

CURRICULUM VITAE

Toby C. Chai, M.D., FACS

John D. Young, Jr. Professor of Surgery, Division of Urology
University of Maryland School of Medicine
Baltimore, MD

Date: October 12, 2010

Personal Information

Business Address University of Maryland, Division of Urology
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Baltimore, MD 21201

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Foreign Languages Chinese

Education

B.A., Natural Sciences, Johns Hopkins University 1985

M.D., Indiana University School of Medicine 1989

Post Graduate Education and Training

Resident in General Surgery 1989-1991
University of Michigan Medical Center
Ann Arbor, MI

Resident in Urological Surgery 1991-1994
University of Michigan Medical Center
Ann Arbor, MI

Postdoctoral American Foundation for Urological Diseases 1995-1997
(AFUD) Research Fellow
Department of Urology and Neuroscience
University of Virginia, Charlottesville, VA

Certifications

Diplomate, NBME 1989
Diplomate, American Board of Urology 1998-2018

Medical Licensures

State of Michigan	1992-1995
State of Virginia	1994-1998
State of Maryland Number D52526	1997-2012

Employment History

Chief of Urology Salem VAMC Salem, VA	1994-1995
Research Instructor Department of Urology University of Virginia, Charlottesville, VA	1996-1997
Assistant Professor Department of Surgery, Division of Urology University of Maryland School of Medicine	1997-2002
Associate Professor with Tenure Department of Surgery, Division of Urology University of Maryland School of Medicine	2002-2007
John D. Young Professor with Tenure Department of Surgery, Division of Urology University of Maryland School of Medicine	2007-present

Professional Memberships

American Urological Association (AUA)	1993
Society for Urodynamics and Female Urology (SUFU)	1995
Society for Basic Urological Research (SBUR)	1997
Mid-Atlantic Section AUA	1998
Fellow of American College of Surgeons (FACS)	2000
American Urogynecologic Society (AUGS)	2010

Honors and Awards

1. Honors Group Westinghouse Science Talent Search	1981
2. Representative of USA International Symposium on Sciences and Humanities London, England	1981

3. First Runner Up, Medical Student Research Day
University of Maryland, Baltimore 1986
4. First Prize, Michigan Urological Society's Residents' Day 1991
5. American Foundation for Urologic Diseases (AFUD)
Research Scholar Award 1995
(Mentors: William D. Steers, MD and Jeremy B. Tuttle, PhD)
6. NIH Mentored Clinical-Scientist Career
Development Award (K08 Series Award) 1996
7. Second Prize, AUA CIRCON-ACMI
Basic Science Prize Essay Contest 1997
American Urological Association Annual Meeting
New Orleans, LA
8. Third Prize Poster 1999
Society of Uroradiology Annual Meeting
New Orleans, LA
9. Second Prize Poster 1999
International Bladder Symposium
Washington, DC
10. Honorable Mention 2001
Annual Jack Lapidus Essay Contest in Neurourology
Anaheim, CA
11. Winner 2001
Pfizer International Cardura Competitive Awards Program
12. First Prize Winner, Basic Science Category 2001
Society for Urodynamics and Female Urology (SUFU) Annual Meeting
Anaheim, CA
13. Second Alternate, 2001
American Urological Association – European Urological Assoc.
Scholar Exchange Program
14. Young Investigator Award 2001
Society for Basic Urologic Research
15. First Prize (*Mentee: Jennifer MaLossi, MD*) 2001
Residents' Essay Contest, Basic Science
Mid-Atlantic AUA Annual Meeting

Hot Springs, VA

16. American Foundation for Urologic Disease (AFUD) 2003
Research Scholar Award
(*Mentee: Yan Sun, PhD*)
17. Second Prize (*Mentee: Humphrey Atiemo, MD*) 2003
Resident's Essay Contest
Mid-Atlantic AUA Annual Meeting
18. Second Prize (*Mentee: Benjamin Lowentritt, MD*) 2004
AUA-ACMI
Basic Science Prize Essay Contest
American Urological Association Annual Meeting
San Francisco, CA
19. Honorary Member of Academic Council 2004
Dnipropetrovsk State Medical Academy
Dnipropetrovsk, Ukraine
20. Paul Zimskind Award 2005
For Continuing Excellence and Leadership
In Field of Voiding Dysfunction
Society for Urodynamics and Female Urology
21. *Journal of Urology* Best Reviewer Award 2005
22. First Prize Winner (*Mentee: Gopal Gupta, MD*) 2006
Resident's Essay Contest
MidAtlantic AUA Annual Meeting
Washington DC
23. First Prize Winner (*Mentee: Gopal Gupta, MD*) 2006
Society for Urodynamics and Female Urology (SUFU) Annual Meeting
Basic Science Essay Contest
San Diego, CA
24. Honorable Mention (*Mentee: Gopal Gupta, MD*) 2007
Annual Jack Lapides Essay Contest in Neurourology
Anaheim, CA
25. Third Prize Winner (*Mentee: Gopal Gupta, MD*) 2007
AUA-ACMI
Basic Science Prize Essay Contest
American Urological Association Annual Meeting
Anaheim, CA

26. Best Basic Science Poster 2007
Society for Urodynamics and Female Urology Annual Meeting
San Diego, CA
27. John D. Young, Jr. Endowed Professorship 2007
University of Maryland School of Medicine
28. First Prize Winner (*Mentee: Brian Tully, MD*) 2008
Resident's Essay Contest
MidAtlantic AUA Annual Meeting
Cambridge, MD
29. Honorable Mention 2009
Basic Science Poster
NIDDK New Research Directions in UI Symposium
Bethesda, MD 2009
30. Honorable Mention (*Mentee: Mingkai Li MD, PhD*) 2009
Annual Jack Lapides Essay Contest in Neurourology
Chicago, IL
31. Second Prize Winner (*Mentee Mingkai Li, MD, PhD*) 2009
AUA-ACMI
Basic Science Prize Essay Contest
American Urological Association Annual Meeting
Chicago, IL
32. *Journal of Urology* Best Reviewer Award 2009

Administrative Service

Institutional Service

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| Interviewer for Office of Admissions | 2002-2006 |
| Speaker for White Coat Ceremony for Class 2007 | 2003 |
| Medical Student Research Day Judge | 2004 |
| Dept. of Surgery Representative, SOM Faculty Council | 2007-2008 |

Local and National Service

National Institutes of Health Grant Reviews:

