

## UROLOGY

### OVERVIEW

Urology is one of the leading academic urologic units in the nation, and has been recognized as one of the best urologic programs in the United States in *US News and World Reports*. The Section specializes in the treatment of specific urologic subspecialties: oncology, pediatrics, neurourology and female urology, the management of stone disease, and minimally invasive surgery. The section continues to make contributions to education, research and clinical care. Members of the Section maintain active NIH supported research projects and Dr. Edward M. Uchio was recently recruited to be Chief of Urology at the VA and has significantly increased the clinical activity at the Veteran's Administration Hospital. Dr. John W. Colberg, Director of Urologic oncology, has an active clinical practice dealing with all aspects of urologic oncology and reconstructive urology. Under the tutelage of Kevin R. Anderson, M.D., the clinical activities have been expanded to include hand assisted laparoscopic radical nephrectomies as well as laparoscopic orchidopexies and laparoscopic cryoablation of renal tumors. During the academic year, Dr. Anderson indicated that he planned to return to the west coast and after a nationwide search Dr. Dinesh Singh was selected to replace Dr. Anderson on the faculty. Dr. Singh trained with Drs. Indy Gill and Steve Stroom at the Cleveland Clinic and will bring to the Section a full gamut of laparoscopic expertise including experience with laparoscopic radical prostatectomies. Dr. Harris E. Foster, Jr., is director of neurology and female urology and in addition to his clinical practice is a principal investigator on a multicenter NIH grant studying, "Clinical Management of Benign Prostatic Hypertrophy." Dr. Robert Weiss continues to have a busy practice dealing with urologic abnormalities affecting the pediatric population.

Urology continues to have an active input into basic and clinical urologic research. The research group headed by **Robert Weiss, Jamshid Latifpour and Marcia Wheeler** possesses an NIH research grant on "Age-Dependent Factors in Ureteral-Vesical Function." This grant previously received the first Merit Award given by the NIH to a urologist. Dr. Latifpour also has an NIH grant entitled, "The Effects of Diabetes on the Urinary Tract, Biochemical and Functional Changes in Diabetic Bladder." Dr. Latifpour working with **Dr. Harris Foster** also is testing the hypothesis that long-term administration of alpha-adrenergic antagonists causes differential alterations in the molecular, biochemical and functional properties of alpha-adrenergic receptors in the genitourinary tract. They are specifically looking at the long-term effectiveness of alpha-1 adrenergic receptor antagonists in the treatment of lower urinary tract symptoms secondary to BPH. This parallels a study in which Dr. Foster is the P.I. for in a NIH-BPH clinical trial. Dr. Foster also chairs a NIH interstitial cystitis clinical research network. Robert Weiss, Marcia Wheeler and Dan Eisenberg, who was on a NIH training grant in the Section of Urology, developed transgenic mice that over-express the anti-apoptotic gene survivin or a nonfunctional, non-phosphorylatable mutant survivin. Using these mice they have embarked on studies of signaling pathways linking bladder inflammation and survivin inhibition of apoptosis. **Dr. Edward Uchio** is investigating the role of the von Hippel Lindau (VHL) tumor suppressor pathway in renal cancer and the effects of the hypoxia inducible factor (HIF) pathway in tumor genesis using siRNA.

### FACULTY

	<i>Academic Rank</i>	<i>Academic Interests</i>
Robert M. Weiss, M.D.	Donald Guthrie Professor and Chief	Pediatric Urology
Bernard Lytton, M.D.	Professor Emeritus	Reconstruction of Urinary Tract
Kevin R. Anderson, M.D.	Associate Professor	Endourology & Laparoscopy
John W. Colberg, M.D.	Associate Professor	Uro-oncology

Harris E. Foster, Jr., M.D.	Associate Professor	Neurourology & Female Urology
Edward Uchio, M.D.	Assistant Professor	Uro-oncology
Jamshid Latifpour, Ph.D.	Senior Research Scientist	Receptor Pharmacology

### **AFFILIATED FACULTY**

	<i>Academic Rank</i>	<i>Academic Interests</i>
Stuart Flynn, M.D.	Professor of Uro-pathology	Uro-pathology
Arthur T. Rosenfield, M.D.	Professor of Uroradiology	Uroradiology

