Gonzales E, Mittal A, Janzen N, Seth A. Improvement of lower urinary tract dysfunction symptoms after three sessions

of biofeedback is demonstrated on validated voiding questionnaires. *American Urologic Association*. May 2020

5. **Bhatia VP**, O'Flynn O'Brien K, Tillman MT, Homafar M, Gong YY, Zhu H, Dietrich J, Janzen N. The Prevalence of Mullerian Anomalies in Females with a Diagnosed Renal Anomaly. *American Urologic Association*. May 2020
6. **Bhatia VP**, Mittal AG, Austin PF, Hilliard ME. Conceptual Framework for Hypospadias-Specific Health-Related Quality of Life. *Baylor College of Medicine Pediatric Research Symposium Day*. March 2020.
7. **Bhatia VP**, Hilliard ME, Austin PF, Mittal AG. Validation of a Health-Related Quality of Life Metric in 8-12 Year Old Males with Hypospadias. *Clinical Scientist Training Program Annual Research Symposium*. February 2020.
8. **Vasudevan V**, Morganstern B, Griffiths L, Myers A, Gitlin JS, Palmer LS. Total Testicular Volume Predicts Total Motile Count in Adolescent Varicocele Patients. *American Urologic Association*. April 2019
9. **Vasudevan V**, Morganstern BA, Griffiths L, Myers A, Gitlin JS, Palmer LS. Total Testicular Volume Predicts Total Motile Count in Adolescent Varicocele Patients. *Society for Pediatric Urology*. Sept 2018.
10. **Vasudevan V**, Palmer LS. How many semen analyses are needed to evaluate the adolescent with a varicocele to determine a plan for intervention? *Society for Pediatric Urology*. Sept 2018.
11. **Vasudevan V**, Howe AO, Sultan J, Kwan J, Morganstern BA, Gitlin JS, Fine R, Palmer LS. "A Prospective Randomized Controlled Trial of Transcutaneous Electrical Nerve Stimulation (TENS) for the Treatment of Nocturnal Enuresis in Children: Preliminary Results." *American Urologic Association*. May 2018.
12. **Vasudevan V**, Morganstern BA, Griffiths L, Myers A, Casado-Lopez P, Murphy M, Reifsnyder J, Gitlin J, Fine R, Ghorayeb SR, Palmer LS. "Adolescent Varicoceles: Increased Sonographically Measured Heterogeneity of Contralateral Testis Signifies Decreased Semen Parameters." *American Urologic Association*. May 2018.
13. **Vasudevan V**, Howe AO, Fine RF, Gitlin JS, Zelkovic P, Freyle J, Palmer LS. "Tunneled buccal mucosal grafts for repair of proximal hypospadias: Long term follow-up and evaluation of complications." *Annual Clinical Research Poster Session Hofstra Northwell School of Medicine*. Sept 2017.
14. **Vasudevan V**, Samson P, Gaunay G, Ren K, Okeke Z, Smith AD, Hoenig D. "The Role of Frailty Assessment in the Prediction of Post-operative Complications for Percutaneous Renal Surgery." *World Congress of Endourology*. Sept 2017
15. **Vasudevan V**, Okeke Z, Smith AD. "Complications of Percutaneous Access during Percutaneous Nephrolithotomy." *American Urologic Association*. May 2017
16. **Vasudevan V**, Smith AD, Z Okeke, Gupta N, Gaunay GS, Hoenig DM. "How to Protect Your Flexible Ureteroscope." *World Congress of Endourology. Journal of Endourology*. November 2016, 30(S2): P1-A464
17. **Vasudevan V**, Edelman M, Palmer LS. "Management of Dysgerminoma in Swyer's Syndrome: A Case Report and Review of the Literature." *Academic Compendium Competition 2016 – Northwell Health Systems*. June 2016.

#### PRESENTATIONS: INVITED

1. **Bhatia VP**. Hypospadias Surgery: Opportunities for Quality Improvement. University of Wisconsin-Madison Department of Urology Grand Rounds. November 2021.
2. **Bhatia, VP. Management of Penetrating Renal Trauma**. Texas Children's Hospital, Baylor College of Medicine. May 2021.
3. **Bhatia VP. Management of Bladder Trauma**. Texas Children's Hospital, Baylor College of Medicine. November 2020.