Special Study Section for NIH RFA DK98-002 "The Effect of Diabetes on Urinary Bladder and Erectile Function"	1998
Special Grants Review Committee DDK-D	1999-2000
Writing Committee, NIDDK Bladder Research Progress Review Group	2001
Special Study Section for NIH RFA DK02-026 "Alternative Therapies for Benign Prostate Symptoms"	2002
Special Emphasis Panel ZRG1 SMB (05) NIH Center for Scientific Review	2002
Special Emphasis Panel ZRG1 RUS-D (01) NIH Center for Scientific Review March 24, 2004, Chris Langub, PhD (SRA)	2004
Special Emphasis Panel (SEP) ZRG1 RUS-D 50, 12 NIH Center for Scientific Review June 28, 2004, Chris Langub, PhD (SRA)	2004
Special Emphasis Panel UKGD IRG July 2005 Shirley Hilden, PhD (SRA)	2005
Special Emphasis Panel ZDK1 GRB-8 Ancillary Studies in Obesity Nov. 4, 2005 Maria Avila-Bloom. PhD (SRA)	2005
Member UKGD NIH Center for Scientific Review Ryan Morris, PhD (SRA)	2005-2008
Ad Hoc Small Business Grant Review (ZRG1 DKUS-K(11)) NIH Center for Scientific Review Krystyna Rys-Sikora, PhD (SRA)	2009
Ad Hoc Special Emphasis Panel (ZRG1 DKUS-E) NIH Center for Scientific Review Bonne Burgess-Beusse, PhD (SRA)	2009
Ad Hoc Reviewer NIDDK T-32 and K-Award Reviews NIDDK Review Branch	2009

Xiaodu Guo, MD PhD (SRO)	
Ad Hoc Special Emphasis Panel (ZRG1 DKUS (12) B) NIH Center for Scientific Review Ryan Morris, PhD (SRA)	2009
Ad Hoc Special Emphasis Panel (ZRG1-DKUS-B03M) NIH Center for Scientific Review Najma Begum, PhD (SRA)	2010
Ad Hoc Reviewer NIDDK CAMUS Research Network Review NIDDK Extramural Review Branch Carol Goter Robinson, PhD (SRO)	2010
Ad Hoc Reviewer NIDDK KUH-F32 Fellowship Award Review NIDDK Review Branch Xiaodu Guo, MD, PhD (SRA)	2010
Ad Hoc Special Emphasis Panel (ZRG1 DIRH-J (01)) NIH Center for Scientific Review Jacinta Bronte-Tinkew, PhD (SRA)	2010
Ad Hoc Reviewer NIDDK KUH K-Award Review NIDDK Review Branch Xiaodu Guo, MD, PhD (SRA)	2010
Ad Hoc Reviewer NIDDK R21-Awards (ZRG1 DKUS-G (80) S) Pilot Clinical Studies in Nephrology and Urology NIH CSR Ryan Morris, PhD (SRA)	2010
Ad Hoc Reviewer NIDDK X01-Awards (ZDK1 GRB-S (J3)) Central Repositories, Non-Renewable Sample Access PAR 10-90 NIDDK Najma Begum, PhD (SRA)	2010
<u>Non-NIH Grant Review Activity</u>	
Interstitial Cystitis Association – Fishbein Family Foundation Research Awards Study Section	2001-05

Research into Ageing (United Kingdom) Fellowship Grant Reviewer	2001
Diabetes Endocrinology Research Center (DERA) University of Washington, Seattle Pilot and Feasibility Program Project Reviewer	2002
American Foundation for Urologic Diseases Grant Reviewer	2004
Pfizer Detrol LA Research Grant Program	2004-10
American Urological Association Foundation Grant Reviewer	2007-08
American Urogynecologic Society Foundation Grant Reviewer	2008-10

Peer Reviewer – Journals

American Journal of Physiology – Renal
American Journal of Physiology – Regulatory, Integrative and Comparative
American Journal of Physiology – Cell Physiology
BJU International
Brain Research
Clinical Chemistry
FEBS Letters
Journal of Biological Chemistry
Journal of Urology
Nature Clinical Practice Urology
Neurourology and Urodynamics
Neuroscience
Physiologic Genomics
Urology

American Urological Association (AUA)

Meeting Abstract Reviewer	2005-2007
AUA Leadership Program Participant	2006-2007

MidAtlantic Section of American Urological Association

Program Chair, 2008 Mid-Atlantic AUA Meeting	2007-2008
Board of Directors	2007-2010
Investment Committee	2010-2011

American Urological Association Foundation (AUAUF)

Program Co-Chair AUAUF/SBUR Summer Research Conference On Urinary Incontinence	2010
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American Board of Urology (ABU)

Member of ABU/AUA Examination Committee (EC) 2005-2009
Senior Editorial Consultant ABU/AUA EC 2009-2013

Society for Female Urology and Urodynamic

Winter Meeting Basic Science Program Chair 2010-2014
Nominating Committee Member 2009-2012

American Urogynecologic Society (AUGS)

Research Summit Panel 2010

Editorial Board

Current Bladder Dysfunction Reports 2006-present
American Journal of Physiology – Renal 2007-2011
Female Pelvic Medicine and Reconstructive Surgery 2010-present

Community Service

Ordained Deacon at Chapelgate Presbyterian Church (PCA) 2004-present
Marriottsville, MD

Secretary of Diaconate Board, Chapelgate Presbyterian Church 2004-2006
(PCA), Marriottsville, MD

Chair of Advisory Committee for Maryland Regional Junior 2003-2005
Science and Humanities Symposium (JSHS)

Roundtable Leader “Science and Society” 2004
National Junior Science and Humanities Symposium
Hunt Valley Marriott

Medical Advisory Board, Interstitial Cystitis Association (ICA) 2004-2007

Judge at National Junior Science and Humanities Symposium 2010
Bethesda, MD (www.jshs.org)

Consultant Services

1. Advisory Board for Overactive Bladder – Pfizer, Inc. 2007, 2008
2. Consultant to Proctor & Gamble – 2007
3. Consultant to Astellas for Mebegron – 2010
4. Advisory Board for InterStim – Medtronic, Inc. 2010

Teaching Service

School of Nursing Students

Physiology of Aging, Graduate Nursing Course 1998-2009
Lower Urinary Tract Physiology and Aging

University of Maryland School of Nursing
(Norbert Myslinski, PhD, Course Director)

School of Medicine

Cell and Systems Physiology GPLS 645 2010-present
“Bladder and the urinary system”
(Andrea Meredith, PhD, Course Director)

Mentored Individuals in Laboratory

MENTEE	CURRENT POSITION (POSITION WHEN MENTORED)	YEARS MENTORED
Joseph DelPizzo, M.D.	Faculty Weill-Cornell School of Medicine Department of Urology New York, NY (Urology Resident at Univ of MD Med Ctr)	1998
Jacob Wynes, B.S., M.S.	Podiatry Resident Hosp of Pennsylvania (High School Student, College Student from Rutgers, Graduate Student at Univ of MD SOM)	1992-1998
Yan Sun, Ph.D.	Research Instructor University of Maryland School of Medicine Department of Surgery, Division of Urology (Post-doctoral fellow at Univ of MD SOM)	1999-2004
Jennifer MaLossi, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2000-2001
Lisa Nipkow, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2002-2003
James Chuo, B.S.	PM&R Resident University of Maryland School of Medicine (College student from Univ of MD Baltimore County)	2002
Humphrey Atiemo, M.D.	Assistant Professor Department of Urology University of Michigan, Ann Arbor, MI (Urology Resident at Univ of MD Med Ctr)	2002-2003
Benjamin Lowentritt, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2003-2004

