



SUNY Upstate Medical University

Department of Pediatrics Report

January 1, 2006 – December 31, 2007
750 East Adams Street, Syracuse, NY 13210



State University of New York



Upstate
Medical
University

Opening 2009.

 **Golisano
Children's Hospital**
at University Hospital



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INTRODUCTION FROM THE CHAIR



Our department report from two years ago highlighted progress on the Golisano Children's Hospital. At that time, "progress" was measured by milestones such as the Certificate of Need, architectural drawings, and successful fundraising. As I write this introduction, our "progress" is much more visible. Virtually all of the exterior of the hospital has been completed and progress is well underway on the interior. The department has established a number of task forces to address the many operational issues which will arise when we move into the new building in 2009.

The department continues a major growth in clinical activity in preparation for the move into the new hospital. This has involved bringing in new faculty in almost all of our clinical divisions and a substantial growth in our satellite activity. We now offer outpatient specialty consultations in Watertown, Utica, and Binghamton and have recently been able to integrate reports from these sites into the University Hospital record system. We originally mapped out our strategy for satellite clinics after surveying pediatricians and family physicians in our referral area. In the next two years, we hope to add additional specialty services in these three communities and will be looking into an additional site as well. This satellite activity has proven to be extremely popular with our families who, in many cases, are saved hours of travel time.

We continue to place a very high value on communication with the regional physicians who entrust us with the care of their patients. We do this through a variety of ways, the first of which is providing complete timely discharge summary and consultation reports. We continue to produce KidStuff, a quarterly newsletter, which provides state-of-the art clinical information along with a description of our new and growing programs. KidStuff is also available on line at <http://www.upstate.edu/gch/professionals/kidstuff/>. Since our last report, we have introduced a new web-based service by which physicians can ask non-urgent questions of our pediatric specialists. This service, e-Ped Direct, is available to any provider in the region through a simple registration process (http://www.upstate.edu/peds/e_peds.shtml).

Thank you for supporting us in the past, and we welcome your participation in our exciting future.

Thomas R. Welch, MD
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DEPARTMENT LEADERSHIP

With the growth in department activity which has already occurred, and which is planned for the coming years, it has become critical to apportion leadership responsibilities in a meaningful way. We now have a group of vice- and associate-chairs who have primary responsibilities for a variety of functions within the department. This group meets weekly, and together acts as a deliberative body to set policy and direction. Each of these individuals is also empowered to make independent decisions within his or her area of responsibility. Although I am always available to speak with referring physicians regarding hospital or department issues, these individuals may also be contacted directly in regard to matters within their respective purviews.

H. James Brown, MD, a distinguished community pediatrician, is Associate Chair for Community Affairs. In this role, Jim functions as a liaison between the full-time faculty and our community and regional practitioners. Jim's advice and counsel has been invaluable as we prioritize new initiatives and respond to concerns.

Jim is uniquely qualified to serve in this role. He is currently chair of the American Board of Pediatrics and serves on the editorial board of the Journal of Pediatrics. He is a very important member of the Community Advisory Council of the Golisano Children's Hospital.

Ann Botash, MD, is Vice Chair for Educational Affairs, with ultimate responsibility for all aspects of education in the department: undergraduate, graduate, and continuing. The enormous growth in our education services is outlined in the education section of this report.

Ann is a well-known figure in pediatrics nationally. She has received the Advocacy Award from the Ambulatory Pediatrics Association, and is very visible regionally and nationally in the area of child abuse.

Scott Schurman, MD, continues to serve as our Vice Chair for Clinical Affairs. Scott also directs our highly-regarded and growing program in kidney diseases.

In his Vice Chair role, Scott has ultimate responsibility for all inpatient and outpatient activity in the department. He has played an important role in our recent growth in faculty and programs, including the development of our satellites.

Leonard Weiner, MD, rounds out the department leadership team as Vice Chair for Academic Affairs. A former interim Chair of our department, with a national reputation for clinical care and research in infectious diseases, Len is well suited for this role.

In addition to responsibility for the department's faculty promotion and tenure process, Len has overall responsibility for our research programs. We have made some steady strides in this area, as indicated by the individual division and section reports. With growth in faculty and programs, this will continue.

PEDIATRICS BY THE NUMBERS

A few pertinent numbers provide a snapshot of child health care activity over the past two years. It should be noted that there is a considerable amount of pediatric activity, especially outpatient, which is not captured in these data. As the hospital moves toward provider based status for most pediatric outpatient activity, it should be much easier to calculate these numbers in coming years.

Measure	2006	2007	% change
Inpatient discharges *	3,634	3,411	-9.6%
Average length of stay	4.5	4.6	2.2%
Pediatric ED visits	20,242	21,338	5.4%
Pediatric outpatient visits ***	85,005	91,835	7.4%
Surgical procedures **	3,825	4,735	19.2%

* Includes University Hospital and Crouse Hospital, but does not include the Crouse Hospital NICU or normal newborn nursery

** Includes only University Hospital

*** Excludes ED and ambulatory surgery visits

About 43% (1,197) of the pediatric inpatients at University Hospital in 2007 came from Onondaga County, and nearly 2% (49) were from outside New York State. Approximately 40% of inpatients were under the age of five years and nearly 52% (1,456) of all admissions come from the Pediatric Emergency Room.

Outpatient pediatric visits were drawn from an even wider geographic area throughout New York State, with nearly 70% (71,343) of children from outside Onondaga County. Less than 1% (529) outpatient visits were from outside New York State.

CENTER FOR CHILDREN'S NUTRITION AND EXERCISE

FACULTY

Denise C. Woodall-Ruff, M.D., Assistant Professor, Director

CLINICAL OVERVIEW

(The CCNE is a component of the General Pediatrics Division, but because of its unique services, it is included here separately.)

The primary goal of this program is to offer a family-centered approach to healthy eating and physical activity habits. Families obtain the skills necessary to promote a home and social environment that effectively deters excess weight gain. The program structure was developed utilizing recent evidence-based guidelines and practices. Families work closely with a multi-disciplinary team of professionals including a pediatrician, a pediatric nutritionist, a clinical social worker, physical therapist and exercise physiologist.

A general pediatrician performs a complete medical evaluation. The evaluation is focused on the overweight condition, identifying risk factors of obesity. This physician monitors objective measures of health/ physical fitness over time. Referrals to appropriate specialists are initiated in office. A pediatric nutritionist performs a nutrition assessment. Behavior counseling, psychological, and social assessment is performed by clinical social worker. Therapeutic counseling occurs on site.

Education in regards to lifestyle changes is delivered via individual counseling as well as in group sessions. Areas of focus include nutrition, physical activity, and behavior.

RESEARCH HIGHLIGHTS

In addition to its clinical program, the CCNE is developing an extensive research focus. In cooperation with investigators at Syracuse University, for example, the center is studying the effects of a weight management program on several objective measures of physical fitness.

INVITED WORKSHOPS, CME PRESENTATIONS

Woodall-Ruff, D. The Commission for a Healthy Central New York (Onondaga Health Department), "Working Together for a Fit CNY: Community and Medical Solutions for Obesity", breakout session on "Approaches to Childhood Obesity", September, 2006.

Woodall-Ruff, D. The Children's Hospital of the King's Daughters, CME conference and Virginia Chapter AAP Meeting, lecture on "Motivating Families to Adopt a Healthier Lifestyle", October, 2007.

Woodall-Ruff, D. The Children's Hospital of the King's Daughters, CME conference and Virginia Chapter AAP Meeting, workshop presentation on "Case Studies: Managing Obesity in Your Practice", October, 2007.

Woodall-Ruff, D. Menichello Pediatric Teaching Day, Wilson Memorial Regional Medical Center, "War on Childhood Obesity: Perspective from the Front Lines", May, 2007.

SELECTED CLINICAL DATA

Outpatient Visits, 2006: 296 Outpatient Visits, 2007: 281

CRITICAL CARE & INPATIENT PEDIATRICS

FACULTY

John Andrade, MD, Associate Professor of Pediatrics
Melissa Gorczynski, MD, Clinical Instructor of Pediatrics
William P. Hannan, MD, Associate Professor of Pediatrics
Robert K. Kanter, MD, Professor of Pediatrics, Division Director
Kevin Ragosta, DO, Associate Professor of Pediatrics
Neal A. Seidberg, MD, Associate Professor of Pediatrics

CLINICAL OVERVIEW

Pediatric Critical Care: The Pediatric Critical Care service at SUNY Upstate Medical University provides the only critical care for infants and children in a 15 county area of Central New York. The multidisciplinary medical and surgical Pediatric Intensive Care Unit includes 13 intensive and intermediate care beds admitting 600-700 patients annually. The PICU serves the region's Level 1 Trauma center. The Pediatric Interhospital Transport Service sends pediatric transport specialists to referring hospitals to provide care at the earliest possible time for critically ill infants and children throughout the region. We also coordinate the transition of care for children with special health care needs from intensive care to community based care, including formulation of plans for emergency treatment of future unpreventable illnesses in this vulnerable population. Outpatient care is provided for selected technology assisted patients (Dr. Ragosta), in collaboration with the patient's other subspecialists and primary care physicians. A multidisciplinary assessment team also evaluates high-risk patients preoperatively, including a pediatric intensivist (Dr. Ragosta), anesthesiologist, surgeon, and other pediatric subspecialists, as warranted. Finally, the Pediatric Critical Care service provides pediatric critical care education to residents in pediatrics and emergency medicine, nursing students, respiratory therapy students, and pharmacy students. In recent years many of our pediatric residents have gone on to training in critical care medicine at the finest fellowship programs after their residency in Syracuse.

Pediatric Hospital Care: The Pediatric Hospitalist service cares for pediatric medical patients admitted without a primary or subspecialty attending in the 60 pediatric non-ICU beds at University and Crouse hospitals. The Hospitalist staff also assumes responsibility for inpatient care of other inpatients at the request of primary care physicians. In addition, the Hospitalists supervise pediatric residents performing general pediatric consultations for complex surgical and subspecialty patients.