**F. Candidate Biosketch**

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.  
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: <b>Vinaya Pavithra Bhatia</b>				
eRA COMMONS USER NAME (credential, e.g., agency login): BHATIAVIN				
POSITION TITLE: <b>M.D., Assistant Professor of Pediatric Urology</b>				
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)</i>				
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Start Date MM/YYYY	Completion Date MM/YYYY	FIELD OF STUDY
Loyola University of Chicago Chicago, IL	BS Mathematics with Honors	08/2006	05/2010	Mathematics
Loyola University of Chicago Chicago, IL	Minor Bioethics	08/2006	05/2010	Bioethics
Loyola University of Chicago Stritch School of Medicine	MD with Honors in Research	07/2010	05/2014	M. D.
Zucker School of Medicine at Hofstra/Northwell Health Systems	Residency	07/2014	06/2019	Urology
Texas Children’s Hospital at Baylor College of Medicine	Fellowship	07/2019	07/2021	Pediatric Urology
Baylor College of Medicine	Certificate of Added Qualification	07/2019	07/2020	Master of Clinical Science

**A. Personal Statement**

As a pediatric urologist and burgeoning surgeon-scientist, I am focused on delivering patient-prioritized medicine within the realm of a surgical field. To accomplish this, I have chosen to focus my current work on health-related quality of life (HRQOL) in patients who have undergone genitourologic reconstruction. This work has been extensively informed by my personal experiences and interactions with children with hypospadias (HS). I was first exposed to this disease process during my residency, during which I encountered a high volume of patients with severe HS variants. The repairs for these patients were extensive, and, in studying our outcomes, I realized that more than 60% of our patients went on to require multiple procedures and often became exceedingly anxious for follow-up exams even years after the initial surgery. I became concerned that, as urologists, we were underestimating the psychosocial, sexual, and emotional impact that our surgical interventions had on these patients and families. My study of available literature demonstrated that these patients often reported unmet psychological and social needs because of their prior surgeries. This exploration is what inspired my interest in pediatric urology as a career.

I have an extensive background in the conduct of clinical studies, extending from my freshman year of college as a research fellow in a neonatology lab, followed by my work with bladder cancer patients in medical school, and with patients suffering from hypospadias and adolescent varicoceles in residency. My training has been both formal and practical. I found my enthusiasm for clinical research while completing the Mulcahy Scholars Research Program in College and Research Honors Program in medical school, for which I was awarded Honors with Distinction for the quality of my work. I also completed the first year of a Master’s in Clinical

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Science through the Clinical Scientist Training Program at Baylor College of Medicine. These courses helped me develop the initial skills necessary to conduct behavioral and surgical clinical trials, which will allow me to formulate and test care plan tools for HS based upon our HRQOL outcomes. I also completed formal qualitative research training under the tutelage of Dr. Marisa Hilliard, which has allowed me to complete the initial interview-based needs assessments of youth and parents of youth with HS. Using the care planning tool created from my study of HRQOL, parent and youth needs, and functional surgical outcomes, I will be equipped to truly improve the care of HS patients.

In my current position as an Assistant Professor of Pediatric Urology, at the University of Wisconsin-Madison School of Medicine and Public Health, I am optimally positioned to study the large, diverse population of patients with HS in both Madison, WI and Milwaukee, WI through our existing collaboratives. Our respective centers treat 100-150 HS patients per year and performs surgery on approximately 50-80 patients per year. Further, I have the opportunity to work with highly experienced mentors in the field of pediatric urology as well as pediatric psychology, dissemination and implementation, expert consensus methods (e.g., Delphi methods), and patient-prioritized care plan development. My mentor in the department of pediatrics, section of psychology has extensive experience with qualitative study design, patient interviewing techniques, and creation of patient-reported outcome metrics. My pediatric urology mentors are experienced in the treatment of patients with HS and surgical techniques and are actively involved in research with HS. Further, I have extensive support from our research coordinators and statistics faculty, who are experienced in the statistical and clinical concerns associated with HS.

