

CURRICULUM VITAE
THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE

Ming-Hsien Wang, M.D.

November 3, 2015

DEMOGRAPHIC AND PERSONAL INFORMATION

Current Appointments

2009-present Assistant Professor in the Department of Urology, Division of Pediatric Urology at the Johns Hopkins University School of Medicine
2009-present Director of Pediatric Urology Fellowship
2009-present Medical staff at The Johns Hopkins Hospital, and Johns Hopkins Bayview Medical Center
2012-present Endowed Spiegel/Nichols Assistant Professor in Pediatric Urology
2012-present Clinical advisory board member for Cornelia de Lange Syndrome

Personal Data

Urology
Pediatric urology
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Bloomberg 7308
Baltimore, MD 21287
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Education and Training

Undergraduate

1991-1995 Bachelor of Science, Biology, Binghamton University, State University of New York

Doctoral/graduate

1995-1999 Doctor of Medicine, Tufts University School of Medicine

Postdoctoral

1999-2000 Surgical Internship, Department of Surgery, Mayo Clinic
2000-2001 Resident, Department of Radiation Oncology, Thomas Jefferson Medical Center
2001-2003 Research Fellow, Department of Biochemistry/Molecular Biology, Mayo Clinic
2003-2007 Resident, Department of Urology, University at Buffalo School of Medicine
2007-2009 Research/ Clinical Fellow, Department of Urology/ Pediatric Urology, University of California at San Francisco

Professional Experience

2009-present Assistant Professor in Pediatric Urology, Johns Hopkins

RESEARCH ACTIVITIES

Peer Reviewed Publications (* corresponding author)

1. Merchant T, **Wang MH**, Haida T, Lindsley K, Finlay J, Dunkel I, Rosenblum M, Leibel S. Medulloblastoma: Long Term Results for Patients Treated with Definitive Radiation Therapy during the CT era. *International Journal of Radiation Oncology Biology and Physics*.1996; 36:29-35.
2. Merchant T, Haida T, **Wang MH**, Finlay J, Leibel S. Anaplastic Ependymoma: Treatment of Pediatric Patients with or Without Craniospinal Radiation Therapy. *Journal of Neurosurgery*.1997; 86:943-949.
3. **Wang MH***, Abreu-Delgado Y, Young C. Effects of Vitamin C on Androgen Receptor Mediated Actions in Human Prostate Adenocarcinoma Cell Line LAPC-4. *Urology*. 2003; 62(1):167-171.