### **VOLUNTARY FACULTY**

	<i>Rank</i>	<i>Academic Interests</i>
Richard P. Lena, M.D.	Associate Clinical Professor	---
Arnold M. Baskin, M.D.	Assistant Clinical Professor	Education
Richard J. Dean, M.D.	Assistant Clinical Professor	Education
Robert A. Feldman, M.D.	Assistant Clinical Professor	Education
Paul A. Kraus, M.D.	Assistant Clinical Professor	Education
Ralph F. Stroup, M.D.	Assistant Clinical Professor	Education
James F. Walsh, III, M.D.	Assistant Clinical Professor	Education
Joseph P. Antoci, M.D.	Clinical Instructor	Education
Thomas Buckley, M.D.	Clinical Instructor	Education
Joseph A Camilleri, Sr, MD	Clinical Instructor	---
Joseph A. Camilleri, Jr, MD	Clinical Instructor	Education
Peter Demir, M.D.	Clinical Instructor	Education
Ralph J. DeVito, M.D.	Clinical Instructor	Education
Michael Flanagan, M.D.	Clinical Instructor	Education
David G. Hesse, M.D.	Clinical Instructor	Education
Thomas V. Martin, M.D.	Clinical Instructor	Education
James P. Roach, M.D.	Clinical Instructor	Education

### **STAFF**

	<i>Position</i>
Lisa Dahlmeyer	Administrative Assistant
Patricia DeFrancesco	Administrative Associate I
Sharyn Jones	PCA
Theresa Martin, R.N.	Study Coordinator
Lucille Montesanto	Administrative Assistant
Susan Morales	Administrative Assistant
Kathy Olsen, R.N.	Clinical Nurse
Claire P. Puklin, R.N.	Nurse Manager
Jill Sarkady	Administrative Assistant
Pamela Schontag	Administrative Assistant
Patricia Sweat	Account Assistant IV
Marcia Wheeler, M.S.	Associate in Research

## POST DOCTORAL FELLOWS, RESEARCH ASSOCIATES AND RESIDENTS

	<i>Position</i>	<i>Institution of Last Degree</i>
Piero Biancani, Ph.D.	Research Affiliate	Yale University
Derek Hausladen, M.D.	Chief Resident	Washington University
Anthony Kim, M.D.	Chief Resident	Boston University Sch Med
M. Grey Maher, M.D.	Resident	Yale University Sch Med
Joseph Renzulli, M.D.	Resident	Boston University Sch Med
Margarett Shnorhavorian, M.D.	Resident	University of California at San Francisco
Frank Tamarkin, M.D.	Postdoctoral Fellow	M.C.P. Hahnemann
Charles Walker, M.D.	Resident	Weill Medical College of Cornell University
George L. Wheeler, Ph.D.	Research Affiliate	University of Maryland
Makoto Yono, M.D., Ph.D.	Postdoctoral Associate	University of Kumamoto, Japan
Sagar Phatak, M.D.	Resident	University of Pittsburgh School of Medicine

## CURRENT GRANT SUPPORT

	<i>Title</i>	<i>Funding Agency</i>	<i>Dates</i>
Robert Weiss, M.D.	Age dependent factors in ureteral-vesical function	National Institute of Diabetes & Digestive & Kidney Diseases (NIH)	9/15/99 – 6/30/05
Harris Foster, Jr., M.D.	Phytotherapy for the Treatment of Benign Prostatic Hyperplasia Symptoms	National Institute of Diabetes & Digestive & Kidney Diseases (NIH)	9/30/02-
Jamshid Latifpour, Ph.D.	Biochemical and functional changes in diabetic bladder	National Institute of Diabetes & Digestive & Kidney Diseases (NIH)	9/15/01- 8/31/06
Edward Uchio, M.D.	Molecular Basis of Urologic Malignancies	Yale University School of Medicine, Department of Surgery, Section of Urology	

## HONORS AND AWARDS

Robert Weiss, M.D.	Trustee, American Board of Urology (1998-2004)
Edward Uchio, M.D.	Veterans Affairs Education Debt Reduction Program Award Recipient (2003-2008)

## MAJOR INVITED LECTURES

Harris E. Foster, Jr., M.D.	"Prostate Disease in the Year 2004 for the Primary Care Physician" Visiting Professor, Medical Grand Rounds, Memorial Hospital, Pawtucket, Rhode Island, February 2004
	"Medical Management of Benign Prostatic Hyperplasia" Visiting Professor,

Grand Rounds, University of Medicine and Dentistry of New Jersey, April 2004

"Treatment of Refractory Over Active Bladder" Panelist, American Urology Association Plenary Session, May 2004

## MAJOR YALE LECTURES

Harris E. Foster, Jr., M.D.