As evidenced by my recent, grant-funded activities, submitted publications, and accomplishments summarized in my biosketch, I have demonstrated my ability to continuously maintain meaningful research productivity. I also intend to focus my career on understanding the important and overlooked psychosocial and sexual impacts of genitourinary surgery on the child, adolescent, and adult. My next steps from this work will include behavioral clinical trials emphasizing early referral for psychosocial support promoted by HRQOL-informed care-planning tools, comparative effectiveness research of surgical techniques for repairs to assess which repairs are better equipped to support HRQOL, and cross-application of a HRQOL care planning tool approach to other genitourinary reconstructive conditions, such as spina bifida and cloacal anomalies.

### **B. Positions and Honors**

#### **Positions and Employment**

2008	Herman B. Well Center Summer Internship (Indianapolis, IN)
2008-2009	Summer Ophthalmologist Technician (Indianapolis, IN)
2008-2010	Hospital Volunteer, Advocate Illinois Masonic Memorial Center (Chicago, IL)
2008-2010	Resident Assistant, Loyola University of Chicago (Chicago, IL)
2014-2015 (Manhasset, NY)	Residency, General Surgery, Zucker School of Medicine at Hofstra/Northwell
2015-2019 Hofstra/Northwell	Residency, Urology, Smith Institute for Urology, Zucker School of Medicine at (Manhasset, NY)
2019-2021 (Houston, TX)	Pediatric Urology Fellow, Texas Children's Hospital at Baylor College of Medicine
2021-Present	Assistant Professor of Pediatric Urology, University of Wisconsin – Madison (Madison, WI)

#### **Other Experiences and Professional Memberships**

2007-2009	Alpha Epsilon Delta, Loyola University of Chicago (Chicago, IL)
2011-2012	Health Education Chair, New Life Volunteering Society (Chicago, IL)
2014-present	American Urological Association –Member
2017	National Urology Resident Preceptorship (NURP) in Adult and Pediatric Reconstructive and Prosthetic Surgery
2021-present	American Association of Pediatric Urologists
2022-present	Society for Pediatric Urology

#### **Honors**

2010	Honors in Mathematics (Loyola University of Chicago)
2007-2010	Dean's List (Loyola University of Chicago)

2009	Mulcahy Scholar Research Grant (Loyola University of Chicago)
2014	Honors in Research with Distinction
2017	Best Video – Endourology Section (American Urologic Association)
2019	Grand Winner – New York Section, Chief Resident Debate (American Urologic Association)
2019	National Grand Winner – The Great Debate (American Urologic Association)
2020	North American Robotic Urology Symposium Travel Award

### C. Selected Peer-Reviewed Publications

#### Most Relevant to the current application:

1. **Bhatia VP**, Mittal AG, Austin PF, Hilliard ME. The hypospadias-specific health-related quality of life conceptual framework: a scoping review of the literature. *Quality of Life Research*. Feb 2021. PMID: 33559860.
2. **Bhatia VP**, Hilliard ME, Austin PF, Mittal AG. Evaluating quality of patient-reported outcome measures in patients with hypospadias. *Journal of Pediatric Urology*. Dec 2020. PMID: 33371965
3. **Bhatia VP**, Adler A (\*Co-First Author), Chandrakantan A, Austin PF. Ultrasound Assessment of Penile Blood Flow Following Caudal Block in Children: A Pilot Study. *Urology*. April 2022. PMID: 35429493
4. **Bhatia VP**, Adler A (\*Co-First Author), Chandrakantan A, Nathanson BH, Ouellette L, Austin PF. Association of Analgesic Block with the Incidence of Complications Following Hypospadias Surgery; A Meta-Analysis. *Urology*. March 2022. PMID: 35292293.