4. **Wang MH***, Grossmann M, Young C. Forced Expression of Heat-Shock Protein 70 Increases the Secretion of Hsp70 and Provides Protection against Tumor Growth. *British Journal of Cancer*. 2004; 90(4):926-931.
5. **Wang MH***, Greenfield S, Williot P. Ectopic Ureterocele in Duplex Systems: Long Term Follow Up and "Treatment Free" Status. *Journal of Pediatric Urology*. 2008; 4:183-187.
6. **Wang MH***, Baskin L. Endocrine Disruptors, Genital Development, and Hypospadias. *Journal of Andrology*. 2008; 29(5):499-505.
7. **Wang MH***, Baskin L. Management of Neurogenic Bladder in Patients with Cerebral Palsy. *Journal of Pediatric Rehab Medicine*. 2008; 1(2):123-125.
8. Kalfa N, Liu B, Ophir K, Audran F, **Wang MH**, Cao M, Baskin L. Mutations of CXORF6 are Associated with a Range of Severities of Hypospadias. *European Journal of Endocrinology*. 2008; 159(4):453-458.
9. Kalfa, N, Liu B, Ophir K, **Wang MH**, Cao, M, Baskin L. Genomic Variants of ATF3 in Patients with Hypospadias. *Journal of Urology*. 2008; 180(5):2183-2188.
10. Cao M, Tasian G, **Wang MH**, Liu B, Cunha G, Baskin L. Urothelium-derived Sonic Hedgehog Promotes Mesenchymal Proliferation and Induces Bladder Smooth Muscle Differentiation. *Differentiation*. 2010; 79(4-5):244-50.
11. Yiee J, DiSandro M, **Wang MH**, Hittelman A, Baskin L. Does Severity of Renal Scarring on DMSA Scan Predict Abnormalities in Creatinine Clearance? *Urology*. 2010; 76(1):204-8.
12. Zhu J, **Wang MH***. Dextranomer/hyaluronic acid copolymer (Deflux) Implant Seen on CT as Distal Ureteral Calcification: How to Differentiate between Distal Ureteral Stones from Deflux? *Current Urology*. 2010; 4:213-215.
13. **Wang MH***. Surgical Management of Meatal Stenosis with Meatoplasty. *Journal of Visual Experiments*. 2010; 30(45).
14. Stec A, **Wang MH***. Isolated Distal Vaginal Agenesis Masquerading as Recurrent Urinary Infections in an Adolescent Female. *Journal of Pediatrics*. 2011; 158(4):684.
15. Gupta, A, Stec, A, Loeb, S, **Wang MH***. Unusual Presentation of a Mullerian Remnant in an Infant with Recurrent Epididymo-orchitis. *Urology*. 2011; 78(6):1414-1416.
16. Suson K, Gupta A, **Wang MH***. Bloody Urine after Minor Trauma in a Child: Isolated Renal Injury versus Congenital Anomaly? *Journal of Pediatrics*. 2011; 159(5):870.
17. Baradaran N, Stec A, **Wang MH**, Cervellione M, Luskin J, Gearhart J. Urinary Diversion in Early Childhood: Indications and Outcomes in the Exstrophy Patients. *Urology*. 2012; 80(1):191-5.
18. Gearhart S, **Wang MH**, Gilson M, Chen B, Kern D. Teaching and Assessing Technical Proficiency in Surgical Subspecialty Fellowships. *Journal of Surgical Education*. 2012; 69(4):521-528.
19. **Wang MH***, Chen, B, Kern D, Gearhart S. Pediatric Urology Fellowship Training: Are We Teaching What They Need to Learn? *Journal of Pediatric Urology*. 2013; 9(3):318-21.
20. Massanyi E, Gupta A, Preece J, Lin S, **Wang MH***. The Utility of Screening Ultrasound Following First Febrile UTI among Patients with Clinically Significant Vesicoureteral Reflux. *Urology*. 2013; 82(4):90-909.
21. Monn M, **Wang MH**, Gilson M, Chen B, Kern D, Gearhart S. ACGME Core Competency Training, Mentorship, and Research in Surgical Subspecialty Fellowship Programs. *Journal of Surgical Education*. 2013; 70(2):180-8.
22. Johnson C, Millard S, **Wang MH**, Ehsanipoor R. Prenatal Diagnosis of a Paraurethral Cyst. *Journal of Pediatric Urology*. 2013; 9(1):E91-93.
23. **Wang MH**, Kim KS. Cytotoxic Necrotizing Factor 1 Contributes to Escherichia coli Meningitis. *Toxins*. 2013; 5(11): 2270-2280.
24. Preece J, Suson K, **Wang MH**, Shanker K, Feja K, Tolan R, Clewner L, Fina L, and Everson P. Index of Suspicion. *Pediatrics in Review*. 2013; 34(9):408-16.
25. Carpenter M, Hoberman A, Mattoo T, Mathews R, Keren R, Chesney R, Moxey-Mims M, Greenfield S, **RIVUR Trial Investigators**. The RIVUR Trial: Profile and Baseline Clinical Associations of Children with Vesicoureteral Reflux. *Pediatrics*. 2013; 132(1):e34-45 (**PI for Johns Hopkins**).
26. Chesney R, Carpenter M, Moxey-Mims M, **RIVUR Trial Investigators**. Randomized Intervention for Children with Vesicoureteral Reflux (RIVUR): Background Commentary of RIVUR Investigators. *Pediatrics* 2008; 122: S233-S239 (**PI for Johns Hopkins**).
27. Gupta N, Ko J, Matlaga B, **Wang MH***. Ureterscopy for Treatment of Upper Urinary Tract Stones in Children: Technical Considerations. *Current Urology Report*. 2014; 15 (5):407.
28. Kern A, **Wang MH***. Impact of Nephrectomy on Long Term Renal Function in Nonsyndromic Children Treated for Unifocal Wilms Tumor. *Journal of Pediatric Urology*. 2014; 10(4):662-666.