Sean Van Zijl, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2004-2005
Todd Lehrfeld, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2005-2006
Emmanuel Graham, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2005-2006
Julia Ahn, B.S.	Missouri School of Osteopathy (Graduate student Univ of MD SOM)	2005-2006
Mingkai Li, M.D., Ph.D.	Faculty, Xi'an 4 th Military Hospital, China (Post-doctoral Fellow UM SOM)	2006-2010
Troy Sofinowki, MD	Urology Resident University of Oklahoma Program (Medical Student – Univ of MD SOM)	2006
Gopal Gupta, M.D.	Urologic Oncology Fellow, NCI (Urology Resident at Univ of MD Med Ctr)	2006-2007
Alan Kusakabe, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2006-2007
Jordan Gold, B.A.	Medical Student Drexel University SOM, Philadelphia, PA (College Student)	2006-2007
Jared Berkowitz, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2007-2008
Brian Tully, M.D.	Private Practice (Urology Resident at Univ of MD Med Ctr)	2007-2008
Kristina Suson, M.D.	Pediatric Urology Fellow, Johns Hopkins (Urology Resident at Univ of MD Med Ctr)	2008-2009
Michael Leapman, M.D.	Urology Resident Mt. Sinai program, New York, NY (Medical Student, Univ of MD SOM)	2008
Charlotte Andersson	Medical Student University of Erasmus	2009

	Rotterdam, Netherlands	
Yu-Chao Hsu, M.D.	Post-doctoral Fellow Faculty, Division of Urology Chang Gung Memorial Hospital Taoyuan, Taiwan	2009-current
Jay Heintz, M.D.	Urology Resident University of Maryland Medical Center	2009
Sarah Chan, M.D.	Urology Resident University of Maryland Medical Center	2010

Current Grant Support

Principal Investigator (20% effort) 9/1/06-6/30/11
Human Bladder Urothelial Cell Structure and Function in Bladder Hypersensation
NIH-NIDDK R01-DK75728
Total Direct Cost: \$1,139,700
Total Indirect Cost:\$ 541,620
TOTAL COSTS: \$1,681,320

Principal Investigator (0% effort) 8/1/09-5/31/10
Human Bladder Urothelial Cell Structure and Function in Bladder Hypersensation
NIH-NIDDK R01-DK75728 Administrative Supplement ARRA for Equipment
Total Direct Cost: \$79,100
Total Indirect Cost:\$0

Principal Investigator (0% effort – Administrative Supplement) 7/15/09-8/31/10
Human Bladder Urothelial Cell Structure and Function in Bladder Hypersensation
Administrative Supplement NOT-OD-09-060 “Recover Act Funds for
Administrative Supplements Providing Summer Research Experiences for Students
and Science Educators”.
Total Direct Cost: \$9,424
Total Indirect Cost:\$4,712
TOTAL COSTS: \$14,136

Principal Investigator (10% effort) 10/1/10-9/30/12
University of Maryland Baltimore Interdisciplinary Research Center in Benign
Urology
NIH-NIDDK P20
Total Direct Cost: \$400,000
Total Indirect Cost:\$115,810
TOTAL COSTS: \$515,810

Principal Investigator (10% effort) 9/1/01-9/29/11
“Baltimore Continence Treatment Center”
NIH-NIDDK U01-DK060397
Total Direct Costs Awarded: \$1,115,838
Total Indirect Costs Awarded: \$260,126
TOTAL COSTS: \$1,375,964

Pending Grant Support

Alternate Principal Investigator (10% effort, PI: Rickey) 4/1/11-3/32/16
Pelvic Floor Disorders Network Clinical Sites (U10)
NIH-NICHD U10
Total Direct Cost: \$1,159,916
Total Indirect Cost: \$293,778
TOTAL COSTS: \$1,453,694

Past Grant Support

Principal Investigator (50% effort) 2/1/96-1/31/01
“Neuroplasticity of The Aging Bladder” (peer-reviewed)
NIH-NIA K08AG-000698
Total Direct Costs Awarded: \$469,800
Total Indirect Costs Awarded: \$34,060
Total Costs: \$503,860

Principal Investigator (25% effort) 6/15/01-6/31/07
“Effects of stretch on IC and Normal Urothelia
NIH-NIDDK R01-DK059441-05
Total Direct Costs Awarded: \$925,000
Total Indirect Costs Awarded: \$428,013
TOTAL COSTS: \$1,353,013

Principal Investigator (25% effort) 9/1/03 – 2/28/08
Interstitial Cystitis Clinical Research Network
NIH-NIDDK U01-DK65271-04
Total Direct Costs Awarded: \$1,280,564
Total Indirect Costs Awarded: \$311,886
TOTAL COSTS: \$1,592,450

Principal Investigator (1% effort) 3/1/05-2/28/08
Interstitial Cystitis Clinical Research Network – Ancillary Study 2
NIH-NIDDK U01-DK65271S2
Total Direct Costs Awarded: \$89,929
Total Indirect Costs Awarded: \$23,282
TOTAL COSTS: \$113,311

Principal Investigator (2% effort) 9/30/04-2/28/08
Interstitial Cystitis Clinical Research Network – Ancillary Study 1
NIH-NIDDK U01-DK65271S1
Total Direct Costs Awarded: \$292,956
Total Indirect Costs Awarded: \$76,170
TOTAL COSTS: \$369,126

Principal Investigator (1% effort) 3/1/05-2/28/08
Interstitial Cystitis Clinical Research Network – Ancillary Study 3
NIH-NIDDK U01-DK65271S3
Total Direct Costs Awarded: \$113,211
Total Indirect Costs Awarded: \$29,436
TOTAL COSTS: \$142,647

Publications

Original Work in Peer-Refereed Journals

1. Chai TJ, **Chai T**: Bactericidal activity of cerumen. *Antimicrobial Agents and Chemotherapy* 18(4):638-41 (1980).
2. Giam CZ, **Chai T**, Hayashi S, Wu HC: Prolipoprotein modification and processing in E. coli. a unique secondary structure in prolipoprotein signal sequence for the recognition by glyceryl transferase. *Eur J Biochem* 141(2):331-7 (1984).
3. **Chai TC**, Belville WD, McGuire EJ, Nyquist L: Specificity of AUA voiding symptom index: comparison of unselected and selected samples of both sexes. *J Urol* 150(5):1710-3 (1993).
4. **Chai TC**, Ohl DA. Difficult urethral catheterization due to ectopic ureter: an unusual presentation of ureteral ectopia in a male. *J Urol* 153(6):1899-1900 (1995).
5. **Chai TC**, Chung A, Belville WD, Faerber GJ: Compliance and complications of clean intermittent catheterization in the spinal cord injured patient. *Paraplegia* 33(3):161-3 (1995).
6. **Chai TC**, Gray ML, Steers WD: The incidence of a positive ice water test in bladder outlet obstructed patients: evidence for bladder neuroplasticity. *J Urol* 160(1):34-8 (1998).
7. **Chai TC**, Sklar GN: Use of the Flexible Cystoscope as a Vaginoscope to Aid in the Diagnosis of Artificial Sling Erosion. *Urology* 53(3):617-8 (1999).
8. **Chai TC**, Gemalmaz H, Andersson KE, Tuttle JB, Steers WD: Persistently Increased Voiding Frequency Despite Relief of Bladder Outlet Obstruction. *J Urol* 161:1689-93 (1999).
9. **Chai TC**, Zhang C, Shoenfelt JL, Johnson HW, Warren JW, Keay S: Bladder Stretch Alters Urinary Levels of HB-EGF and Antiproliferative Factor in Interstitial Cystitis Patients. *J Urol* 163:1440-4 (2000).
10. Warren JW, Horne LM, Hebel JR, Marvel RP, Keay SK, **Chai TC**: Pilot Study of Sequential Oral Antibiotics in the Treatment of Interstitial Cystitis. *J Urol* 163:1685-8 (2000).