"Effects of Medical Therapy on the Progression of Benign Prostatic Hyperplasia," Surgery Grand Rounds, November 5, 2003

John W. Colberg, M.D.

"Treatment of Localized Prostate Cancer," Surgery Grand Rounds, December 3, 2003

## ORIGINAL PUBLICATIONS

### ORIGINAL ARTICLES

Afiatpour P, **Latifpour J**, Takahashi W, Yono M, **Foster HE Jr**, Ikeda K, Pouresmail M, **Weiss RM**. Developmental Changes in the Functional, Biochemical and Molecular Properties Of Rat Bladder Endothelin Receptors. *Naunyn-Schmiedeberg's Arch Pharmacol* 367:462-472, 2003.

**Anderson KR**, Shnorhavorian M. Anatomic and physiologic consideration in ureteroscopy. *Urologic Clinic of North American* 2004, 31:15-20.

Cao W, Cheng L, Behar J, Fiocchi C, **Biancani P**, Harnett KM. Proinflammatory cytokines alter/reduce esophageal circular muscle contraction in experimental cat esophagitis. *Am J Physiol - GI & Liver Physiol* 2004, 287(6):G1131-9.

Cao W, Sohn UD, Bitar KN, Behar J, **Biancani P**, Harnett KM. MAPK mediates PKC-dependent contraction of cat esophageal and lower esophageal sphincter circular smooth muscle. *Am J Physiol - GI & Liver Physiol* 2003, 285(1):G86-95l.

**Foster HE Jr**, Hemani M, Derweesh IH, Pouresmail M, Sanematsu H, Yono M, Latifpour J: Identification and characterization of endothelin receptors in human prostate using autoradiographic, immunohistochemical and immunoblotting techniques. *J Urol* 2004, 171(4): 347.

**Foster HE Jr**, Yono M, Shin D, Takahashi W, Pouresmail M, Afiatpour P, Latifpour J. Effects of chronic administration of doxazosin on alpha 1-adrenoceptors in the rat prostate. *J Urol* 2004 172:2465-2470.

Guarino MP, Xiao ZL, **Biancani P**, Behar J. PAF-like lipids- and PAF-induced gallbladder muscle contraction is mediated by different pathways in guinea pigs. *Am J Physiol- GI & Liver Physiol* 2003, 285(6):G1189-97

Hausladen DA, Wheeler MA, Altieri DC, **Colberg JW**, **Weiss RM**. Effect of intravesical treatment with Bacillus Calmette-Guerin and mitomycin C on urinary survivin levels and outcome. *J Urol* 170:230-234, 2003.

Hwang JJ, **Uchio EM**, Patel SV, Linehan WM, Walther MM, Pacek C. Diagnostic Localization of Extra-adrenal Pheochromocytoma Using 6-[<sup>18</sup>F] Flourodopamine Positron Emission Tomography. *J Urol* 2003 Jan;169(1):274-5.

Hwang JJ, **Uchio EM**, Pavlovich CP, Pautler S, Libutti SK, Linehan WM, Walther MM. Surgical management of multi-organ visceral tumors in patients with von Hippel-Lindau disease: a single stage approach. *J Urol* 2003 March;169(3):895-8.

Hwang JJ, Dharmawardana PG, **Uchio EM**, Wynberg J, Phillips JL. Prostate cancer in Klinefelter syndrome during hormonal replacement therapy. *Urology* 2003 Nov;62(5):941.

Hwang JJ, **Uchio EM**, Linehan WM, Walther MM. Follow up Strategies and Management of Recurrence in Urologic Oncology – Renal Cancer – Familial. Hereditary Kidney Cancer. *Urol Clin North Am* 2003 Nov;30(4):831-42.

Hwang J, Shoaf G, **Uchio EM**, Watson J, Pacak K, Linehan WM, Walther MM. Laparoscopic management of extra-adrenal pheochromocytoma. *J Urol* 2004 Jan;171(1):72-6.

Kim N. Cao W. Song IS. Kim CY. Harnett KM. Cheng L. Walsh MP. **Biancani P**. Distinct kinases are involved in contraction of cat esophageal and lower esophageal sphincter smooth muscles. *Am J Physiol - Cell Physiol* 2004, 287(2):C384-94.

