

Division of Pediatric Urology

DIVISION PROFILE

Number of Faculty	7
Number of Fellows	
Clinical Fellows	1
Research Fellows	1
Number of Support Personnel	19
Annual Total Industry Contracts (direct)	\$16,767
Number of Peer Reviewed Publications	9
Patient Encounters	
Outpatient	11,453
Inpatient	261
Total Surgeries (Inpatient and Outpatient)	2,273

FACULTY LISTING

Curtis A. Sheldon, MD, Professor of Surgery, Division Director
William Robert DeFoor, Jr., MD, Assistant Professor of Surgery
Elizabeth C. Jackson, MD, Associate Professor
Alfor Lewis, PhD, Research Assistant Professor
Eugene Minevich, MD, Assistant Professor of Surgery
Pramod P. Reddy, MD, Assistant Professor of Surgery
Jeffrey Wacksman, MD, Associate Professor of Clinical Surgery



Left to Right: J. Wacksman, P. Reddy, C. Sheldon, A. Lewis, E. Minevich

OVERVIEW

Our vision is to be the leader in pediatric urology care, research and education nationally and internationally. Our mission is serving the health care needs of infants, children and adolescents and providing research and teaching programs of the highest ethical and scientific standards that ensure delivery of the highest quality of care. The division values (1) the development of new and innovative clinical skills, (2) the safety and effectiveness of surgical care that meets the highest professional and ethical standards, (3) the treatment of

patients/families and staff that is consistent with the CARES standards, (4) the pursuit of patient/family centered care and (5) the spirit of inquiry and personal development in the teaching of our residents, fellows, students, employees and families.

The division manages a full range of urologic care from the most basic urologic issues to the performance of highly complex genitourinary reconstructive surgery. Outpatient clinic sites include Main Campus, Anderson, Eastgate, Fairfield, Harrison, Mason, Northern Kentucky and West Chester. Additionally, surgical procedures are performed at Main Campus, Mason and St. Elizabeth South. In fiscal year 2004, the division established the Center for Pelvic and Genitourinary Reconstruction performing 38 complex surgical procedures.

Dr. Elizabeth Jackson oversees our Voiding Dysfunction Clinics with three Pediatric Nurse Practitioners who provide a variety of interventions including biofeedback. Voiding Dysfunction clinics are held at Main Campus, Mason, Fairfield and Northern Kentucky. Additionally, the division provides Urodynamic testing services for invasive and non-invasive bladder studies at Main Campus.

The division is committed to the education of urology residents from the University of Cincinnati and the University of Kentucky within inpatient and outpatient care settings and the emergency and operating rooms. The division has a two-year pediatric urology fellowship program accredited by the ACGME. The program has a total of two fellows, the first year is dedicated to clinical training and the second year is focused on basic science research.

The division's research program applies basic science principles and techniques to address urology problems specific to the pediatric population. Pramod Reddy, MD manages his research laboratory within the division of Developmental Biology. Dr. Reddy's laboratory is studying the molecular basis of organogenesis of the urinary bladder using *Xenopus*. In February, Dr. Reddy submitted his first NIH K08 grant which received a fundable score. Alfor Lewis PhD supervises the fellow during his/her basic science research year. Dr. Lewis is a co-investigator on an NIH U01 submission addressing genitourinary smooth muscle development. The Division has completed its clinical trial studies on overactive bladder/urge incontinence and has accepted a new trial on the treatment of detrusor overactivity in children.

The division had a total of 11,453 Outpatient Clinic Visits, including: Physician Clinics, 8,731; Voiding Dysfunction Clinics, 1,801; and Urodynamics Testing, 921.

HIGHLIGHTS

The division of Pediatric Urology launched the Center for Pelvic and Genitourinary Reconstruction in September of 2004. The vision of this multidisciplinary center is to be a national and global leader for the care of children with complex pelvic abnormalities, including vaginal, genitourinary and anorectal abnormalities. The Center provides expert, comprehensive, family-centered clinical care and it is a resource for the education of physicians, nurses, patients and families. Dr. Sheldon is a nationally recognized authority in performing complex genitourinary reconstructive surgery and kidney transplantation. Dr. Sheldon oversees a monthly/bimonthly Complex Clinic, which has been established to address the comprehensive medical, nursing and surgical management of patients with complex genitourinary conditions and patients awaiting renal transplantation. Division faculty and clinical fellows/residents are being mentored on the complex medical and surgical management of children with complex pelvic and genitourinary problems. Debbie Reeves, RN case manages all patients who are seen in the Complex Clinic as well as oversees the development of a patient database, communication center and parent advisory group.