29. Gupta N, Kim B, Di Carlo H, Ko J, Gearhart J, Bosemani M, **Wang MH***. Cost-Effectiveness of Dimercaptosuccinic Acid Renal Scan versus Renal Ultrasound in the Evaluation of Children with Vesicoureteral Reflux. *The Journal of Urology*. 2014; 191(4):e105.
30. **RIVUR Trial Investigators**, Hoberman A, Greenfield S, Mattoo T, Keren R, Mathews R, Pohl H, Kropp B, Skoog S, Nelson C, Moxey-Mims M, Chesney R, Carpenter M. Antimicrobial Prophylaxis for Children with Vesicoureteral Reflux. *New England Journal of Medicine*. 2014; 370:2367-76 (**PI for Johns Hopkins**).
31. Mattoo T, Carpenter M, Moxey-Mims M, Chesney R, **RIVUR Trial Investigators**. The RIVUR trial: a Factual Interpretation of Our Data. *Pediatric Nephrology*. 2015; 30(5): 707-712 (**PI for Johns Hopkins**).
32. Garjae L, Suson K, Kim B, **Wang MH***. Evaluation of Clitoral Mass in a Prepubescent Female. *Clinical Medicine Insights: Pediatrics*. 2015: 91-2.
33. **Wang MH***. Is There Hope for Renal Growth on Imaging Studies Following Ureteral Reimplant for Boys with Fetal Hydronephrosis and Urinary Reflux? *Urology Case Reports*. 2015: 114-116.
34. **Wang MH***. Persistent Urinary Incontinence: A Case Series of Missed Ectopic Ureters. *Urology Case Reports*. 2015, in press.

Extramural Funding

Current None

Pending None

Previous

2011-2014 Randomized Intervention for Children with Vesicoureteral Reflux (RIVUR)
NCT00405704
The National Institute of Diabetes and Digestive and Kidney Diseases
Role: PI, 8% salary support

Research Program Building/ Leadership

2009-present Program director of pediatric urology fellowship at Johns Hopkins
2009-2010 Johns Hopkins Faculty Development Program, Development of Surgical Sub-specialty Fellowship Curriculum
2009-present Director of weekly multidisciplinary pediatric radiology/urology conference
2009-present Director of monthly multidisciplinary pediatric nephrology/ radiology/urology conference
2013 Leadership Program for Women Faculty
2011-present Director of adult and pediatric urology monthly journal club at Brady Urology
2014-present Surgical liaison for marketing and outreach for Johns Hopkins Children's Center
2015-present Brady Diversity Committee-liaison for pediatric urology

EDUCATIONAL ACTIVITIES

Book Chapters

1. **Wang MH**, Yeh Y, Young C. Natural Products and Environmental Androgens/Antiandrogens. *Androgens and Androgen Receptor: Mechanisms, Functions, and Clinical Applications*. 2002; chapter 7: 197-211.
2. **Wang MH**, Hinman F, Baskin L. Endoscopic Treatment of Vesicoureteral Reflux. *Hinman's Atlas of Pediatric Urologic Surgery*, 2nd ed. 2008; chapter 110: 588.
3. **Wang MH**, Hinman F, Baskin L. Molecular Mechanism of Undescended Testicle. *Hinman's Atlas of Pediatric Urologic Surgery*, 2nd ed. 2008; chapter 46: 254.
4. Schatz S, Green I, Nickel J, **Wang MH**. Chronic Urogenital Pain. *Clinical Aspects of Pain Medicine and Interventional Pain Management: A Comprehensive Review: American Society of Interventional Pain Physicians*, 2011.
5. Gupta N, **Wang MH**. Hypospadias. *The 5-Minute Pediatric Consult Standard*, 7th ed. 2015; 484-485.

E-News Letters

1. Stec A, **Wang, MH**. Isolated Distal Vaginal Agenesis Masquerading as Recurrent Urinary Infections in an Adolescent Female. *Dialogue in Pediatric Urology*. 2010.
2. **Wang, MH**. A Kid-Friendly Approach to Meatal Stenosis. *Johns Hopkins*. 2010.
3. **Wang, MH**. Start of School Can Worsen Bedwetting in Children. *Johns Hopkins*. 2010.
4. **Wang, MH**. Bloody Urine after Injury Rarely Cause for Alarm, but Check it out Anyway. *Johns Hopkins*. 2010.
5. **Wang, MH**. Catching a Urethral Valve Problem Early. *Johns Hopkins*. 2011.
6. **Wang, MH**. Just How Do you Manage Urinary Tract Infections. 2011.
7. **Wang, MH**. Rethinking the DMSA. *Johns Hopkins*. 2014.
8. **Wang, MH**. A Social Media Experiment in Children with Urinary Tract Infections. 2014.
9. **Wang, MH**. Journal Spotlight: The RIVUR Study, Are Daily Antibiotics Necessary for Patients with Urinary Reflux? 2014.