McConnell JD, Roehrborn CG, Bautista OM, Andriole GL Jr, Dixon CM, Kusek JW, Lepor H, McVary KT, Nyberg LM Jr, Clarke HS, Crawford ED, Diokno A, Foley JP, **Foster HE Jr**, et al. The Long-Term Effect of Doxazosin, Finasteride, and Combination Therapy on the Clinical Progression of Benign Prostatic Hyperplasia. *NEJM* 349 (25) 2385-2396, 2003.

Peschel RE. **Colberg JW**. The modern era: Surgery, brachytherapy, and external beam radiation therapy for early prostate cancer. *The Lancet Onc* 2003, 4: 233-241.

**Renzulli JF**, Borromeo JR, Barkhordarian S, Sumpio BE. Abdominal aortic aneurysm in association with a congenital pelvic horseshoe kidney: sentinel report and technical consideration. *Vascular Med* 2003, 8(3):197-9.

**Shnorhavorian M, Foster HE Jr**. Surgical Management of Complex Neurogenic Urinary Incontinence in Female patients: The 10-Year Yale Experience. NE AUA Annual Mtg. 144, 2004 Sept.

Sheryka E, Wheeler MA, **Hausladen DA, Weiss RM**. Urinary interleukin-8 levels are elevated in subjects with transitional cell carcinoma. *Urology* 62:162-166, 2003.

Takahashi W, Yono M, Wada Y, Ikeda K, **Weiss RM, Latifpour J**. Regulatory effect of castration on endothelins, their receptors and endothelin converting enzyme in the rat seminal vesicle. *BJU Int* 92:803-809, 2003.

**Uchio EM**, Linehan WM, Figg WD, Walther MM. A Phase I Study of Intravesical Suramin for the Treatment of Superficial Transitional Cell Carcinoma of the Bladder. *J Urol* 2003 Jan;169(1):357-360.

Xiao ZL. **Biancani P**. Carey MC. Behar J. Hydrophilic but not hydrophobic bile acids prevent gallbladder muscle dysfunction in acute cholecystitis. *Hepatology* 2003, 37(6):1442-50.

Xiao ZL. **Biancani P**. Behar J. Role of PGE2 on gallbladder muscle cytoprotection of guinea pigs. *Am J Physiol - GI & Liver Physiol* 2004, 286(1):G82-8.

Yono M, **Latifpour J**, Pouresmail M, Takahashi W, **Foster HE Jr**, Afiatpour P, **Weiss RM**. Age-related changes in the properties of the endothelin receptors system at protein and mRNA levels in the rat vas deferens. *J Rec Sign Transduc Res* 2004 24:53-66.

Yono M, **Foster HE Jr**, Shin D, Pouresmail M, Takahashi W, **Latifpour J**. Doxazosin-induced up-regulation of alpha 1-adrenoceptor mRNA in the rat lower urinary tract. *Can J Physiol and Pharmacol* 2004 82:872-878.

Yono M, **Foster HE Jr**, **Shin D**, Takahashi W, Pouresmail M, **Latifpour J**. Doxazosin treatment causes differential alterations of alpha 1 adrenoceptor subtypes in rat kidney, heart and aorta. *Life Sciences* 2004 75:2605-2614.

Zeeberg BR, Riss J, Kane DW, Bussey KJ, **Uchio E**, Linehan WM, Barrett CJ, Weinstein JN. Mistaken Identifiers: Gene name errors can be introduced inadvertently when using Excel in bioinformatics. *BMC Bioinformatics* 2004 June:5(1):80.

## REVIEWS AND CHAPTERS

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**Colberg JW**, **Weiss RM**. Urologic abnormalities of the genitourinary tract. In: Rudolph's Pediatrics 21<sup>st</sup> edition, McGraw Hill: New York, 2003, 1735-1743.

Harnett KM. **Biancani P**. Calcium-dependent and calcium-independent contractions in smooth muscles. *Am J Med* 115 Suppl 3A:24S-30S, 2003 Aug 18.

Jacobs M. **Foster HE Jr**: Transurethral Resection of the Prostate. In: Management of Benign Prostatic Hypertrophy. Kevin T. McVary, M.D. (Editor). Humana Press, Totowa, NJ, 2003, pp. 163-193

**Shnorhavorian M**. **Anderson KR**. Anatomic and physiologic considerations in ureteroscopy. [Review] *Urologic Clinics of North America*. 2004, 31(1):15-20.

## EDITORIALS

**Latifpour J**. Endothelins and bladder neural mechanisms. *J Urol* 2004 172:1235-6.