11. **Chai TC**, Zhang C, Warren JW, Keay S: Percutaneous Sacral Nerve Root (S3) Neurostimulation Improves Symptoms and Normalizes Urinary HB-EGF Levels and Antiproliferative Activity in Interstitial Cystitis Patients. *Urology* 55: 643-6 (2000).
12. **Chai TC**, Andersson KE, Tuttle JB, Steers WD. Altered neural control of micturition in the aged F344 rat. *Urol Res* 28:348-54 (2000).
13. Keay S, Zhang C-O, Shoenfelt J, Erickson DR, Whitmore K, Warren JW, Marvel R, **Chai T**. Sensitivity and Specificity of Antiproliferative Factor, Heparin-Binding Epidermal Growth Factor-Like Growth Factor, and Epidermal Growth Factor as Urine Markers for Interstitial Cystitis. *Urology* 57(6A): 9-14 (2001).
14. Sun Y, Keay S, DeDeyne P, **Chai TC**. Augmented Stretch-activated ATP Release from Bladder Uroepithelial Cells in Interstitial Cystitis Patients. *J Urol* 166:1951-6 (2001).
15. **Chai TC**, Mamo GJ. Modified Techniques of S3 Foramen Localization and Lead Implantation in S3 Neuromodulation. *Urology* 58(5):786-90 (2001).
16. Sun Y, MaLossi J, Jacobs SC, **Chai TC**. Effect of Doxazosin on Stretch-activated Adenosine Triphosphate Release in Bladder Urothelial Cells from Patients with Benign Prostatic Hyperplasia. *Urology* 60(2):351-6 (2002).
17. Sun Y, **Chai TC**. Effect of DMSO and Heparin on Stretch-Activated ATP Release by Bladder Urothelial Cells from Interstitial Cystitis Patients. *BJU International* 90(4):381-5 (2002).
18. Palese MA, Colonna JO, **Chai TC**. Donor to Native Ureteroureterostomy in a Patient with Pre-existing Ileal During Renal Transplantation. *Urology* 61(3): 643 (2003).
19. Keay S, Zhang C, Shoenfelt JL, **Chai TC**. Decreased In Vitro Proliferation of Bladder Epithelial Cells from Patients with Interstitial Cystitis. *Urology* 61:1278-84 (2003).
20. Zhang C, Li Z, Shoenfelt JL, Kong C, Erickson DR, **Chai TC**, Keay S. Comparison of APF Activity and Epithelial Growth Factor Levels in Urine from Chinese, African American and Caucasian American IC Patients. *Urology* 61(5):897-901 (2003).
21. Keay S, Seillier-Moiseiwitsch, Zhang, C, **Chai TC**, Zhang J. Changes in human bladder epithelial cell gene expression associated with interstitial cystitis or antiproliferative factor treatment. *Physiol Genomics* 14(2):107-15 (2003).
22. Sun Y, **Chai TC**. Upregulation of P2X3 receptor during stretch of bladder urothelial cells from interstitial cystitis patients. *J Urology* 171(1):448-452 (2004).
23. Keay S, Zhang C-O, **Chai T**, Warren J, Koch K, Grkovic D, Colville, H, Alexander R. Antiproliferative factor, heparin-binding epidermal growth factor-like growth factor, and epidermal growth factor in men with interstitial cystitis vs. chronic pelvic pain syndrome. *Urology* 63:22-6 (2004).
24. Van Zijl S, **Chai T**. Gas-Forming Infection from *Clostridium perfringens* in a Renal Cyst of a Patient with Autosomal Dominant Polycystic Kidney Disease (ADPKD). *Urology* 63:1178-9 (2004).
25. Atiemo H, Wynes J, Chuo J, Nipkow L, Sklar GN, **Chai TC**. Effect of Botulinum Toxin on Detrusor Overactivity Induced by Intravesical ATP and Capsaicin in the Rat Model. *Urology* 65(3):622-6 (2005).
26. **Chai TC**, Keay S. New theories in interstitial cystitis. *Nature Clinical Practice Urology* 1:85-9 (2005).
27. The Urinary Incontinence Treatment Network (UITN)*. Design of the Stress Incontinence Surgical Treatment Efficacy Trial (SISTER) Study. *Urology* 66:1213-17