In addition to the expertise in reconstruction, the faculty surgically manages genitourinary tumors, including testes tumors, renal tumors and genitourinary rhabdomyosarcoma. The faculty has achieved a high level of expertise and success in the care of standard urologic medical and surgical conditions such as hypospadias, undescended testis, vesicoureteral reflux, ureteropelvic junction obstruction, UTIs and ureteroceles. Additionally, faculty interests include surgical intervention high intra-abdominal testis by means of testis autotransplantation and the treatment of patients with kidney stones through the use of Extracorporeal Shock Wave Lithotripsy and minimally invasive endoscopic lithotripsy. The faculty has completed clinical trials on the medical management of overactive bladder and urge incontinence. Dr. Minevich is the consulting urologist for

the Fanconi Anemia Center and has been elected to the Board of Directors of the Ohio Urological Association. Dr. Reddy is a member of the Fetal Care Center and has been appointed Fellowship Director of the Pediatric Urology Fellowship program at CCHMC.

Dr. DeFoor joined the division as an Assistant Professor in July of 2003. Dr. DeFoor completed his residency at the Medical University of South Carolina and his Pediatric Urology fellowship at CCHMC. Dr. DeFoor is participating in the first of a three-year program entitled "The Program of Clinical Effectiveness" at Harvard School of Public Health for which he will receive an MPH degree in 2006. In June, Dr. DeFoor submitted his first proposal for an NIH R03 grant entitled "Antibiotic Prophylaxis in Vesicoureteral Reflux." Also, Dr. DeFoor is the primary investigator on a new clinical trial which addresses the treatment of detrusor overactivity associated with a neurological condition in the pediatric patient.

The division continues to focus on the care of the Voiding Dysfunction patient and patients with myelomeningocele. Dr. Jackson and the Pediatric Nurse Practitioners are jointly developing a study focusing on the care management as well as outcome measures for patients with incontinence and voiding difficulties. Dr. Jackson has applied for funding with the Kidney Foundation for her study entitled "Enuresis: Role of Urine Composition, Volume and Genetics." Additionally, Nan Tobias, RN has transitioned her PNP role beyond the care of the Voiding Dysfunction patient to the care management of the inpatient Urology service with the faculty, fellows and residents.

The division's basic science research efforts continue. Dr. Pramod Reddy's research work is focused on understanding the basis of genitourinary abnormalities in humans. His laboratory is studying the molecular basis of the organogenesis of the urinary bladder in vertebrates, using *Xenopus* as an experimental system. Dr. Reddy submitted an NIH K08 grant, entitled "Molecular Basis of Bladder Organogenesis" in February which received an NIH score of 140. Dr. Lewis has submitted an NIH U01 grant as a co-investigator with Dr. James Lessard entitled, "Murine Atlas of Genitourinary Smooth Muscle Development."

TRAINING

Nafisa Dharamsi, MD	PL-6	University of Manitoba
Kazuyuki Nishinaka, MD	PL-7	Sapporo Medical University

GRANTS, CONTRACTS AND INDUSTRY AGREEMENTS

Grant and Contract Awards	Annual Direct/Project Period Direct
Current Year Direct	\$0
Industry Contracts	
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Minevich, E	
Bayer	\$7,989
Pharmacia	\$5,043
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Reddy, P	
Pharmacia	\$3,735
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Current Year Direct Receipts	\$16,767
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TOTAL	\$16,767

PUBLICATIONS

1. **DeFoor W, Minevich E**, McEnergy P, Tackett L, Reeves D, **Sheldon C**. Lower urinary tract reconstruction is safe and effective in children with end stage renal disease. *J Urol* 2003;170(4 Pt 2):1497-500; discussion 1500.
2. **DeFoor W**, Tackett L, **Minevich E, Wacksman J, Sheldon C**. Risk factors for spontaneous bladder perforation after augmentation cystoplasty. *Urology* 2003;62(4):737-41.
3. **DeFoor W, Minevich E**, Reeves D, Tackett L, **Wacksman J, Sheldon C**. Gastrocystoplasty: long-term followup. *J Urol* 2003;170(4 Pt 2):1647-9; discussion 1649-50.
4. **DeFoor W**, Tackett L, **Minevich E**, McEnergy P, Kitchens D, Reeves D, **Sheldon C**. Successful renal transplantation in children with posterior urethral valves. *J Urol* 2003;170(6 Pt 1):2402-4.
5. **DeFoor W, Wacksman J**. Results of single staged hypospadias surgery to repair penoscrotal hypospadias with bifid scrotum or penoscrotal transposition. *J Urol* 2003;170(4 Pt 2):1585-8; discussion 1588.
6. **Lewis AG**, Pecha BR, Smith EP, Gardner BJ, Hsieh-Li HM, Potter SS, **Sheldon CA**. Early orchiopexy restores fertility in the Hoxa 11 gene knockout mouse. *J Urol* 2003;170(1):302-5.
7. Szucsik JC, **Lewis AG**, Marmer DJ, Lessard JL. Urogenital tract expression of enhanced green fluorescent protein in transgenic mice driven by a smooth muscle gamma-actin promoter. *J Urol* 2004;171(2 Pt 1):944-9.
8. Bagli DJ, **Reddy PP**, Mitchell ME. Pediatric dysfunctional voiding in the 21st century. *AUA Update Series* 2003;22(26):202-207.
9. **Reddy PP**. Pediatric ureteroscopy. *Urol Clin North Am* 2004;31(1):145-56.