Clinical Initiatives: A collaborative hospital safety process continues to involve physicians, nurses, pharmacists, respiratory therapists, child life specialists, and case managers. Improvements continue in the hospital-wide computer assisted physician order entry process. Dr. Seidberg serves a leadership role for computer-based clinical initiatives throughout University Hospital. Clinical practice guidelines have been implemented for bronchiolitis management on the pediatric inpatient service, as well as traumatic brain injury management and therapeutic hypothermia for post cardiac arrest encephalopathy in the PICU.

RESEARCH HIGHLIGHTS

Regionalization of Pediatric Hospital Care

Dr. Kanter's health services research investigates the balance between regional pediatric acute care needs and existing hospital resources. Despite the availability of evidence-based guidelines for managing the mild stage of common illnesses in the outpatient setting, hospitalization rates for ambulatory care sensitive conditions have not declined significantly in recent years. Hospitalization rates for pediatric mental illness have increased more than any other condition. Best practices in regional coordination for pediatric critical care have been identified and classified according to the quality of published evidence. Nationally, the existing regional organization of hospital services for children is informal, largely driven by market forces.

In major regional emergencies, more formal coordination would be necessary to accommodate surges of patients. Hospital disaster surge capacity for children is much smaller than that for adults. Temporary alterations in standards of hospital care will be essential to accommodate mass casualty events involving substantial numbers of children. Analysis of quantitative models shows that mortality reduction would be achieved in major emergencies if the distribution of disaster victims is controlled in proportion to hospital capacity, and if care is restricted to essential interventions in order to extend care at each hospital to larger than usual numbers of patients. A panel of experts has begun developing professional consensus regarding those clinical interventions that should be regarded as essential in disaster responses, even while less important interventions may be delayed. Work in progress includes investigation of the network of organizations responding to major regional emergencies, and the coordination necessary to deliver services effectively.

PUBLICATIONS

Kanter RK, Moran JR; Recent trends in child hospitalization in New York State. *J Pediatr*,148:637-41, 2006

Kanter RK, and members of the New York State Emergency Medical Services for Children Advisory Committee; *Pediatric Regional Critical Care Hospitals: White paper on evidence and improvement opportunities in New York.* New York State Department of Health, Albany, NY 2007.

Kanter RK, Moran JR; Hospital emergency surge capacity: An empiric New York statewide study. *Ann Emerg Med*, 50:314-319, 2007.

Kanter RK, Moran JR; Pediatric hospital and ICU capacity in regional disasters: Expanding capacity by altering standards of care. *Pediatrics*,119:94-100, 2007.

Kanter RK; Strategies to improve pediatric disaster surge response: Potential mortality reduction and tradeoffs. *Crit Care Medicine*, 35:2837-42, 2007.

Kanter RK, Andrade JS, Boeing NM, Callahan J, Cooper A, Lopez-Dwyer CA, Marcin JP, Odetola FO, Ryan AE, Terndrup TE, Tobin JR; Professional consensus on altered standards of hospital care in disaster surges. *Acad Emerg Med*,14:S190, 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Kanter RK, Moran JR; Emergency availability of hospital beds: An empirical NY statewide study. *Pediatric Academic Societies*,59:4836.118, 2006 (www.pas-meeting.org.) (Presentations at Society of Critical Care Medicine, San Francisco, 2006; Pediatric Academic Societies, San Francisco 2006).

Kanter RK, Moran JR; Ability of NY City hospitals to accommodate patient surges in simulations of regional emergencies. *Pediatric Academic Societies*, 59:4836.117, 2006 (www.pas-meeting.org.) (Presentations at Society of Critical Care Medicine, San Francisco, 2006; Pediatric Academic Societies, San Francisco, 2006).

Kanter RK; Survival tradeoffs: Altered standards of care in disasters. E-PAS:618418.5, 2007 (www.pas-meeting.org.) (Presentation at Pediatric Academic Societies, Toronto, ON, 2007).

Kanter RK, Moran JR, Resti JP; Vulnerability of disadvantaged areas to indirect health effects of disasters. E-PAS:617909.32, 2007 (www.pas-meeting.org.) (Presentation at Pediatric Academic Societies, Toronto, ON, 2007).

Kanter RK, Moran JR; Disparities in prolonged indirect health effects of disasters. *Acad Emerg Med*,14:S191, 2007. (Presentation at Society for Academic Emergency Medicine, Chicago, IL, 2007).

Kanter RK; Pediatric hospital mortality reduction strategies in disasters. *Acad Emerg Med*, 14:S191, 2007. (Presentation at Society for Academic Emergency Medicine, Chicago, IL, 2007).

Kanter RK, Andrade JS, Boeing NM, Callahan J, Cooper A, Lopez-Dwyer CA, Marcin JP, Odetola FO, Ryan AE, Terndrup TE, Tobin JR; Professional consensus on altered standards of hospital care in disaster surges. *Acad Emerg Med*, 14:S190, 2007. (Presentation at Society for Academic Emergency Medicine, Chicago, IL, 2007).

INVITED WORKSHOPS, CME PRESENTATIONS

Andrake JS, Sveen A, Bennett N; Building a Communication Skills Curriculum for the Pediatrics Clerkship. Annual Meeting of COMSEP, San Antonio, TX, March 9-12, 2007; and Pediatric Academic Societies Annual Meeting, Toronto, Ontario, Canada. May 3-8, 2007.

Kanter RK: Paediatric Hospital Definition and Scope of Care. Teleconference, Child Health Network of Toronto & The Children's, Young People's and Family's Network, Manchester, England, October 3, 2007.

Ragosta K: Visiting Professor, West Virginia School of Osteopathic Medicine, 2006 & 2007.

Seidberg N: Technology Update at University Hospital. Pediatric Grand Rounds, SUNY Upstate Medical University, Syracuse, NY, 2007.

Seidberg N: Reconnecting with the Disenfranchised: Using CPOE in Challenging Environments. Siemens CPOE User Group Symposium, 2007.

Seidberg N: Implementing a Fully Interfaced CPOE System in an Academic Setting. American Association of Medical Colleges, 2007.

Seidberg N: Leading Culture Change: Implementing CPOE. National Patient Safety Congress, 2007.

GRANTS AND CONTRACTS

Andrake JS, McKay R; Innovations in Medical Education: Teaching Communication Skills to Residents and Medical Students, SUNY Upstate Medical University - \$1500, 2006.

EDUCATION PROGRAM IN GENERAL PEDIATRICS

FACULTY

Ann S. Botash, MD, Professor of Pediatrics, Vice Chair for Educational Affairs

Graduate Medical Education

John Andrade, MD, Associate Professor of Pediatrics, Director of Residency Program

Bradley Olson, MD, Assistant Professor of Pediatrics, Associate Director of Residency

Gloria Kennedy, MD, Assistant Professor of Pediatrics, Associate Director of Residency

Casey Duca, MD, Assistant Professor of Pediatrics, Associate Director of Residency 2005-2007

Undergraduate Medical Education

Charles Bergstrom, MD, Assistant Professor of Pediatrics, Clerkship Director

Robert Hingre, MD, Assistant Professor of Pediatrics, Associate Clerkship Director

Abdul Souid, MD, Professor of Pediatrics, Associate Clerkship Director 2005-08

Anne Sveen, MD, Assistant Professor of Pediatrics, Clerkship Director 2005-2008

Administrative

James F. Peacock, MS, Educational Administration

Patricia Mondore, MA, Residency Program Coordinator

Carol Plumley, Clerkship Coordinator

OVERVIEW

For more than fifty years, the Department of Pediatrics has maintained a residency training program in general pediatrics that provides residents with a strong foundation in primary care pediatrics, acute care medicine and all subspecialties. Our collegial environment allows a “hands on” approach with a low faculty to resident ratio. Due to the large catchment area served by the Department, residents directly care for patients with a vast array of medical problems, from common primary care issues to the most unique subspecialty conditions. Residents are actively involved in varied learning experiences such as resident run journal clubs, research and pathophysiology conferences, case-based ambulatory care and subspecialty conferences, daily rounds with faculty, weekly grand rounds, and regular discourse with visiting professors. Our all-encompassing curriculum has successfully prepared residents for fellowship training in subspecialties and careers in primary care pediatrics across the country.

Our 6-week clerkship provides pediatric education to about 120 students every year. The students are exposed to extensive in-patient (3 weeks) and out-patient (3 weeks) experiences. They attend thirty core lectures given by the faculty and are required to study CLIPP (Computer Learning in Pediatric Project; www.clippcases.org) cases. A teaching attending is assigned to the students during their in-patient rotation.

RESIDENCY CURRICULUM

The broad-based curriculum enables residents to become competent in all areas of general pediatrics. Some of the highlights of the curriculum include:

- **Seminars** – In 2007, the core curriculum for the residents was updated with some innovative changes. Faculty have reproduced the core curriculum so that an on-line web version of the basic information from their didactic material is available 24/7. The material is provided on Blackboard and completion is required for the residents. The first year residents have a separate case based series of seminars and the senior residents attend a more in depth seminar on the same topics later in the day. These interactive seminars reinforce and complement the on-line lectures and offer an interactive approach to learning through cases. Residents complete quiz materials online that can be used for preparation for the board examination.