Teaching

Classroom Instruction

Undergraduate Students

- 1991 – 1995 Analytical Chemistry, Teaching Assistant at Binghamton University, State University of New York
1991 – 1995 Calculus I and II, Teaching Assistant at Binghamton University, State University of New York

Medical Students

- 1995 – 1999 Problem Based Learning, Teaching Assistant at Tufts University School of Medicine, Boston, MA
1995 – 1999 Patient Interviewing, Teaching Assistant at Tufts University School of Medicine, Boston, MA
1995 – 1996 Cell and Tissue Biology, Teaching Assistant at Tufts University School of Medicine, Boston, MA
2011 Johns Hopkins medical student lecture-Sexual Differentiation
2011 Johns Hopkins medical student lecture-Congenital Renal Diseases
2012 Johns Hopkins medical student lecture-Genital Development
2013 Johns Hopkins medical student lecture-Congenital Renal Diseases
2014 Johns Hopkins medical student lecture-Disorder of Sexual Differentiation
2014 Johns Hopkins medical student longitudinal clerkship
2015 Johns Hopkins medical student lecture-Congenital Renal Diseases
2015 Johns Hopkins medical student longitudinal clerkship

Mentoring

- 2010 Timothy Phillips, MD-Pediatric urologist, San Antonio, Texas
- 2011 Susan Lin-First Year Johns Hopkins Medical Student/**Persky Scholar**
Childhood urologic diseases, with emphasis on environmental factors and bladder dysfunctions

Andrew Stec, MD-Assistant professor in pediatric urology, Medical University of South Carolina
- 2012 Jack Cooper-First Year Johns Hopkins Medical Student/**Persky Scholar**
Pediatric Urinary Tract Infection-role of CNF 1 toxin in pathogenesis

Kristina Suson, MD-Assistant professor in pediatric urology, Children's Hospital of Michigan
- 2013 Natasha Gupta-Third Year Johns Hopkins Medical Student/ research fellow/**Persky Scholar**

Hypospadias etiology and environmental factors
Renal cancer in pediatric population and long- term renal outcomes
Pediatric stones diseases-treatment techniques
Utility of DMSA in children with urinary tract infection
- 2013 Eric Massanyi, MD-Pediatric urologist at Akron Children's Hospital

Jason Michaud, MD-urology resident at Johns Hopkins

CNF1 toxin in UPEC in murine model
DMSA radiation exposure in children, long term impact
Early urinary diversion and infection risk in pediatric population

2014 Heather DiCarlo, MD-Assistant professor of pediatric urology at Johns Hopkins

Zeke Wei- Third Year Medical Student Johns Hopkins

2015 Zeke Young, MD-Assistant professor of pediatric urology at Stony Brooke School of Medicine

Regina Cho- First Year Medical Student Johns Hopkins

Kathy Lue- Third Year Medical Student University of Miami

2016 Peter Stuhldreher, MD-Assistant professor of pediatric urology at University of San Diego

CLINICAL ACTIVITIES

Certification

Maryland State licensure
2009-present Maryland # D30364

Board, other specialty certifications
2010-present American Board of Urology
2014-present Subspecialty board certification in Pediatric Urology

Clinical Responsibilities

2009-present Pediatric urology attending 85% (patient care)

ORGANIZATIONAL ACTIVITIES

Editorial Activities

Editor: Hinman's Atlas of Pediatric Urology Surgery, Second Edition
Editor: Advances in Urology/Urinary Tract Infection and Vesicoureteral Reflux (2010)
Invited Reviewer: Journal of Urology (present)
Invited Reviewer: Journal of Pediatric Urology (present)
Invited Reviewer: Journal of Neonatology & Clinical Pediatrics (present)

Professional Societies

American Urological Association
American Academy of Pediatrics – Urology Section
Member of the Birth Defect Reporting Information System Forms Committee
Member of American College of Surgeons National Surgical Quality Improvement Program
Faculty champion for pediatric urology at Johns Hopkins
Johns Hopkins Patient Satisfaction Committee
Representative from department of urology

RECOGNITION

Awards and Honors

- 1991 – 1995 Cum Laude (GPA 3.78)
 1992 – 1995 Dean's Honor List
 1992 – 1995 **New York Empire State Minority Scholarship**
 1993 – 1995 **Golden Key National Honor Society**
 May 1999 **The Philip E. Sheridan, M.D.** Prize given to a 4th year medical student whose dedication is recognized by the academic community
- 2006 **Northeastern Section AUA Resident Essay Competition**-3rd Place
Ectopic Ureterocele in Duplex Systems: Long-Term Follow-Up after a Staged Approach
- 2012 **American Academy of Pediatrics Conference and Exhibition**- Clinical Prize Finalist
Utility of Initial Renal Ultrasound in Finding Vesicoureteral Reflux in Children Who Present with Febrile Urinary Tract Infection: Single Institutional Experience