- (2005). *UITN is a NIH multi-institutional consortium in which T.C. Chai is a PI at University of Maryland site and is part of the authorship line when UITN is used.
28. Sun Y, **Chai TC**. Augmented extracellular adenosine triphosphate (ATP) signaling in bladder urothelial cells from patients with interstitial cystitis. *Am J Physiol* 290(1):C27-34 (2006).
 29. Kanai A, de Groat W, Birder L, **Chai T**, Hultgren S, Fowler C, Fry C. Symposium report on urothelial dysfunction: pathophysiology and novel therapies. *J Urol* 175(5):1624-9 (2006).
 30. Sun Y, Chen M, Lowentritt BH, Van Zijl PS, Koch KR, Keay S, Simard JM, **Chai TC**. EGF and HB-EGF Modulate Inward Potassium Current in Human Bladder Urothelial Cells from Normal and Interstitial Cystitis Patients. *Am J Physiol – Cell Physiol* 292(1):C106-14 (2007).
 31. Lemack GE, Xu Y, Brubaker L, Nager C, **Chai T**, Moalli P, Kraus SR, Kerr L, Sirils L, Stoddard A. Clinical and Demographic Factors Associated with Valsalva Leak Point Pressure among Women Undergoing Burch Bladder Neck Suspension or Autologous Rectus Fascial Sling Procedures. *Neurourol Urodyn* 26(3):392-6 (2007).
 32. Albo M, Wruck L, Baker J, Brubaker L, **Chai T**, Dandreo KJ, Diokno A, Goode P, Kraus S, Kusek JW, Lemack G, Lowder J, Steers WD. The relationships among measures of incontinence severity in women undergoing surgery for stress urinary incontinence. *J Urol* 177(5):1810-4 (2007).
 33. The Urinary Incontinence Treatment Network (UITN)*. Design of the Behavior Enhances Drug Reduction of Incontinence (BE-DRI) study. *Contemporary Clinical Trials* 28:48-58 (2007). *UITN is a NIH multi-institutional consortium in which T.C. Chai is a PI at University of Maryland site and is part of the authorship line when UITN is used.
 34. Albo ME, Richter HE, Brubaker L, Norton P, Kraus SR, Zimmern PE, **Chai TC**, et al. for the Urinary Incontinence Treatment Network. Burch colposuspension versus fascial sling to reduce urinary stress incontinence. *New Engl J Med* 356(21):2143-55 (2007).
 35. Kraus SR, Markland A, **Chai TC**, Stoddard A, FitzGerald MP, Leng W, Mallett V, Tennstedt SL for the UITN. Race and ethnicity do not contribute to differences in pre-operative urinary incontinence severity or symptom bother in women undergoing stress urinary incontinence. *Am J Ob Gyn* 197(1):92-6 (2007).
 36. Richter HE, Diokno A, Kenton K, Norton P, Albo M, Kraus S, Moalli P, **Chai TC**, Zimmern P, Litman H, Tennstedt. Predictors of treatment failure 24 months after surgery for stress urinary incontinence. *J Urol* 179(3):1024-30 (2008).
 37. Nager CW, Fitzgerald MP, Kraus SP, **Chai TC**, Zyczynsk H, Sirils L, Lemack GE, Lloyd K, Littman H, Stoddard AM, Baker J, Steers W. Urodynamic measures do not predict stress incontinence outcomes after surgery for stress urinary incontinence in women. *J Urol* 179(4):1470-4 (2008).
 38. Subak LL, Brubaker L, **Chai TC**, Creasman JM, Diokno AC, Goode PS, Kraus SR, Kusek JW, Leng WW, Lukacz ES, Norton P, Tennstedt S. High costs of urinary incontinence among women electing surgery. *Obstet Gynecol* 111(4):899-907 (2008).
 39. Burgio KL, Kraus SR, Menefee S, Borello-France D, Corton M, Johnson HW, Mallett V, Norton P, Fitzgerald MP, Dandreo KJ, Richter HE, Rozanski T, Albo M, Zyczynsk HM, Lemack GE, **Chai TC**, Khandwala S, Baker J, Brubaker L, Stoddard AM, Goode

- PS, Neilsen-Omeis B, Nager C, Kenton K, Tennstedt SL, Nyberg LM, Kusek JW, Steers WD. Combined behavior and drug therapy to enable drug discontinuation in the treatment of urge incontinence in women: A randomized controlled trial. *Ann Int Med* 149(3):161-9, 2008.
40. Lemack GE, Kraus S, Litman H, Fitzgerald MP, **Chai T**, Nager C, Sirls L, Zyczynski H, Baker J, Lloyd K, Steers WD. Normal preoperative urodynamic testing does not predict postoperative voiding dysfunction among women undergoing surgery for SUI: results from a prospective randomized trial comparing Burch versus pubovaginal sling. *J Urol* 180(5):2076-80, 2008.
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65. Kraus SR, Lemack GE, **Chai T**, Richter H, Albo M, Brubaker L, Sirls L, Litman H, Norton P, Leng W. Urodynamic changes 24 months after Burch colposuspension and autologous fascia pubovaginal sling. AUA Annual Meeting, Orlando, Florida (2008).
66. Sun Y, Li M, Christ GJ, Melman A, **Chai TC**. New insight into non-neurogenic OAB Pathogenesis – the role of BK channel in bladder urothelial cells. AUA Annual Meeting, Orlando, Florida (2008).

67. Li M, Sun Y, **Chai TC**. Increased responsiveness of non-neurogenic OAB bladder urothelial cells to capsaicin and heat stimuli – role for the TRPV1 receptor in OAB pathogenesis. AUA Annual Meeting, Orlando, Florida (2008).
68. Tully BT, Sun Y, Berkowitz J, Li M, **Chai TC**. Defects in muscarinic receptor cell signaling in a bladder cancer cell line. MidAtlantic AUA Annual Meeting, Cambridge, Maryland (2008).
69. Richter HE, Nygaard I, Huang L, Kraus S, Kenton K, **Chai T**, Whitcomb E, Sirls L, Lemack G, Dandreo K, Stoddard A. Characteristics of obese, overweight and normal (healthy) weight women seeking surgical treatment for stress urinary incontinence. International Continence Society (ICS) Annual Meeting, San Francisco, CA (2009).
70. Sanses T, Brubaker L, Kraus S, Lowder J, Lemack G, Norton P, Tennstedt S, **Chai T**. Preoperative urinary hesitancy is associated with surgical failure and postoperative voiding dysfunction following Burch colposuspension or pubovaginal rectus fascial sling surgery. International Continence Society (ICS) Annual Meeting, San Francisco, CA (2009).
71. Kusakabe AO, **Chai TC**. Novel Reconstructive Repair of Ileal Loop Stomal Stenosis or Left Ureteroileal Anastomotic Stricture with a New Segment of Ileum. MidAtlantic AUA Annual Meeting, Williamsburg, VA (2009).
72. Wolf-Johnston AS, Sun Y, **Chai TC**, Birder LA. Bladder urothelial cells from patients with overactive bladder exhibit alterations in mechano- and chemosensitivity. Society for Neuroscience Annual Meeting, Chicago, IL (2009).
73. Nager CW, Kraus SR, Kenton K, Sirls L, **Chai TC**, Wai C, Sutkin G, Leng W, Litman H, Huang L, Tennstedt S, Richter HE. Urodynamics, the supine empty bladder stress test, and incontinence severity. American Urogynecological Association Annual Meeting, Hollywood, Florida (2010).
74. Sanses T, Brubaker L, Xu Y, Kraus S, Lowder J, Lemack G, Norton P, Tennstedt S, **Chai T**. Preoperative symptom of hesitating urinary stream with associated with surgical failure and postoperative voiding dysfunction following Burch colposuspension or pubovaginal rectus fascial sling surgery. Society for Urodynamics and Female Urology (SUFU) Annual Meeting, St. Petersburg, FL (2010).
75. Christiaansen CE, Sun Y, Hsu Y, **Chai TC**. Stretch-induced expression of HIF-1 α , HIF-2 α and VEGF in bladder urothelial cells (BUC) from subjects with overactive bladder (OAB). American Urological Association Annual Meeting, San Francisco, CA (2010).
76. Li M, Sun Y, Tomiyia N, Hsu Y, Lee YC, **Chai TC**. Elevated polyamine levels in bladder urothelial cells from subjects with overactive bladder (OAB) mediate oxotremorine (OXO) evoked intracellular calcium increase and acetylcholine release. American Urological Association Annual Meeting, San Francisco, CA (2010).
77. Sun Y, **Chai TC**. The role of m3 muscarinic signaling bladder urothelial cancer cell proliferation and apoptosis. American Urological Association Annual Meeting, San Francisco, CA (2010).
78. **Chai T**, Huang L, Kenton K, Richter H, Kraus S, Baker J, Litman H. Clinical and demographic variables associated with static urethral pressure profilemetry in patients undergoing mid urethral sling surgery. American Urological Association Annual Meeting, San Francisco, CA (2010).