- **Primary Care** – The training in primary care takes advantage of the well-developed division of general pediatrics and takes place at the University Pediatric and Adolescent Center (UPAC). The residents participate in a continuity clinic experience one half day per week. In addition, there are six separate month-long block rotations at UPAC. This combination of experience provides residents with a greater continuity for health maintenance, chronic diseases and acute illnesses. In the second year, residents combine their UPAC experience with longitudinal training in the outpatient clinics of various subspecialties. An additional rotation in Adolescent Medicine rounds out their education in general pediatrics. Community practices are also available as sites for resident education, and nicely complement their training in the inner city, hospital-based UPAC.
- **Critical Care** – The PICU and Stepdown units are the setting for the training in Pediatric Critical Care Medicine. Residents provide direct patient care for the sickest children in Central New York, with a wide-range of acute conditions. Residents also provide concurrent care for patients admitted primarily for surgical conditions. Residents have exposure to Neonatal Intensive Care through two distinct NICU experiences, first at St. Joseph’s Hospital Health Center and subsequently at the tertiary care NICU at Crouse Hospital.
- **Emergency Medicine** – Residents are the front line for children up to 18 years of age who come with medical or surgical emergencies to the area’s only Pediatric Emergency Department. More than 20,000 annual visits are seen, and supervised by board certified Pediatric Emergency Medicine faculty.
- **Developmental Pediatrics** – This rotation takes advantage of some of the outstanding community resources in child development, as well as those at our Center for Neurodevelopmental Pediatrics. The Center is home to services for children with developmental and behavioral problems, including the autistic spectrum disorders, as well as those with complex medical conditions, such as spina bifida, cerebral palsy, and genetic disorders.
- **Inpatient** – Education on the general inpatient service has changed in the past few years with the establishment of an academic pediatric hospitalist service. Dedicated hospitalists provide oversight and direct care for the inpatients at University and Crouse Hospital. They also provide consultative care to other medical and surgical patients. A great deal of the education of residents and medical students is provided by these inpatient specialists. In addition, a separate attending, the Teaching Attending, provides hands-on and didactic teaching to complement the learning on the wards.
- **Subspecialties** – The curriculum continues to provide comprehensive training in the pediatric subspecialties. Clinical instruction is available in virtually all the major pediatric medical and surgical subspecialties. Residents have elective time that allows them to create additional experiences in focused areas of the subspecialties. In the third year, residents are able to spend a clinical rotation away from the medical center as an “away elective.”
- **COAT** – The Community Oriented Advocacy Training program, established in 1995, is one of the first such advocacy training programs nationally. The COAT curriculum educates residents on a wide range of topics in Child Advocacy including a section utilizing case based format to cover the curriculum on systems based care.
- **Teaching Skills for Housestaff** – This monthly seminar series is also in its 11th year and is designed to meet the needs of residents as teachers. The series addresses topics such as: delivering effective lectures, teaching at the bedside, providing feedback, evaluating students and serving as a role model.
- **Evidence Based Medicine** – The housestaff present and participate in a series of workshops designed to analyze recent literature and demonstrate possible effects on practice. These workshops are held twice each month and utilize a curriculum in evidence based medicine.
- Some of our residents participate in active research with faculty. The underlined authors of the manuscripts in the sections below are our residents or students.

PEDIATRIC CLERKSHIP

Medical students rotating through our pediatric clerkship are assigned for three weeks to an “outpatient program” at either on-site (general pediatrics and subspecialty clinics) or in the community. They are also

assigned for three weeks to one of two inpatient services (University and Crouse Hospitals). A teaching attending is assigned to them during their in-patient rotation. Her or his role is to work closely with the students, mostly providing bed-side teaching (communicating with patients and families, taking medical histories, performing physical examinations, evaluation laboratory findings, interpreting x-rays, etc.)

The students actively participate in patient care, morning report, teaching rounds, evidence based medicine conferences, adolescent conferences and on-line cases. They attend 30 core lectures given by the faculty and are required to study CLIPP (Computer Learning in Pediatric Project; www.clippcases.org) cases.

EDUCATION OUTCOMES

Graduates of the Residency program go on to careers in both primary care practice and in academic medicine, in the subspecialties and in general pediatrics. In the past five years, 62% of our residents have pursued academic fellowship programs. These have included: Hematology/Oncology, Endocrinology, Critical Care, Infectious Diseases, Gastroenterology, Pediatric Emergency Medicine, Neonatology, Allergy/Immunology and General Academic Pediatrics. In addition, 35% of our residents have joined primary care practices in the Syracuse area as well as various communities in New York State, North Carolina, California, Ohio, Louisiana, New Hampshire, Pennsylvania, and Washington. Another 2% have joined academic faculties directly upon completion of the residency. Nine percent have stayed on to become our chief residents. Of these, 100% entered fellowships upon completion of their chief year.

In 2007, 81% of our residents passed the American Board of Pediatrics Certifying Examination on the first attempt. On the NBME subject exam in pediatrics, our medical students' scores for the years 2006-2007 average above the 50th percentile nationally.

EDUCATION PUBLICATIONS

Adams JA, Kaplan RA, Starling SP, Mehta NH, Finkel MA, Botash AS, Kellogg ND, Shapiro RA. Guidelines for medical care of children who may have been sexually abused. *J Pediatr Adolesc Gynecol.* 2007; 20:163e172

PUBLICATIONS WITH RESIDENTS/FELLOWS

Bonville CA, Bennett NJ, Koehnlein M, et al. Respiratory dysfunction and proinflammatory chemokines in the pneumonia virus of mice (PVM) model of viral bronchiolitis. *Virology*, 2006

Faddoul D, Meguid V. Brain Tumor Presenting as Recurrent Right Upper Lobe Pneumonia. Poster Presentation (with Dr. Meguid), 2006 AAP National Conference) Oct, 2006

Jeha GS, Lowenthal ED, Chan WY, Wu SM, Karaviti LP, Variable presentation of precocious puberty associated with the D564G mutation of the LHCGR gene in children with testotoxicosis. *Journal of Pediatrics*, 149:2;271-274, 2006

Santos RP, and Hoo JJ. Difficulty in Recognizing Multiple Sulfatase Deficiency in an Infant. *PEDIATRICS*, 117;955-958, 2006

Shibata S, Kiska D, & Domachowske J. Reactive Hemophagocytosis in a Patient With Systemic Lupus Erythematosus and Disseminated Histoplasmosis. *Infectious Diseases in Clinical Practice*, 2006

Aram B and Souid A-K. Hemolytic Uremic Syndrome in Pediatric Emergency Medicine ed JM Baren. Chapter 131. 2007

Bennett, NJ: Laboratory-based investigations of IM and Epstein-Barr virus. *Medical Laboratory Observer*, P10-15, January 2007

Bennett NJ, Ellis J, Bonville C, et al. Immunization strategies for the prevention of pneumovirus infections. *Expert Rev. Vaccines* 6(2), 2007

Bonville CA, Bennett NJ, Percopo CM, et al. Diminished Inflammatory responses to natural pneumovirus infection among older mice. *Virology*. Nov 10;368(1):182-90, 2007

Chauvin, NA, Chen M, Anthony EY. AIR in all the wrong places: Subtle and not-so-subtle plain film findings in newborns. *Contemp Peds* (Vol 24; #2). Feb, 2007

Samkari A. Eczema Herpeticum: A Manifestation of Hyperimmunoglobulin E Syndrome. Consult for Pediatricians, September 2007

Samkari A, Kiska DL, Riddell SW, Wilson KW, Domachowske JB. Dipylidium canium infestation masquerading as treatment-resistant pinworms. Clin Infect Dis. 2007

Santos R, Awa E, Anbar R. "Inhaled tobramycin solution-associated recurrent eosinophilia and severe persistent bronchospasm in a patient with cystic fibrosis: a case report. BMC Pediatrics 7:11, 2007

PUBLICATIONS WITH STUDENTS

Linden JH, Bhardwaj A, Anbar RD. Hypnotically enhanced dreaming to achieve symptom reduction: a case study of 11 children and adolescents. Am J Clin Hypnosis. 48:279-289, 2006.

Tao Z, Ahmad SS, Penefsky HS, Goodisman J, Souid A-K. Dactinomycin impairs cellular respiration and reduces accompanying ATP formation. Molecular Pharmaceutics 3:762-772, 2006

Burnett A, Carney D, Mukhopadhyay S, Scalzetti EM, Leino D, Souid A-K. Thyroid involvement with Langerhans cell histiocytosis in a 3-year-old boy. Pediatric Blood and Cancer 50:726-727, 2006

Tao Z, Morrow MP, Penefsky HS, Goodisman J, Souid A-K. Study on caspase-induced mitochondrial dysfunction by anticancer drugs. Current Drug Therapy 2;233-235, 2007

Burnett AM and Domachowske JB. Therapeutic considerations for children with invasive group A streptococcal infections: A case series report and review of the literature Clin Pediatr 46:550-5, 2007

PRESENTATIONS AT NATIONAL MEETINGS

Dosa NP, Eckrich M, Katz D, Turk M, Liptak GS. Incidence, prevalence, and characteristics of spontaneous fractures in children, adolescents and adults with spina bifida. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. December, 2006.

Faddoul D, Meguid V., Brain Tumor Presenting as Recurrent Right Upper Lobe Pneumonia, 2006 AAP National Conference and Exhibition, Oct, 2006

Botash AS, Truehart A, Mitchell, SD. Repeated sexual abuse allegations: Do subsequent forensic examinations reveal new details? Ambulatory Pediatric Association Annual Meeting, San Francisco, CA, Apr, 2006.

San Jose J, Botash AS. Causes of Death in a Hospital Based Urban Pediatric Ambulatory Population. Pediatric Academic Societies meeting. Toronto, Canada, May, 2007.

Sveen AR, Andrade JS, Bennett N. Building a Communication Skills Curriculum for the Pediatric Clerkship. Pediatric Academic Society Meeting. Toronto, Canada. May, 2007.

Botash AS, Adams JA. Law and Order: Adolescent Sexual Assault. Workshop at Pediatric Academic Societies Meeting. Toronto, Canada. May, 2007.

Olson B, Touhy M, Koszalka T. The Nuts & Bolts of Creating an Online Curriculum. Annual Meetings of the Pediatric Academic Society. Toronto, Canada. May, 2007.

Pekarsky A, Frey S, Botash AS. Forensic Medical Evaluations of Sexually Abused Boys. Pediatric Academic Societies meeting. Toronto, Canada, May 2007.

Bennett NJ, Bonville CA, Percopo CM, Rosenberg HF, Domachowske JB. Disease manifestations in young and elderly mice infected with pneumonia virus of mice. Society for Pediatric Research, Toronto, Canada, May, 2007.

Sveen AR, Andrade JS, Bennett N. Building a Communication Skills Curriculum for the Pediatric Clerkship. Annual COMSEP Meeting, San Antonio, TX, March 2007

PRESENTATIONS AT NATIONAL MEETINGS WITH RESIDENTS, FELLOWS AND STUDENTS

Soultan ZN, Samkari A, Anbar RD. Evaluation of Children Diagnosed by Primary Care Providers as Having Cough Variant Asthma , American Thoracic Society Annual Meeting, San Francisco, April 2007

Bennett NJ, Bonville CA, Percopo CM, Rosenberg HF, and Domachowske JB. Disease manifestations in young and elderly mice infected with pneumonia virus of mice. Pediatric Academic Societies, Toronto, Canada, May 2007.