#### Additional recent publications (in chronological order):

1. **Bhatia VP**, Aro T, Shannon S, Samson P, Lynch E, Guanay G, Ren K, Rai A, Mikhail D, Smith A, Okeke Z, Hoenig D. Frailty as predictor of complications in patients undergoing percutaneous nephrolithotomy (PCNL). *World J Urol*. Apr 2021. doi: 10.1007/s00345-021-03681-x. PMID: 33797589.
2. O'Flynn O'Brien KL, **Bhatia VP**, Homafar M, Gong YY, Winsten MT, Gerber J, Dietrich JE. The Prevalence of Mullerian Anomalies in Women with a Diagnosed Renal Anomaly. *J Pediatr Adolesc Gynecol*. April 2021. PMID: 33242594
3. **Vasudevan V**, Johnson E, Wong K, Iskander M, Javed S, Gupta N, McCabe John, Kavoussi L. "Contemporary Management of Ureteral Strictures." *Journal of Clinical Urology*. 12 (Jan 2019): 20-3.
4. Morganstern BA, **Vasudevan V**, Mistry PK, Howe AO, Wu W, Palmer LS. "Influential Factors in Pursuit of Pediatric Urology Fellowship Training." *Urology Practice*. 6 (Jan 2019): 64-68.
5. Griffiths L, **Vasudevan V**, Myers A, Morganstern BA, Palmer LS. "The role of inheritance in the development of adolescent varicoceles." *Translational andrology and urology*. 7 (Dec 2018): 920-925. PMID 30505728.
6. Lim, LT, **Vasudevan V**, Shelton J, Vitale AT, Moorthy R. Macula Retinal Vasculitis and Choroiditis Associated with Granulomatosis with Polyangiitis. *Retinal Cases and Brief Reports*. 11(2017): 119-122.
7. **Vasudevan V**, Samson P, Hoenig D, Smith AD, Okeke Z. "The genetic framework for development of nephrolithiasis." *Asian Journal of Urology* 4.1 (Jan 2017): 18-26. PMID: 29264202.
8. **Vasudevan V**, Moldwin R. "Addressing quality of life in the patient with interstitial cystitis/bladder pain syndrome." *Asian Journal of Urology* 4.1 (Jan 2017): 50–54. PMID: 29264207.
9. Howe AO, **Vasudevan V**, Kongnyuy M, Rychik R, Thomas LA, Matuskova M, Friedman SC, Gitlin JS, Reda EF, Palmer LS. "Degree of twisting and duration of symptoms are prognostic factors of testis salvage during episodes of testicular torsion." *Translational andrology and urology*. 6.6 (Dec 2017): 1159-1166.

For a complete list of my published research, see my bibliography in PubMed:

<https://www.ncbi.nlm.nih.gov/myncbi/18Su2caYnDvoWC/bibliography/public/>

### D. Prior Research Support

#### Foundation Grant

#### Texas Pediatric Society

Bhatia

12/2019 – 08/2021

**Development of a Health-Related Quality of Life Metric for 8–12-Year-Old Males with Hypospadias:** The aim of this study was to ascertain the HS-specific HRQOL and functional concerns of 8–12-year-old youth and parents through semi-structured interviews of patients and families. We conducted a total of 18 interviews over the study period, after which interview responses were coded iteratively and revised by consensus. We are

Wisconsin Multidisciplinary K12 Urologic Research Career Development Application: Vinaya P. Bhatia

currently preparing our manuscript, and our findings will be used to draft our Delphi Survey in Aim 1.

Role: Primary Investigator

**Institutional Grant**  
**LIJ Medical Staff Society**

**Palmer**

**1/2018-1/2019**

**Transcutaneous Electrical Nerve Stimulation therapy for monosymptomatic nocturnal enuresis:** This was a prospective clinical trial in pediatric patients with monosymptomatic nocturnal enuresis. Patients were randomized to one of four arms: presacral, posterior tibial, shoulder (sham), and suprapubic arms. A PIN-Q validated questionnaire was administered during each month of the study. Month 1 prior to therapy focused on treatment of underlying bowel dysfunction and behavioral modification. Month 2 patients administered treatment for 20 minutes at bedtime. Month 3 patients were observed off therapy. Presacral and posterior tibial application appeared to decrease the number of wet nights, but no patients experienced complete resolution of symptoms while on therapy. The study results were presented at the American Urological Association in 2018 and has been submitted for publication this spring.

Role: Co-Investigator