79. Sanses T, Brubaker L, Xu Y, Kraus S, Lowder J, Lemack G, Norton P, Tennstedt S, **Chai T**. Preoperative symptom of hesitating urinary stream with associated with surgical failure and postoperative voiding dysfunction following Burch colposuspension or pubovaginal rectus fascial sling surgery. American Urological Association Annual Meeting, San Francisco, CA (2010).
80. Sirls L, Tennstedt S, Albo M, **Chai T**, Kenton K, Huang L, Stoddard AM, Arisco A, Gormley EA for UITN. Factors associated with quality of life in women undergoing surgery for stress urinary incontinence. American Urological Association Annual Meeting, San Francisco, CA (2010).
81. Dyer K, Brubaker L, Nygaard I, Rahn D, Markland A, Stoddard A, **Chai T**, Lukacz for the UITN. Minimum important difference for validated instruments in women with urgency incontinence. International Continence Society Meeting, Toronto, Canada (2010).
82. Dyer K, Brubaker L, Nygaard I, Rahn D, Markland A, Stoddard A, **Chai T**, Lukacz for the UITN. Minimum important difference for validated instruments in women with urgency incontinence. American Urogynecologic Society Meeting, Long Beach, CA (2010).
83. Nygaard I, Brubaker L, **Chai T**, Markland A, Menefee S, Sirls L, Stukin G, Zimmern P, Arisco A., Huang L, Tennstedt S., Stoddard A for UITN. Risk Factors for UTI After SUI Surgery. American Urogynecologic Society Meeting, Long Beach, CA (2010).
84. Brubaker L, Norton P, **Chai T**, Albo M, Dandreo KJ, Lemack G, Lowder K, Lloyd L, Sirls A., Arisco A., Kusek JW for UITN. Adverse Events in TOMUS Trial abstract submitted to Society for Gynecologic Surgery.

Grand Rounds and Invited Speeches - Regional

1. “*Overactive Bladder and Urinary Incontinence*”, Department of Family Medicine Grand Rounds, University of Maryland School of Medicine, Baltimore, MD October 21, 1998.
2. “*Neuroplasticity Diagnosed by Urodynamics*”, Maryland Urologic Society Spring Meeting, Baltimore, MD, February 6, 1999.
3. “*Urinary Incontinence and Overactive Bladder*”, Franklin Square Hospital Grand Rounds, Baltimore, MD, March 8, 1999.
4. “*Neurophysiology of Micturition and Continence*”, Department of Neurology Grand Rounds, University of Maryland School of Medicine, Baltimore, MD, February 23, 2000.
5. “*Surgical Management of Interstitial Cystitis?*”, Maryland Urologic Society Spring Meeting, Baltimore, MD, March 11, 2000.
6. “*Workup and Treatment of Urinary Incontinence*”, Peninsula Regional Medical Center Surgical Scientific Educational Session, Salisbury, MD, May 16, 2000.
7. “*Interstitial Cystitis: A Boon to Understanding Basic Bladder Physiology?*”, Department of Obstetrics and Gynecology Grand Rounds, Greater Baltimore Medical Center, Baltimore, MD, October 6, 2000.
8. “*Overactive Bladder and Urinary Incontinence*”, Fall Regional Conference of the Maryland Academy of Family Physicians, Rocky Gap, MD, October 22, 2000.

9. “*Stretch and the Bladder Urothelia: Why You Feel the Urge*”, Maryland Urologic Society Spring Meeting, Baltimore, MD, March 17, 2001.
10. “*InterStim Therapy: S3 Neuromodulation for Treatment of Voiding Dysfunction or The Bladder Matters*”, Society for Urologic Nursing Association Maryland Regional Meeting, Timonium, MD, April 21, 2001.
11. “*Urinary Incontinence*”, Suburban Hospital Grand Rounds, Bethesda, MD, May 25, 2001.
12. “*Pathophysiology of Stress Urinary Incontinence*”, Department of Obstetrics and Gynecology Grand Rounds, St. Agnes Hospital, Baltimore, MD, June 27, 2001.
13. “*Urinary Incontinence – Need for Data*”, Department of Family Medicine Grand Rounds, University of Maryland School of Medicine, Baltimore, MD, October 4, 2001.
14. “*Management of UTIs and Interstitial Cystitis*”, Fall Regional Conference of the Maryland Academy of Family Physicians, Solomons Island, MD, November 3, 2001.
15. “*Urinary Incontinence*”, 8th Annual Chesapeake Regional Osteopathic Scientific Conference, Primary Care Update: Medicine in 2003, Ocean City, MD June 30, 2002.
16. “*Stress Urinary Incontinence – The Need for Data*” Grand Rounds, Department of Family Medicine, University of Maryland School of Medicine, August 8, 2002.
17. “*Overactive Bladder and Interstitial Cystitis*”, Montgomery General Hospital Grand Rounds, Olney, MD, September 5, 2002.
18. “*Prostate Cancer 2002: New Perspectives*” – Urinary Incontinence, Baltimore, MD September 26-28, 2002.
19. “*Modern Perspectives and Historical Footnotes on Surgery for Stress Incontinence*” – Mid-Atlantic AUA Meeting, October 7, 2002.
20. “*Interstitial Cystitis*”, 8th Annual Chesapeake Regional Osteopathic Scientific Conference, Primary Care Update: Ocean City, MD June 20, 2003.
21. “*Surgery for Non-neoplastic Conditions of the Lower Urinary Tract*”, Annual American Kidney Stone Management, Inc. Meeting, Orlando, FL August 9, 2003.
22. “*Intravesical Agents and Gene Therapy in Treatment of Overactive Bladder*” Panel Presenter, Mid-Atlantic AUA Meeting, Boca Raton, FL Oct. 29, 2003.
23. “*Overactive Bladder: Form and Function*”, Department of Obstetrics and Gynecology Grand Rounds, University of Maryland Baltimore, February 6, 2004.
24. “*Overactive Bladder: Evolving Concepts*”, Department of Obstetrics and Gynecology Grand Rounds, Johns Hopkins Hospital, Baltimore, MD April 22, 2004.
25. “*Overactive Bladder: Evolving Concepts*”, Department of Medicine Grand Rounds, Harbor Hospital, Baltimore, MD June 11, 2004.
26. “*Overactive Bladder: Evolving Concepts*”, 9th Annual Chesapeake Regional Osteopathic Scientific Conference, Primary Care Update: Ocean City, MD June 19, 2004.
27. “*Overactive Bladder: Evolving Concepts*”, Department of Internal Medicine Grand Rounds, Northwest Hospital Center, Timonium, MD, July 7, 2004.
28. “*Overactive Bladder: Evolving Concepts*”, Medical Grand Rounds, Good Samaritan Hospital, Baltimore, MD, July 14, 2004.
29. “*Overactive Bladder: Form and Function*”, Obstetrics and Gynecology Grand Rounds, Frederick Memorial Hospital, Frederick, MD August 2, 2004.
30. “*Overactive Bladder: Form and Function*”, Obstetrics and Gynecology Grand Rounds, St. Joseph Medical Center, Timonium, MD, September 9, 2004.