Burnett AM and Domachowske JB. Treatment practices for children hospitalized with invasive group A streptococcal infections. Pediatric Academic Societies, Toronto, Canada, May 2007.

Sveen AR, Andrade JS, Bennett N. Building a Communication Skills Curriculum for the Pediatric Clerkship. Annual COMSEP Meeting, San Antonio, TX, March 2007 and Pediatric Academic Society Meeting. Toronto, Canada. May 7, 2007.

Moro MR, Faddoul DA, Kobayaa HR, Bonville CA, and Domachowske JB. Pediatric adenovirus infection: features at presentation to an emergency room. Infectious Disease Society of America. San Diego, CA October 2007.

Faddoul DA, Moro MR, Kobayaa HR, Bonville CA, and Domachowske JB. The clinical spectrum of adenovirus infection encourages inappropriate antibiotic use. American Academy of Pediatrics, San Francisco, CA. October 2007.

GRANTS AND CONTRACTS

Andrake JS, McKay R, SUNY Upstate Medical University Grants for Innovations in Medical Education, Teaching Communication Skills to Residents and Medical Students, July 2006 – June 2007, \$1500.

Botash AS: Child Abuse Medical Provider NYS Training Initiative: 2003-2008 New York State Department of Health, Rape Crisis Program Preventive Health and Health Services Block Grant from CDC, Rape Prevention Education. \$421,153.

Botash AS: Child Abuse Medical Provider Training and Network: 2007- 2008, NYS Office of Children and Family Services. \$500,000 per year.

Botash AS: Child Abuse Medical Provider Training and Network: 2006- 2007, NYS Office of Children and Family Services. \$500,000 per year.

Botash AS: Community Oriented Advocacy Training, Children's Miracle Network Grant, 2007. \$4,400.

Botash AS, Unger C, Ryan M. Onondaga County Child Fatality Review Team:NYS OCFS 2007- 2009. \$88,224

Botash AS: Community Oriented Advocacy Training, Children's Miracle Network Grant, \$3,600, 2006.

Botash AS: Merck Education Award for Pediatric Teaching Day. 2006.

Botash, AS, Bifano, E, Empire Clinical Research Investigator Program, Post Graduate Medical Education research in Neonatology, September 2008 – August 2010, \$120,000.

Dosa NP: Parent Partners in Health Education. New York State Developmental Disabilities Planning Council: 2006-2009: \$135,000

Olson B: SUNY Upstate Medical University Grants for Innovations in Medical Education. Project Title: Creating an Online Core Lecture Curriculum. July 1, 2006 – June 30, 2007. Total Budget: \$2000.

PEDIATRIC EMERGENCY MEDICINE

Syracuse is fortunate to have a group of specialists in Pediatric Emergency Medicine. While these physicians have primary appointments in the Department of Emergency Medicine, most have joint appointments in the Department of Pediatrics.

FACULTY

Richard M. Cantor, MD, FAAP/FACEP, Director of Pediatric Emergency Services/Medical Director, Central NY Poison Control Center, Associate Professor of Emergency Medicine and Pediatrics

P. David Sadowitz, MD, Associate Professor, Emergency Medicine and Pediatrics

James D'Agostino, MD, FAAP, Assistant Professor, Emergency Medicine and Pediatrics

Brian Stout, MD, FAAP, Assistant Professor, Emergency Medicine and Pediatrics

Jennifer E. Mackey, MD, FAAP, Assistant Professor, Emergency Medicine and Pediatrics

CLINICAL OVERVIEW

The Pediatric Emergency Department at University Hospital for the greater part of 25 years has provided 24-hours a day, 7 days a week coverage for any and all pediatric emergencies. We service the entire Central New York region consisting of over 18 counties and over 25 hospitals. We are the primary referral center for all pediatric emergencies, including major trauma, major medical emergencies, poisonings, and child abuse. All pediatric transports within our region are evaluated within our emergency department and disposition is arranged for daily. With the advent of the Golisano Children's Hospital, the Pediatric Emergency Department will continue to play an expanded role in the delivery of sub-specialty Pediatric Emergency Medical Services.

The last few years have demonstrated a marked growth in both patient volume and diversity in our academic efforts. The faculty maintains a strong clinical relationship with all practitioners within the region, including family practitioners and pediatricians alike. We maintain a strong educational presence in the region as evidenced by the annual Pediatric Emergency Medicine Teaching Day, which has been in place for the greater part of 8 years. In addition, under the directorship of Dr. Brian Stout, PALS, APLS, and PEPP courses are offered almost on a monthly basis. Target audiences include students, residents, paramedics, and private practitioners. Members of the Pediatric Emergency Medicine faculty, specifically Drs. Cantor and D'Agostino, are nationally recognized figures in our field and are often invited to present to national and international audiences.

Within the medical school at Upstate Medical University, the Pediatric Emergency Department offers many educational opportunities. We are developing an educational model within the MedSTAR Simulation Center, addressing the needs of medical students and residents. In addition, we offer a fourth year medical student elective in Pediatric Emergency Medicine. Lectures are given to residents within both the Departments of Emergency Medicine and Pediatrics throughout the year. In addition, we maintain a strong affiliation with the family practice residency at St. Joseph's Hospital, with their residents rotating through our Pediatric Emergency Department four days a week.

Over the last two years, we have re-instituted our fellowship program in Pediatric Emergency Medicine. This is under the exceptional leadership of Dr. Richard Cantor. We accept one fellow per year, and at present will have three in place working within our division. It is important to mention that these fellows are not only graduates of pediatric residencies, but emergency medicine residencies as well. The fellowship program in Pediatric Emergency Medicine at University Hospital is unique in the country in offering positions to graduates of emergency medicine residency programs. These are very competitive positions, and we are fortunate to have this offering on a local basis.

PUBLICATIONS

Souid A-K, Penefsky HS, Sadowitz PD, Toms B. Enhanced cellular respiration in cells exposed to doxorubicin. *Molecular Pharmaceutics*, 3(3); 307-321, 2006.

Cantor RM: Neonatal Emergencies, in Pediatric Emergency Medicine, Baren J. Elsevier, 2007.
Cantor RM: Aspirin and APAP Poisoning, in Pediatric Emergency Medicine, Baren J. Elsevier, 2007.
Cantor RM: Classic Pediatric Poisonings, in Pediatric Emergency Medicine, Baren J. Elsevier, 2007.
Mackey JE, Wojcik S, Long R, Callahan J, Grant W. Predicting Pertussis in a Pediatric Emergency Department Population. *Clinical Pediatrics*, 46(5):437-40, 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Cantor, RM. Pediatric Emergency Medicine Literature Review, Common Complaints in the First 28 Days of Life, Pediatric Poisonings, Controversies in Pediatric Emergency Medicine. ACEP Scientific Assembly, New Orleans, Louisiana, 2006.

Mackey JE. Predicting Pertussis in a Pediatric Emergency Department Population. Charles Ross Symposium, Syracuse (poster presentation), Dec 2005; Eastern SPR conference, Connecticut (oral presentation), March 2006; Regional Scientific Assembly of Emergency Medicine, Syracuse (oral presentation), April 2006; Pediatric Academic Society Meeting, San Francisco (oral platform presentation), April 2006; New York ACEP, Sagamore (moderated poster presentation), July 2006.

Cantor, RM. Pediatric Emergency Medicine Literature Review, Common Complaints in the First 28 Days of Life, Pediatric Poisonings, Controversies in Pediatric Emergency Medicine. ACEP Scientific Assembly, Seattle, Washington, 2007.

Cantor, RM. Pediatric Literature Review, Classic Teaching Cases in PEM. New Jersey Annual ACEP Meeting, 2007.

Cantor, RM. Pediatric Life Threatening Rashes, Mistakes You Don't Want To Make. California Pacific Medical Center Hospitalist Assembly, 2007.

Cantor, RM. Literature Review, Classic Teaching Cases, Pediatric Cardiac Emergencies, The New Drugs of Abuse. 20th Annual Symposia Medicus Pediatric Emergency Medicine Conference, Nassau, Bahamas, 2007.

Cantor, RM. The New Drugs of Abuse. 10th Annual Toxicology Teaching Day, November, 2007.

Mackey, JE. Status Epilepticus and the Newer Anti-Epileptics in Pediatrics. Pediatric Emergency Medicine Assembly, Department of Emergency Medicine, SUNY Upstate Medical University, September 2007.

Mackey, JE. Recognizing and Managing Concussion and Sports Concussion. Children at Risk Conference, Syracuse, November 2007.

HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Editorial Boards/Reviewer

Cantor, R. *Annals of Emergency Medicine*. Pediatric Emergency Care, American Journal of Emergency Medicine, Micromedex Poisonsindex, Pediatric Emergency Medicine Abstracts, PRETx (Pediatric Research in Emergency Therapeutics).