Invited Talk, Panels

- 2003 **American Association for Cancer Research (AACR)**
Forced Expression of Heat-Shock Protein 70 Increases the Secretion of Hsp70 and Provides Protection against Tumor Growth
- 2008 **American Academy of Pediatrics Conference and Exhibition**
Do Renal Scars on DMSA Scan Predict Abnormalities in Renal Function?
- 2010 **Society of Fetal Urology**
Isolated Distal Vaginal Agenesis Masquerading as Recurrent Urinary Infections in an Adolescent Female
- 2011 **American Academy of Pediatrics Conference and Exhibition**
Pediatric Urology Fellowship Training: Are We Teaching What They Need to Learn?
- 2011 **American Academy of Pediatrics Conference and Exhibition**
The Application of a Comprehensive Voiding Improvement Program and Biofeedback Therapy on Patients with Bladder Exstrophy after Undesirable Bladder Neck Reconstruction Outcome
- 2011 Invited Lecturer at **GBMC/ Grand Rounds**, Baltimore, MD
Pediatric Hydronephrosis, Urinary tract infection, and Urinary Reflux
- 2012 Invited Lecturer at **Howard Hospital/ Grand Rounds**, Washington, DC
Pediatric Penile Abnormalities
- 2012 Invited Lecturer at **Mount Washington Pediatric Hospital/ Grand Rounds**, Baltimore, MD
Pediatric Urologic Emergencies
- 2012 **Society of Fetal Urology**
Deforming Penoscrotal Lesions in a 9 Year Old
- 2012 **Society of Fetal Urology**
Vaginal Atresia in a Two Year Old Present with Urinary Retention
- 2012 **Society of Fetal Urology**
Prenatal diagnosis of Paraurethral Cyst
- 2012 **Society of Fetal Urology**
Clitoral Mass in Prepubescent Female
- 2013 Invited Lecturer at **Department of Radiology Grand Rounds at Johns Hopkins**
Pediatric Urinary Tract Infections, Current Management
- 2013 **Society of Pediatric Urology**

Long Term Outcome in Children with Wilms Tumor

- 2013 **Society of Pediatric Urology**
Comparison Analysis of DMSA scan and Renal Ultrasound
- 2014 Invited Lecturer at **Department of Ob/Gyn at Johns Hopkins**
Newborn Circumcision, Current Controversies/Management
- 2014 Invited Lecturer at the **International Surgery-Anesthesia conference**, Chicago, IL
The role of CNF-1 in uropathogenic E. coli: Murine Model of Urinary Tract Infection
- 2014 Invited Lecturer, **Spinal Bifida Association**, Orlando, Florida
Bladder and Bowel Management in Children with Spinal Cord Injury
- 2014 Visiting Professor, **Robert Wood Johnson Medical School, Department of Surgery**, Division of Urology, New Brunswick, NJ
Update on Urinary Tract Infection and Vesicoureteral Reflux
- 2014 **European Society of Pediatric Urology**
Cost Effectiveness of Routine DMSA Renal Scan for Children with Febrile Urinary Tract Infection and Vesicoureteral Reflux with Normal Renal Ultrasound-Single Institution Experience
- 2014 **European Society of Pediatric Urology**
Cost Effective Procedure for Examination of Uropathogenic E. coli in a Murine Model of Urinary Tract Infection/ CNF-1
- 2014 **American Urological Association**
Cost Effectiveness of Routine DMSA Renal Scan for Children with Febrile Urinary Tract Infection and Vesicoureteral Reflux with Normal Renal Ultrasound-Single Institution Experience
- 2014 **Society of Fetal Urology**
Ectopically Inserting Primary Obstructing Megaureter: Application and Utility of Magnetic Resonance Urography
- 2015 Invited Lecturer, **Maryland Chapter of American Academy of Pediatrics**, Maryland
Guidelines for Evaluating and Managing Urinary Tract Infection, Urinary Reflux
- 2015 Invited Lecturer, **Uro-Track/ Inaugural Course**, Boston, MA
Management of Urinary Tract Infections in Children: RIVUR Study
- 2016 Invited Lecturer, **Cornelia de Lange Syndrome (CdLS) Foundation's National Conference**, Orlando, Florida.
Urologic Conditions in Children with CdLS, Evaluation and Management
- 2016 **Annual Academic Surgical Congress**
Rethink Pediatric Nuclear Scans: Cost and Radiation Exposure of DMSA Scans in Children