31. “*Overactive Bladder: Evolving Concepts*”, Medicine Grand Rounds, Franklin Square Hospital, Baltimore, MD September 30, 2004.
32. “*Overactive Bladder: Evolving Concepts*”, Medicine Grand Rounds, Upper Chesapeake Hospital, Bel Air, MD, October 6, 2004.
33. “*Overactive Bladder: Evolving Concepts*”, Medicine Grand Rounds, Union Memorial Hospital, Baltimore, MD, October 7, 2004.
34. “*Hypersensitive Bladder Conditions: Overactive Bladder and Interstitial Cystitis*”, Washington Urological Society Fall Meeting, Washington, DC, October 21, 2004.
35. “*Urinary Incontinence 2006*” 12th Annual Chesapeake Regional Osteopathic Scientific Conference, Primary Care Update. July 24, 2006.
36. “*Voiding Dysfunction and the Bladder Urothelium*” MidAtlantic AUA Meeting, Washington DC, October 14, 2006.
37. “*Urinary Incontinence*” Maryland Academy of Family Physicians Sprint Meeting, June 23, 2007, Annapolis, MD.
38. “*Urinary Incontinence*” University of Maryland Family Medicine & Community Health Departmental Annual Meeting, June 29, 2007, Ocean City, MD.
39. “*Urinary Incontinence*” University of Maryland University of Maryland Family Medicine & Community Health, Grand Rounds, Oct. 17, 2007, Baltimore, MD
40. “*Interstitial Cystitis – Disease of Syndrome?*” The MidAtlantic Region of The Wound, Ostomy and Continence Nurses Society Annual Meeting, Oct. 26, 2007, Baltimore, MD.
41. “*Bladder Injuries during Hysterectomy: A Need for a Partnership Between the Urologist and the Gynecologist*” Ob/GYN Conference, Peninsula Regional Medical Center, Salisbury, MD, December 16, 2008.
42. “*Point Counterpoint – Female Pelvic Reconstruction Urology vs. Female Pelvic Medicine*” MidAtlantic AUA Annual Meeting, Williamsburg, VA (2009).
43. “*Stress Urinary Incontinence AUA Practice Guidelines*” MidAtlantic AUA Annual Meeting, Neamcolin, PA (2010).

Invited Speeches – National/International

1. “*InterStim Therapy: S3 Neuromodulation for Treatment of Voiding Dysfunction*”, Taiwanese Incontinence Society, Taipei, Taiwan, January 13, 2001.
2. “*Sacral Neuromodulation in Treatment of Voiding Dysfunction*”, Society for Basic Urologic Research, Annual Meeting Breakout Session, Anaheim, CA, June 2, 2001.
3. “*Neural Control of Bladder Function*”, 4th World Congress in Urologic Research, Tuscon, AZ, December 2, 2001.
4. “*Advancing the Treatment of Fecal and Urinary Incontinence Through Research: Trial Design, Outcome Measures, and Research Priorities*”, Consensus Conference, International Foundation for Functional Gastrointestinal Disorders, Milwaukee, WI, November 3-5, 2002.
5. “*Basic Science and Translational Research in Female Pelvic Floor Disorders*” National Institutes of Health, Bethesda, MD November 14-15, 2002.
6. “*The Role of Bladder Urothelium in Sensory Transduction: Can IC Bladder Urothelial Cells be Hypersensitive?*”, Research Insights into Interstitial Cystitis: A

- Basic and Clinical Science Symposium, Presented by the NIH-NIDDK and ICA, Old Town Alexandria, VA October 31, 2003.
7. “*Report on NIH Studies – Chronic Pelvic Pain Syndromes*”, Society for Urodynamics and Female Urology, First Annual Meeting, Phoenix, Arizona, February 28, 2004.
 8. “*ATP Sensitization*”, AUA/SBUR Summer Research Conference, McLean, VA, August 13-15, 2004.
 9. “*Antiproliferative Involvement in Interstitial Cystitis*”, Understanding urothelial dysfunction: pathophysiology and novel therapies. Workshop, International Continence Society and International Urogynecological Association 1st Annual Combined Meeting, Paris, France, August 23, 2004.
 10. “*Role of bladder urothelial cell in sensory signal transduction using interstitial cystitis as a human model*”, Satellite Symposium, XXXV International Congress of Physiological Sciences, San Diego, CA, March 29, 2005.
 11. “*Interstitial Cystitis – Translational Research*”, American Pain Society Annual Meeting, Symposium on Interstitial Cystitis, Boston, MA, March 30-April 2, 2005.
 12. “*Role of Bladder Urothelium in Bladder Hypersensory Disease*”, International Bladder Symposium, Baltimore, MD., April 15-17, 2005.
 13. “*Management of Incontinence After Sling Procedure: Surgery vs. Drugs – Point Counterpoint*” American Urological Association Annual Meeting, Plenary Session, May 23, 2005, San Antonio, TX.
 14. “*Treatment of Lower Urinary Tract Symptoms (LUTS) in Men – Are We Treating BPH or Something Else?*” Taipei Veterans General Hospital Grand Rounds, Taipei, Taiwan, August 23, 2005.
 15. “*Evidence Based Medicine (EBM) in Male LUTS - Review of NIH- Sponsored Clinical*” Urology Scientific Symposium, Formosa Regent Hotel, Taipei, Taiwan, August 23, 2005.
 16. “*Treatment of Lower Urinary Tract Symptoms (LUTS) in Men – Are We Treating BPH or Something Else?*” Taichung Veterans General Hospital Grand Rounds, Taichung, Taiwan, August 24, 2005.
 17. “*Evidence Based Medicine (EBM) in Male LUTS - Review of NIH- Sponsored Clinical*” Urology Scientific Symposium, Splendor Hotel, Taichung, Taiwan, August 23, 2005.
 18. “*Treatment of Lower Urinary Tract Symptoms (LUTS) in Men – Are We Treating BPH or Something Else?*” Tri-Service General Hospital Grand Rounds, Taipei, Taiwan, August 24, 2005.
 19. “*Role of Bladder Urothelium in Bladder Sensation - From Bench to Bedside*” 27th Annual Congress of the Taiwan Urological Association, Kaoshiung, Taiwan, August 27, 2005.
 20. “*Bladder outlet obstruction (BOO) and Overactive Bladder (OAB) - Empiricism versus Science*”, Taiwan Urological Association Satellite Symposium, Ambassador Hotel, Kaoshiung, Taiwan, August 27, 2005.
 21. “*Update on mediators of bladder afferent activity*” Chronic Pelvic Pain/ Chronic Prostatitis Scientific Workshop, NIH-NIDDK, Linthicum, MD, October 19, 2005.
 22. “*The Overactive Bladder: More Options or Differences without Distinction*” Panel Discussion, MidAtlantic AUA Meeting, Phoenix, AZ (2005).