GRANT ACTIVITY

Cantor, RM. Development of a Child Life Specialist in the Pediatric Emergency Department (2005-8), Children's Miracle Network, \$40,000/year

Sadowitz, PD. An Epidemiologic Study to Evaluate the Seasonality of Respiratory Syncytial Virus Associated Lower Respiratory Tract Infections or Apnea in Infants in the Emergency Department. \$45,000 received to date 9/1/06 – May 1, 2008

SELECTED CLINICAL DATA

Pediatric Emergency Visits, 2006: 20,242 Pediatric Emergency Visits, 2007: 21,338

Percentage of patients admitted: 10%. Ambulances received per day: 6-10

Private patient referrals per day: 10-15

ENDOCRINOLOGY, DIABETES & METABOLISM

FACULTY

Roberto Izquierdo, MD, Associate Professor of Medicine and Pediatrics, Section Head; Pediatric Endocrinology and Diabetes, Associate Medical Director, Joslin Diabetes Center Affiliate, Medical Director, Thyroid Cancer Center

Irene N. Sills, MD, Professor of Pediatrics, Director, New York State Newborn Screening Program; Director, Pediatric Endocrine and Diabetes Fellowship

Susan E. Stred, MD, Associate Professor of Pediatrics, Associate Medical Director, KNOT Program

Richard Wu, MD, Clinical Professor

CLINICAL OVERVIEW

The Section of Pediatric Endocrinology, Diabetes and Metabolism provides care for children and adolescents with the full spectrum of disorders of the endocrine system. Staff endocrinologists and nurse practitioners evaluate and treat children with diabetes mellitus, short stature, thyroid disease, Turner syndrome, hypopituitarism, disorders of puberty, congenital adrenal hyperplasia, metabolic bone disorders, and other hormonal disorders. Our Center is one of the original referral sites for New York State's Newborn Screening Program for congenital hypothyroidism and 21-hydroxylase congenital adrenal hyperplasia. We were recognized as an Endocrine Specialty Center for Congenital Hypothyroidism, Congenital Adrenal Hyperplasia, and Diabetes by the New York State Department of Health in 2004.

Diabetes mellitus is treated by a comprehensive group of professionals who work under the team model under the directions of Dr. Izquierdo and Dr. Irene Sills at the Joslin Diabetes Center at SUNY Upstate Medical University. The team includes nurse practitioners with a special interest in diabetes care, diabetes educators, including diabetes pump educators, dietitians, and an exercise physiologist. This multidisciplinary team provides care to children with type 1 and type 2 diabetes mellitus. On a consultative basis, we have support from adult and pediatric psychologists. Social services are also available. In 2003 the University Health System Consortium Diabetes Benchmarking Project named the Joslin Diabetes Center at Syracuse as one of its top four clinical performers in achieving clinical targets in diabetes care (ie. HbA1c < 7%). In the past year our diabetes and endocrine section has moved to our 3229 East Genesee Street office, which has enough space to accommodate our adult and pediatric endocrine and diabetes practices. We offer a combined, comprehensive rotation to medical students and residents in endocrinology and diabetes.

The section also sees a wide variety of thyroid disorders from congenital hypothyroidism to thyroid cancer. Dr. Izquierdo has a special interest in thyroid nodule and thyroid cancer in children. An office ultrasound machine is available to further evaluate multinodular goiters and for the performance of ultrasound guided fine needle aspirations. Our group has a close working relationship with the physicians in nuclear medicine, pathology, and thyroid surgery to provide a multidisciplinary approach to the treatment of thyroid cancer and Graves disease.

Dr. Sills is an internationally known leader in the area of gender variant youth. She has a strong interest in diabetes mellitus in youth and actively participated in the re-writing of the New York State Department of Health Manual on Diabetes in Children.

In addition to her endocrinology practice, Dr. Sills is well versed in adolescent care and is able to help teens with menstrual disorders, hirsutism, and delayed puberty, as well as counseling and screening for sexually transmitted diseases and contraception.

Dr. Stred supervises the endocrine portion of the KNOT (Kids Now Off Therapy) Program, the latter providing comprehensive care to cancer survivors. Although more than 70% of all children diagnosed with a malignancy during childhood now survive, 40-50% of those experience significant endocrine dysfunction as a result of their treatment. The Program here at SUNY was in the first wave of medical centers providing comprehensive care to long-term childhood cancer survivors.

Dr. Stred also has an interest in disorders of sexual differentiation and is a member of the Medical Advisory Board of Androgen Insensitivity Support Group-USA.

Dr. Stred provides care to children with structural birth defects of the hypothalamic-pituitary axis, including septo-optic dysplasia. She has a close working relationship with the physicians in pediatric ophthalmology and neuroradiology to provide a multidisciplinary approach to diagnosis. She also serves as Medical Director for the local branch of the Turner Syndrome Society of the U.S.

EDUCATION

One of the missions of our program is to provide excellence in education. Medical students, residents in both pediatrics and internal medicine, and endocrinology fellows rotate through our section regularly. They are exposed to the wide field of pediatric endocrinology and diabetes by seeing patients with our physicians and nurse practitioners. Our section, in conjunction with the adult endocrine section, thyroid surgeons, nuclear medicine, and the section of nephrology, have weekly endocrine case conferences.

Dr. Stred lectures during the MS I Mammalian Physiology course, and Dr. Izquierdo, Dr. Sills, and Dr. Stred provide core lectures in pediatric endocrinology and diabetes to the residents and students through the year.

RESEARCH HIGHLIGHTS

Type 2 Diabetes Mellitus in Children and Adolescents

Type 2 diabetes mellitus is no longer a disease only of the adult population. Recent studies confirm that there is an epidemic of type 2 diabetes in children and adolescents. Our Joslin Center is one of twelve sites across the nation that is participating in an important clinical trial to determine the best method of treatment for children with type 2 diabetes mellitus. All participants in the study begin therapy with metformin. The subjects will then be randomized to intensive lifestyle changes, standard diabetes care, or rosiglitazone (a thiazolidinedione that decreases insulin resistance). These children will then be followed from two to four years. Insulin will be instituted for the children who fail to maintain good glycemic control. This will be a landmark study that will determine the natural history of type 2 diabetes mellitus in children, and offer insight as to the best management strategies in this population.

Diabetes TrialNet: Natural History of the Development of Type 1 Diabetes Mellitus

This trial studies the natural history development of type 1 diabetes mellitus. It will progress to include studies in the prevention of type 1 diabetes mellitus.

National Cooperative Growth Study (our participation ended Mid 2007)

Dr. Sills and Dr. Stred were clinical investigators in a pharmaceutical industry Phase IV surveillance study, monitoring the incidence rate of side effects of growth hormone treatment in children (NCGS) with growth hormone deficiency. This study has provided important insights for patient education when families are considering treatment with supplemental growth hormone, and provides physicians with outcome data.

School-Centered Telemedicine Program for Children with Type 1 Diabetes Mellitus

Dr. Izquierdo heads this study, which aims at improving diabetes care via the use of telemedicine in schools. It will involve the school nurse and the patient's family.

Type 1 Diabetes Genetics Consortium

This multicenter study involves the acquisition of blood from families who have two family members with type 1 diabetes mellitus. The DNA will be extracted from white blood cells and studied to detect mutations that may be important in the development of type 1 diabetes mellitus.

Co-Pilot Management of Diabetes Mellitus

The Co-Pilot Diabetes Management System is a web-based diabetes application that we are piloting to improve diabetes care in children who manage their diabetes with insulin pump therapy.

Protégé Study

This is a multi-centered study, which uses a monoclonal antibody to preserve beta-cell function in children and adolescents with type 1 diabetes mellitus. This improves glycemic control and prolongs the "honeymoon" phase of type 1 diabetes.

PUBLICATIONS

- Shea, S., Weinstock, R.S. Starren, J. Teresi, W. Palmas, L. Field, P. Morin, R. Goland, **Izquierdo, R.E.**, L.T. Wolff, M. Ashraf, C. Hilliman, S. Silver, S. Meyer, D. Holmes, E. Petkova, L. Capps, R. A. Lantigua, for the IDEATel Consortium. A randomized trial comparing telemedicine case management with usual care in older, ethnically diverse, medically underserved patients with diabetes mellitus. *J Am Med Inform Assoc.*13:40-51, 2006.
- Trief, P.M., P. Morin, **Izquierdo R.**, J. Teresi, J. Eimicke, R. Goland, J. Starren, S. Shea, R.S. Weinstock. Depression and glycemic control in elderly ethnically diverse patients with diabetes: The IDEATel Project. *Diabetes Care* 29:830-835, 2006.
- Wafa, W., J. Bhattarai, **Izquierdo R.** Management of hypercalcemia in patients with acquired immunodeficiency syndrome and mycobacterium avium intracellulare infection: A case report and review of the literature. *Endo Trends* 13: 1, 2006.
- Bakken S, Grullon-Figueroa L, **Izquierdo R.**, Lee NJ, Morin P, Palmas W, Teresi J, Weinstock RS, Shea S, Starren J. Development, Validation, and Use of English and Spanish Versions of the Telemedicine Satisfaction and Usefulness Questionnaire. *J Am Med Inform Assoc* 13:660-667, 2006.
- Trief P.M., Morin P.C., **Izquierdo R.**, Teresi J., Starren J., Shea S., Weinstock R.S. Marital Quality and Diabetes Outcomes: The IDEATel Project. *Families, Systems, & Health* 24: 318-331, 2006.
- Izquierdo, R.**, M. Arekat, P.E. Knudson, K. Kartun, K. Khurana, K. Kort, P.J. Numann. Comparison of palpation-guided versus ultrasound-guided fine needle aspiration biopsies of thyroid nodules in an outpatient endocrinology practice. *Endocr Pract* 12(6): 609-617, 2006.
- Starren J., R.S. Weinstock, W. Palmas, **R.E. Izquierdo**, P. Morin, D. Kaufman. Diabetes. In: *Home Telehealth: Connecting Care Within the Community*, (eds. Wootton R, Dimmick S.L., Kevdar J.C.), The Royal Society of Medicine Press, London, UK, p.170-183, 2006.
- Trief P.M., Teresi J.A., **Izquierdo R.**, Morin P.C., Goland R., Field L., Eimicke J.P., Brittain R., Starren J., Shea S., Weinstock R.S.. Psychological outcomes of telemedicine case management for elderly patients with diabetes. The randomized IDEATel trial. *Diabetes Care* 30:1266-1268, 2007.
- Izquierdo R.**, Meyer S., Starren J., Goland R., Teresi J., Shea S., Weinstock R.S. Detection and Remediation of Medically Urgent Situations Using Telemedicine Case Management for Older Patients with Diabetes Mellitus. *Therapeutics and Clinical Risk Management* 3(3): 1-5, 2007.
- Izquierdo R.**, Khan M. Nonthyroidal Illness Syndrome. AACE Self-Assessment Program, 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

- Izquierdo R.** Weight Loss in Elderly Overweight Patients with Type 2 Diabetes Through the Use of Telemedicine in IDEATel. Upper New York AACE Meeting, September, 2006.
- Izquierdo R.** "Management of Patients with Thyroid Nodules and Differentiated Thyroid Cancer: An Update" Medical Grand Rounds, SUNY Upstate Medical University, February 1, 2007.
- Trief, P.M., J.G Sandberg, **R.I. Izquierdo**, P.C. Morin, S. Shea, R.A. Brittain, E.B. Feldhousen, R.S. Weinstock. The telemedicine experience of elderly diabetes patients: a qualitative study. *Annals of Behavioral Medicine*, 33(Suppl):S096, 2007.
- Izquierdo R.** Ultrasound-guided fine needle aspiration of thyroid nodules in children and adolescents. Pediatric Academic Societies' 2007 Annual Meeting May 2007, Toronto, Canada.
- Izquierdo, R.** School Telemedicine Project. Upper New York AACE Meeting, October 14, 2007.
- Izquierdo R.**, Shankar R, Kort K, Khurana K. "Ultrasound-Guided Fine-Needle Aspiration in the Management of Thyroid Nodules in Children and Adolescents". Fourth Annual Student Research Day and Twenty First Annual Charles R. Ross Research Poster Session. November 28, 2007.

INVITED WORKSHOPS, CME PRESENTATIONS

Izquierdo R. Type 1 Diabetes Mellitus: An Update. Pediatric Grand Rounds at SUNY Upstate Medical University. March 3, 2006.

Izquierdo R. New Advances in the Management of Diabetes Mellitus. Cortland Regional Medical Center. July 24, 2006.

Izquierdo R. Detection and Remediation of Medially Urgent Situations Using Telemedicine Case Management for Older Patients with Diabetes Mellitus. IDEATel Group Meeting, Syracuse, NY. November 2, 2006

Stred S. Changing Standards in Precocious Puberty. Family Practice Teaching Day at St. Joseph's Hospital. February, 2006.

Izquierdo R. "Management of Patients with Thyroid Nodules and Differentiated Thyroid Cancer: An Update". SUNY Upstate Medical University Medicine Grand Rounds. February 1, 2007.

Izquierdo R. "Type 2 Diabetes Mellitus". Onondaga Citizens League Health Inequalities. May 3, 2007.

Izquierdo R. "Type 2 Diabetes as it Relates to Children and Adolescents". Menichello Pediatric Teaching Day, Binghamton, NY, May 30, 2007.

Izquierdo R. "Management of Thyroid Nodules and Cancer: An Update". Central New York Academy of Medicine, June 21, 2007.

Sills IN, Istar-Lev A: Gender Variant Youth: The Role of the Pediatrician. Pediatric Academic Societies/Lawson Wilkins Pediatric Endocrine Society, San Francisco, California, 2006.

Sills IN, Istar-Lev A: Transgender Youth: The Role of the Pediatrician and Pediatric Endocrinologist. Pediatric Academic Societies/Lawson Wilkins Pediatric Endocrine Society, Toronto, Canada, 2007.

Sills IN, Diabetes in Youth. Community Diabetes Forum. Syracuse, NY. November, 2007.

GRANTS AND CONTRACTS

Izquierdo, R. NIDDK: Diabetes TrialNet: Natural History Study of the Development of Type 1 Diabetes (Principal Investigator for our Center)

Izquierdo R. Centers for Medicare and Medicaid Services: Informatics, Telemedicine and Education Demonstration Project (co-investigator).

Izquierdo R. NIDDK: Trial for the Treatment of Type 2 Diabetes in Children and Adolescents (co-investigator)

Izquierdo R. CoPilot Web-based System Utility in Diabetes Care in Children and Adolescents (Principal Investigator)

Izquierdo R. NIDDK: Type 1 Diabetes Genetics Consortium (Principal Investigator for our Center)

Izquierdo R. School Centered Telemedicine Program for Children with Type 1 Diabetes Mellitus (Dr. Izquierdo, Principal Investigator)

Izquierdo R and Sills I. A Phase 2/3, Randomized, Double-Blind, Multicenter, Multinational, 4-Arm, Controlled, Dose-Ranging Study to Evaluate Efficacy and Safety of Teplizumab (MGA031), a Humanized, FcR Non-Binding, Anti-CD3 Monoclonal Antibody, in Children and Adults with Recent-Onset Type 1 Diabetes Mellitus. (Dr. Izquierdo, principal investigator; Dr. Sills, co-investigator)

EDITORIAL DUTY

Dr. Izquierdo has served as ad hoc reviewer for *Diabetes Care*, *Journal of Pediatrics*, and *Endocrine Practice*.

Dr. Stred has served as ad hoc reviewer for *Journal of Pediatrics*.

SELECTED CLINICAL DATA

Children in the diabetes mellitus program: 800

Children with new onset diabetes seen in 2007: 100

Children followed with congenital hypothyroidism: 100

Children with diagnosed with congenital hypothyroidism in 2007: 12

Children with congenital adrenal hyperplasia who are actively followed: 40

Children with septo-optic dysplasia who are actively followed: 25

Endocrine component of KNOT Clinic: 70

GASTROENTEROLOGY & NUTRITION

FACULTY

Manoochehr Karjoo, MD, Professor of Pediatrics, Section Chief

Mirza Beg, MD, Assistant Professor of Pediatrics

Christopher Justinich, MD, Clinical Associate Professor of Pediatrics

Shannon Kesselring, NP

CLINICAL OVERVIEW

The Section of Pediatric Gastroenterology and Nutrition provides care for patients from birth to 21 years of age with all types of gastroenterological disorders. This includes neonates and infants with hyperbilirubinemia, and liver disease such as biliary atresia, apnea, bradycardia, vomiting, feeding disorders and failure to thrive. We evaluate and treat children and adolescents with the following conditions: Gastroesophageal reflux disease, abdominal pain, cyclic vomiting syndrome, liver and gallbladder disease, pancreatic disease, intestinal diseases such as malabsorption syndrome and celiac disease, children who have received liver and small bowel transplantation. The section also provides evaluation, treatment and follow up of patients with inflammatory bowel disease as ulcerative colitis, Crohn's disease, rectal bleeding, chronic constipation and gastrointestinal food allergy.

The section provides services to Pediatric Surgery, ENT, General Pediatrics, Pulmonary, Endocrine, and patients with developmental disorders. We coordinate procedures with our pediatric surgeons, such as gastrostomy tube placement, esophageal dilatation and endoscopies.

The gastroenterologists undertake a full array of procedures including pH probe tests, Bravo pH monitoring, esophago-gastro-duodenoscopy with biopsy, esophageal dilatation, esophageal sclerotherapy and banding procedures for varices, rectal biopsy for evaluation of Hirshsprung's disease, colonoscopy with biopsy and polypectomy, liver biopsy, breath hydrogen test for lactase and sucrase deficiency, esophageal and colon motility and esophageal impedance studies. Most procedures are done in the children's surgery center located at University Hospital, while others are done in our clinic.

Outpatient care is provided in the newly remodeled and expanded office located in the 725 Irving Avenue, Crouse Physician's Office Building, Suite 805 in Syracuse. A satellite clinic at Watertown started in early 2007 and is staffed by Dr. Christopher Justinich. The Mohawk Valley satellite clinic in Utica should begin in the next year.

The section continues to be very active in medical students and pediatric resident education. Students and residents routinely take our elective. In addition to this active participation in patient care activities, the curriculum also includes a series of didactic lectures and case presentations and discussions.

RESEARCH HIGHLIGHTS

The section is actively involved in a variety of clinical research projects. The Bravo pH Monitoring System is an innovative technology by which continuous recording of esophageal pH can be obtained during a patient's normal daily activity and diet. This is in contrast to the current technology, which requires placement and maintenance of transnasal catheter. We are studying the use of this technology, and have presented reports on this system. The section is currently continuing to study its application in children.

The section currently is participating in a multi-center trial of treatment of eosinophilic esophagitis using an antagonist of IL5.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Karjoo M, Beg M, Kesselring S. Pediatric Experience with Esophageal pH Monitoring with the Bravo, a Catheter Free System. Presented at PAS, Toronto, May 2007, and publication in the Pediatric News.

Karjoo M, Beg M. Use of 16 French Rubber Catheter instead of digital rectal examination for fecal occult blood test in infants and children. Presented at PAS Annual Meeting, Toronto, May 2007, and in Ross Poster presentation, 2007.

SELECTED CLINICAL DATA

Outpatients seen in 2006: 3,860

Outpatients seen in 2007: 4,360

Endoscopies in 2006: 315

Endoscopies in 2007: 444

Colonoscopies in 2006: 170

Colonoscopies in 2007: 196

Ph probe studies in 2006: 476

Ph probe studies in 2007: 403

GENERAL PEDIATRICS

FACULTY

John Andrade, MD, Associate Professor of Pediatrics

Steven Blatt, MD, Associate Professor of Pediatrics, Director, General Pediatrics

Ann Botash, MD, Professor of Pediatrics, Vice Chair, Educational Affairs

Robert Cavanaugh, MD, Professor of Pediatrics, Section Head, Adolescent Medicine

Katherine Chang, MD, Assistant Professor of Pediatrics

Melissa Gorczynski, MD, Assistant Professor of Pediatrics

Mary Green, MD, Clinical Assistant Professor of Pediatrics

John Friedman, MD, Clinical Professor of Pediatrics

Paul Fuller, MD, Professor of Pediatrics

Robert Hingre, MD, Assistant Professor of Pediatrics

Toby Kressel, MD, Clinical Assistant Professor of Pediatrics

Victoria Meguid, MD, Associate Professor of Pediatrics

Bradley Olson, MD, Assistant Professor of Pediatrics

Alicia Pekarsky, MD, Assistant Professor of Pediatrics

Ellen Schurman, MD, Clinical Assistant Professor of Pediatrics

Anne Sveen, MD, Assistant Professor of Pediatrics

Irene Sills, MD, Professor of Pediatrics

Howard Weinberger, MD, Professor of Pediatrics

Denise Woodall-Ruff, MD, Assistant Professor of Pediatrics

CLINICAL OVERVIEW

The component programs of the Division of General Pediatrics encompass all of the inpatient and ambulatory clinical activities providing general pediatric and specialty program care to children and adolescents in a university-based urban practice serving a diverse population. The Division has significant responsibilities for ambulatory and inpatient teaching of medical students and training of pediatric residents.