23. “*IC Therapy and Role of Neuromodulation*” 12th Annual Paul Peters Urology Symposium, University of Texas Southwestern, Dallas, TX Jan. 19, 2006.
24. “*Relevant Surgical Pelvic Anatomy*” 12th Annual Paul Peters Urology Symposium, University of Texas Southwestern, Dallas, TX Jan. 20, 2006.
25. “*Surgical management of erectile dysfunction*”. Christian Medical and Dental Association’s (CMDA) Continuing Medical and Dental Education (CMDE) Conference, Chiangmai, Thailand, February 28, 2007.
26. “*Surgical management of urolithiasis*” Christian Medical and Dental Association’s (CMDA) Continuing Medical and Dental Education (CMDE) Conference, Chiangmai, Thailand, March 1, 2007.
27. “*Treatment of urethral strictures*” Christian Medical and Dental Association’s (CMDA) Continuing Medical and Dental Education (CMDE) Conference, Chiangmai, Thailand, March 2, 2007.
28. “*Treatment of urinary incontinence*” Christian Medical and Dental Association’s (CMDA) Continuing Medical and Dental Education (CMDE) Conference, Chiangmai, Thailand, March 2, 2007.
29. “*Medical management of BPH*” Christian Medical and Dental Association’s (CMDA) Continuing Medical and Dental Education (CMDE) Conference, Chiangmai, Thailand, March 3, 2007.
30. “*Update from the Urinary Incontinence Treatment Network (UITN): Work from Publications & Presentations (P&P) Committee*”. Podium Lecture. Society for Urodynamics and Female Urology Annual Meeting. San Diego, CA, March 23, 2007.
31. “*Interstitial Cystitis*” Clinical Reviewers’ Education Program – Women’s Health Update – Part 2, White Oak Conference Room, Food and Drug Administration, Silver Spring, MD November 16, 2007.
32. “*Take Home Message – Urinary Incontinence*”, American Urological Association Annual Meeting, Orlando, FL, May 22, 2008.
33. Asian Network of Excellence in Urological Science (NEXUS): Building Overactive Bladder Awareness. June 7-8, 2008, Sapporo, Japan.
34. Overactive Bladder presentation to Pakistani gynecologists and Primary Care Physicians – Urogynae Day. June 9, 2008, Bangkok, Thailand.
35. Overactive Bladder presentation to Singapore Primary Care Physicians, June 12, 2008, Singapore.
36. “*Basic Research Update in Overactive Bladder and Urge Urinary Incontinence*” – NIDDK New Research Directions in Urinary Incontinence Symposium, January 7, 2009, Bethesda, MD.
37. “*Management of Male LUTS: How Optimized and Different Between Countries*” – Japanese Urological Association/American Urological Association Joint Meeting, Annual AUA Meeting, San Francisco, CA, 2010.
38. “*Urothelial Biology and Overactive Bladder*” – American Urological Association Foundation / Society of Basic Urologic Research Annual Summer Research Conference, AUA Headquarters, Linthicum, MD, 2010.

Community Service / Patient Support Group Presentations

1. “*Urinary Incontinence*”, American Foundation for Urologic Diseases Bladder Health Week, University of Maryland Hospital, Baltimore, MD, November 17, 1999.
2. “*Surgical Management of Interstitial Cystitis*”, Interstitial Cystitis Association Maryland Chapter Meeting, Columbia, MD, April 17, 2001.
3. “*Effect of Prostate Cancer Treatments on Bladder Function*”, Us Too, Prostate Cancer Support Group Meeting, University of Maryland Hospital, Baltimore, MD, March 15, 2001.
4. “*Interstitial Cystitis, a Hypersensory Pelvic Disorder*”. Interstitial Cystitis Association (ICA) Regional Support Group Meeting, Maryland City Public Library, Laurel, MD, October 19, 2003.
5. “*Chronic Pelvic Pain Syndrome AKA Chronic Prostatitis*”. ICA 20th Anniversary Meeting, Old Town Alexandria, VA, November 1, 2003.
6. “*Treatment of IC – Anything New?*” ICA Regional Meeting, Alexandria, VA, September 25, 2005.
7. “*Urological Issues in Patients with Spinal Cord Dysfunction*”. American Syringomyelia & Chiari Alliance Project 2008 Annual Conference.

Regional and National Courses Taught

1. Pelvic Floor Dysfunction Course, Innovations in Medical Education and Training, University of Maryland, Baltimore, MD, May 10-12, 2001
2. National InterStim Training Course, Medtronic Inc., Memphis, TN, July 13-14, 2001.
3. Onsite Regional InterStim Training Course, Medtronic, Inc., Richmond, VA, August 29, 2001.
4. Onsite Regional InterStim Training Course, Medtronic, Inc., Morristown, NJ, November 2, 2001.
5. Onsite Regional InterStim Training Course, Medtronic, Inc., Newton, MA, November 9, 2001.
6. Onsite Regional InterStim Training Course, Medtronic, Inc., Columbia, MD, November 16, 2001.
7. Modern Treatment of Urinary Incontinence, American Urological Association Annual Meeting, Orlando, FL, May 25-30, 2002.
8. Prostate Cancer 2002: New Perspectives – Urinary Incontinence. Baltimore, MD, September 28, 2002.
9. Onsite Regional InterStim Training Course, Medtronic, Inc., Columbia, MD, October 5, 2002.
10. 20th Annual Houston Everett Course in Urogynecology, Johns Hopkins Hospital, Baltimore, MD, February 20-22, 2003.
11. Modern Treatment of Urinary Incontinence, American Urological Association Annual Meeting, Chicago, IL, April 26 – May 1, 2003.
12. Modern Treatment of Urinary Incontinence, American Urological Association Annual Meeting, San Francisco, CA May 5, 2004.
13. 2007 Maryland Urological Association Annual Meeting – Course Director, Davidge Hall, University of Maryland School of Medicine, March 24, 2007
14. Advances and Controversies in Management of Overactive Bladder – Course Director, 2008 American Urological Association Meeting, Orlando, FL, May 20, 2008.

Visiting Professorships

1. Cleveland Clinic Foundation Urological Institute, Section of Voiding Dysfunction and Female Urology, October 18-19, 2001.
2. Dnipropetrovsk Medical Academy, Department of Urology, Department of Obstetrics and Gynecology, Dnipropetrovsk, Ukraine, March 29 – April 1, 2004.
3. Taipei Veterans General Hospital, Taipei, Taiwan, August 23, 2005.
4. Taichung Veterans General Hospital, Taichung, Taiwan, August 24, 2005.
5. Tri-Service General Hospital, Taipei, Taiwan, August 25, 2005.