Clinical activity occurs in the term newborn nursery at Crouse Hospital, the inpatient pediatric units of University and Crouse Hospitals, and at University Pediatric and Adolescent Center located in University Health Care Center, a free-standing ambulatory care site of Upstate Medical University,

Upstate Pediatrics is a suburban pediatric practice that was incorporated into the Department in 2007. This busy 3 pediatrician practice participates in departmental teaching and research activities. Medical students rotate through the office during their clerkship and residents can choose the office as an elective rotation. The office is also a study site for vaccine research.

The Division provides a wide array of services to children, adolescents and families, including well child and adolescent care, acute episodic and chronic disease care, specialized care of abused and foster children, and a growing refugee population from Eastern Europe, Russia and Africa. An adolescent consultation practice is an active program in the Division. Academic generalists often consult and provide second opinions to family physicians in the central New York region. Faculty and resident physicians have established practices at University Pediatric and Adolescent Center with the goal of providing a stable medical home and continuity for children and adolescents with 24-hour availability. Inpatient care is provided under the supervision of the academic generalist faculty.

Faculty have clinical expertise and research interests in child abuse, foster care, refugee health, substance abuse, childhood obesity and nutrition, lead poisoning, adolescent eating disorders and reproductive health, dermatology and medical education. The Family Advocacy Program provides a unique opportunity for patients, families, and the medical staff to easily access legal services within our offices.

The **Adolescent Medicine Program** offers primary and specialty care to patients 11 to 21 years of age. Joining Dr. Robert Cavanaugh in the program is Dr. Irene Sills, a pediatric endocrinologist with a special interest in reproductive health care services for young men and woman. This is a state-of-the-art program in which the psychosocial as well as the physical needs of the adolescent patient are uniquely addressed. Our physicians have been at the forefront of adolescent preventive services for many years. They are particularly well qualified to screen adolescents in order to identify high-risk activities and behaviors and to offer appropriate counseling. They are supported by a highly skilled “teen-friendly” nursing staff.

The program welcomes referrals for second opinions or for consultations. Findings are promptly communicated to referring physicians when applicable. A dietician who specializes in adolescent nutrition is available on site for consultation at the time of the visit.

There is also a very close relationship with physicians in the Department of Psychiatry and a large referral network of other specialists at University Hospital and SUNY Upstate Medical University.

Services include:

- Behavioral evaluation and counseling
- Comprehensive physicals and preventive exams
- Contraceptive counseling
- Gynecologic exams
- Immunizations
- Pregnancy testing and counseling
- Risk-reduction assessment and counseling
- Sports physicals as part of a comprehensive examination
- Substance abuse evaluation and referral

The **CARE** (Child Abuse Referral and Evaluation) team of professionals includes a pediatrician, pediatric nurse practitioner, nurse and social worker who work together to provide child abuse medical evaluations. Team members include Ann Botash, MD, Alicia Pekarsky, MD, Nancy Mitchell, RN, CPNP, Anne Galloway, RN, and Elizabeth Kinsey, CSW.

With over 10 years of experience, the program offers comprehensive history and physical examinations, forensic evidence collection, photodocumentation and court ready record documentation. Legal testimony and non-patient care case reviews are also available. Examinations are performed utilizing state-of-the-art colposcopic documentation of physical findings, and a variety of advanced patient coping techniques.

Over 250 referrals per year come from several counties in Central and Upstate New York. Referral sources include child protective services, law enforcement agencies, rape crisis centers, teachers, parents and other physicians. These children are evaluated at 90 Presidential Plaza, University Pediatric and Adolescent Center as well as at a community off-site location, 509 West Onondaga Street, the McMahan/Ryan Child Advocacy Site.

The McMahan/Ryan Child Advocacy Site’s main goals are to provide a safe, child and family friendly environment for child abuse victims and their non-offending family members and to reduce the trauma that abused children face during the investigative and treatment processes. The site’s focus is to support and enhance existing community agencies that work with child abuse. The staff at the McMahan/Ryan Child Advocacy Site is funded through a SUNY Research Foundation grant provided through CARE and other funding through a non-profit 501-c donations. Children evaluated there have improved access to counseling services (Rape Crisis Center), law enforcement, and child protective investigators. (<http://www.mcmahanryan.org>)

The CARE team offers regular Child Abuse Licensing courses for physicians or other professionals needing certification for licensing in New York State. Further information can be found at: <http://www.upstate.edu/cme/licensing.shtml>

AWARE is a service providing primary health care to teenaged girls in the custody of the Office of Children and Families. The girls are all recently discharged from a secure, detention facility and are living in a group home in Syracuse. All of the girls, the majority of whom are from out of the county, face the challenges of transitioning from the juvenile justice system to community living. Approximately half of these patients are pregnant or have a new baby. Dr. Steven Blatt directs the AWARE program.

ENHANCE Services for Children in Foster Care has provided primary and comprehensive health care services to children in DSS custody since 1991. Consistent with the recommendations outlined in **Fostering Health: Health Care for Children and Adolescents in Foster Care** of the AAP Task Force on Health Care for Children in Foster Care, ENHANCE provides primary and comprehensive health care services, developmental testing and mental health services to the 500 children in DSS foster care. Medical care is provided by two pediatricians, Dr. Steven Blatt, Director and Dr. Victoria Meguid, Associate Director, two pediatric nurse practitioners, and two registered nurses. A nurse practitioner also performs developmental testing on young children in their home or day care setting. A child psychologist meets with older children and their foster parents to assess their need for mental health services. Annually, the 500 children in foster care are seen in more than 2400 ENHANCE visits.

ENHANCE staff have also been active in policy issues. There are regular meetings with DSS administration, focusing on local policy and procedures. ENHANCE representatives participate on the New York State Permanent Judicial Commission on Justice for Children and the New York State, District II AAP Task Force on Health Care for Children in Foster Care. ENHANCE staff also meet with New York State foster care officials and have testified to legislative bodies.

The Syracuse Family Advocacy Program (FAP) is a Medical-Legal Partnership for Children (MLPC) between the University Pediatric and Adolescent Center (UPAC) of University Hospital of SUNY Upstate Medical University and the Children's Rights and Family Law Clinic (CRC) and Family Law and Social Policy Center (FLSPC) of Syracuse University College of Law. Through a triad approach, FAP seeks to engage the disciplines of law and medicine to provide comprehensive advocacy to improve the overall health of low-income children and their families. FAP helps improve health outcomes for low-income children and their families through collaborative advocacy and legal intervention. Cases handled through FAP have included custody, adoption and child support; housing issues including landlord disputes, handicap access and utility disputes; education law including special education and unlawful exclusion from public schools; and other legal issues directly affecting child health. FAP provides students, faculty and staff from both the Department of Pediatrics and the College of Law with opportunities to learn about Pediatrics and Legal Advocacy from experts in both disciplines.

The Pediatric International Health Clinic was started in July 2005 in order to provide more specialized care to the more than 500 new immigrants arriving annually in Central New York. The care of such patients has become increasingly complex, requiring a degree of sophistication not allowed in a typical outpatient pediatric setting. Although they originate from all over the globe, this diverse refugee population most recently has come from the African continent. In addition to providing a much needed service to this medically diverse and fascinating population, this new service, directed by Dr. Bradley Olson, is a rich environment for housestaff education.

RESEARCH HIGHLIGHTS

Vaccines

Faculty and staff at University Pediatric and Adolescent Center collaborate with the Division of Pediatric Infectious Disease on an ongoing basis with funded vaccine studies. Recent studies involve vaccines against meningococcus and pneumococcus.

Child Sex Abuse Evaluation

Dr. Ann Botash was one of the founders of the McMahan/Ryan Child Advocacy Center in 2002 and serves as medical director to the board of this non-profit organization. Dr. Botash is the primary investigator for a grant through the New York State Office of Children and Family Services, to fund the Advocacy site and is primary investigator of the New York State Department of Health grant to support the Child Abuse

Medical Provider Program. This program began as a model network of child abuse medical providers with the creation of a training manual and now provides continuing education to child abuse medical professionals throughout New York State. It is a resource for child abuse professionals nationally as well as statewide.

Foster Care

Drs. Steven Blatt and Victoria Meguid have collaborated with researchers from Cornell University on the relationships between prenatal drug and alcohol use and subsequent involvement in the child protection system. The same faculty are also working with colleagues at the University of Rochester to examine the effectiveness of foster care clinics at both institutions in meeting the needs of children in foster care.

PUBLICATIONS

Adams JA, Kaplan RA, Starling SP, Mehta NH, Finkel MA, **Botash AS**, Kellogg ND, Shapiro RA. Guidelines for medical care of children who may have been sexually abused. *J Pediatr Adolesc Gynecol.* 2007; 20:163e172

Botash AS. Unique Needs of Adolescent Patients. Chapter in *Child Sexual Abuse: A Practical Guide.* American Academy of Pediatrics. Editors: Giardino A, and Finkel M. In review 2007.

Canter J, Hoffman-Rosenfeld J, Butt NK, **Botash AS.** Physical and Sexual Abuse of Children. Chapter in *Emergency Care of the Abused Patient.* Cambridge Press. In Press 2008.

Botash AS: Child Abuse (chapter). Merck Manual, Professional Version. 2006.

Cavanaugh RM. Evaluating Adolescents with Fatigue: Ever Get Tired of It? Caring for Adolescent Patients, American Academy of Pediatrics 2006; 2nd Edition: 107-118.

Cavanaugh RM. Screening Adolescent Gynecology in the Pediatrician's Office: Have a Listen, Take a Look. *Pediatrics in Review* 2007; 28(9): 332-342.

Doris JL, **Meguid V**, Thomas M, Blatt SD, Eckenrode J. Prenatal Cocaine Exposure and Child Welfare Outcomes. *Child Maltreatment*, 2006; 326-337.

Faddoul, D., **Meguid V:** Brain Tumor presenting as Recurrent Pneumonia. *Pediatric Annals* 2006, 35 (9): 621-625

Gwin J. (editor) (including **Blatt SD**) *Child Welfare League of America Standards of Excellence for Health Care Services for Children in Out-of-Home Care.* Washington, DC: CWLA Press. 2007.

Olson B, Domachowske J. Mazzotti reaction after presumptive treatment for schistosomiasis and strongyloidiasis in a liberian refugee. *Pediatric Infect Disease Journal.* 2006;25:466-68.

PRESENTATIONS AT NATIONAL MEETINGS

Melendez S, Ramsey S, **Blatt SD.** Medical Legal Collaboration: The Family Advocacy Program. Association of American Law Schools, Conference on Clinical Legal Education. New York, NY. April 30, 2006.

Townsend S, **Blatt SD**, Barbieri R, Smith C. The Importance of Multidisciplinary Collaboration to Successful Intervention with Families. The Impact of Problem-Solving Courts. Syracuse, New York. October 20, 2006.

Varma S, **Blatt SD**, Kopelman LM. Wards of the State in Pediatric Research. American Society for Bioethics and Humanities Annual Meeting. Denver, Co, October 27, 2006.

Weintraub D, Heymach B, **Blatt SD**, Melendez S, Lumeng J, Schroth A. Innovations in Training and Education: Reports from the Field. Annual Medical-Legal Partnership Summit: Building a Network for Child Health. Toronto, Canada. May 4, 2007.

Blatt SD & Tipton H. Training & Evaluation. Annual Medical-Legal Partnership Summit: Building a Network for Child Health. Toronto, Canada. May 4, 2007.

Jee SH, Szilagyi MA, **Blatt SD**, Meguid V, Auinger P, Szilagyi P. Timely Identification of Mental Health Problems in a Foster Care Medical Home. American Pediatric Society, and American Academy of Pediatrics. Toronto, Canada. May 5, 2007.

Blatt SD, Melendez SM, Ramsey SH, Broton W, Krishna S, & Gresens L. Unmet Legal Needs in a Clinic Population. Annual Meetings of the Ambulatory Pediatric Association, Society for Pediatric Research, American Pediatric Society, and American Academy of Pediatrics. Toronto, Canada. May 6, 2007.

San Jose J, **Botash AS**. Causes of Death in a Hospital Based Urban Pediatric Ambulatory Population. Pediatric Academic Societies meeting. May 7, 2007. Toronto, Canada

Pekarsky A, Frey S, **Botash AS**. Forensic Medical Evaluations of Sexually Abused Boys. Pediatric Academic Societies meeting. May 5, 2007. Toronto, Canada

Botash AS, Truehart A, Mitchell, SD. Repeated sexual abuse allegations: Do subsequent forensic examinations reveal new details? Ambulatory Pediatric Association Annual Meeting, April 29, 2006, San Francisco, CA.

Faddoul D, **Meguid V**, Brain Tumor Presenting as Recurrent Right Upper Lobe Pneumonia. AAP Meeting, Atlanta 2006.

HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Blatt SD: Consulting Editor, Mental Retardation

Blatt SD: Member, New York State Permanent Judicial Committee on Justice for Children

Blatt SD: Child Welfare League of America, Advisory Committee: Addressing the Health Care Needs of Children and Youth in Out-of-Home Care”

Blatt SD: Onondaga County Long Term Care Council

Blatt SD: New York State Children’s Cabinet Advisory Board Member

Blatt SD: Syracuse University, Chancellor’s Award for Public Engagement and Scholarship. Awarded to Syracuse Family Advocacy Program

Blatt SD: Court Appointed Special Advocates Light of Hope Award September 25, 2007

Cavanaugh RM: Executive Committee, American Academy of Pediatrics Section on Adolescent Health

Cavanaugh RM: Program Chair, American Academy of Pediatrics, Section on Adolescent Health

Cavanaugh RM: Editorial Board, American Academy of Pediatrics Adolescent Health Update

INVITED WORKSHOPS, CME PRESENTATIONS

Blatt SD, Dicker S. Children in Foster Care: New Frontier for Inclusion in Health and Educational Services. Inclusion Imperative. Syracuse University. Syracuse, NY. April 21, 2006.

Harmon D, Szilagyi M, **Blatt S.**: The Early Identification of Mental Health and Developmental Problems in Foster Care Youth: Tools and Innovative Treatment Strategies. Annual Meetings of the Ambulatory Pediatric Association, Society for Pediatric Research, American Pediatric Society, and American Academy of Pediatrics. San Francisco, CA. April 29, 2006.

Blatt SD: Health Care for Children in Foster Care. 8th Annual Rural Healthcare Symposium. Alexandria Bay, NY. May 19, 2006.

Greenberg L & **Blatt S.**: Teaching in the Presence of the Patient. SUNY Upstate Medical University Teaching Day. Syracuse, NY. October 24, 2006

Blatt SD, Melendez S, Ramsey S, Broton W, White H. Lawyers and Doctors: A Collaborative Model for Legal Advocacy and Training. Annual Meetings of the Ambulatory Pediatric Association, Society for Pediatric Research, American Pediatric Society, and American Academy of Pediatrics. Toronto, Canada. May 5, 2007

Botash AS: Basic Medical Training Academy in Child Abuse (on the topics of Fractures, STI’s, and Child Sexual Abuse), with Rich Kaplan, MD and Carolyn Levitt, MD. National Children’s Alliance Funded Conference. Syracuse, NY December 1, 2007

GENETICS

FACULTY

Bonnie R. Braddock, MPH, CGC, Clinical Instructor (Honorary Faculty)

Ryan Miller, MS, CGC

Joan Pellegrino, MD, Associate Professor of Pediatrics

Joe J. Hoo, MD, Professor of Pediatrics (retired 12/06)

Constance Stein, PhD, Director Cytogenetics Laboratory

Antony Shrimpton, PhD, Director, Molecular Diagnostic Laboratory

CLINICAL OVERVIEW

The Clinical Genetics Service of Central New York (CGS-CNY) provides high quality, comprehensive genetic services including screening, diagnosis, treatment, counseling and preventive services to the 11 Central New York counties of Health Services Area 3 (HSA-3), 4 Southern Tier counties of Health Services Area 4 (HSA-4), and some surrounding counties.

The CGS-CNY provides genetic evaluation and genetic counseling services for a wide range of neonatal, pediatric and adult onset indications. Services include general genetic evaluation clinic, Inherited Metabolic Diseases program, inpatient genetic evaluation consultations, cancer genetic counseling, genetic counseling within the multidisciplinary Breast Cancer Program, genetic counseling as part of the cystic fibrosis newborn screening program, genetic counseling in conjunction with craniofacial clinic and genetic counseling for other general pediatric and adult indications.

The Clinical Genetics Service is staffed by Clinical Geneticists, Joe J. Hoo, MD (retired 12/06) and Joan Pellegrino, MD and two full time genetic counselors, Bonnie R. Braddock, MPH, Certified Genetic Counselor and Ryan Miller, MS.

In 2006 the Clinical Genetics Service obtained accreditation to become an Inherited Metabolic Diseases Specialty Center by the New York State Department of Health to care for patients with metabolic disorders diagnosed by the State's newly expanded Newborn Screening Program. We are the designated referral center for any abnormal biochemical newborn screen for the 14 county region. The Metabolic team includes a nurse practitioner, genetic counselor, social worker and metabolic dietician.

The Clinical Genetics Service coordinates a monthly Genetics Professionals Review Group meeting at Upstate Medical University. The goals of the meetings are to foster collaboration of cases and research opportunities and provide in house educational opportunities. During the meetings, interesting clinical cases or research topics are reviewed by a multidisciplinary group of genetics staff at Upstate Medical University including clinical geneticists, genetic counselors, cytogeneticist, molecular geneticist, PhD geneticists, other genetic researchers and medical students.

RESEARCH HIGHLIGHTS

Our research activity includes clinical and collaborative research. Over the years the main focus has been on 1) Descriptive elucidation of genetic syndromes; 2) Clinical, cytogenetic, and molecular correlation of chromosomal aberrations; and 3) Gene mapping.

PUBLICATIONS

Lloyd AR, Ragosta KG, Bryke CR, **Hoo JJ**: Desbuquois syndrome in three sisters with significantly different lengths of survival. *American Journal of Medical Genetics* Jun 1:140(11):1253-5 2006.

Santos RP, **Hoo JJ**: Difficulty in recognizing multiple sulfatase deficiency in an infant. *Pediatrics*. Mar;117(3);955-8 2006.

Shrimpton AE, Hoo JJ: A TNN12 mutation in a family with distal arthrogyriposis type 2B. *European Journal of Medical Genetics*. Mar-Apr;49(2):201-6, 2006.

Shrimpton AE, Jensen KA, Hoo JJ: Karyotype-phenotype analysis and molecular delineation of a 3p26 deletion/8q24.3 duplication case with a virtually normal phenotype and mild cognitive deficit. *American Journal of Medical Genetics.* 140(4): 388-91, 2006.

Pellegrino JE: Newborn Screening: Opportunities for Prevention. In: *Children with Disabilities*, 6th edition Batshaw, Pellegrino and Roizen (ed), Baltimore, MD: Brooks Publishing Co. 2007.

Pellegrino JE and Pellegrino L: Fetal Alcohol Syndrome and Related Disorders. In: *Capute & Accardo's Neurodevelopmental Disabilities in Infancy and Childhood*, Third edition. Pasquale J. Accardo (ed.), Baltimore, MD: Brooks Publishing Co. 2007

Hoo JJ, Stein CK: "Zwilling" versus "Tai Chi" configuration of double-sized ring chromosomes. *American Journal Medical Genetics.* 143(8)903-5, 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Shrimpton AE, Zeligman J, Hubbell C, Pellegrino J. Choreoathetosis gene mapping in a Native American family. Abstract 1788B Poster Presentation, American Society of Human Genetics 56th Annual meeting, New Orleans, October 2006.

Duffner P, Adams D, Arnold G, Aron A, Caggana M, Ciafaloni E, Cohen M, Crosley C, Diaz G, Djukic A, Erbe R, Helton L, Kolodny E, Kosofsky B, Kronn D, Kurtxberg J, Kwon J, Levy P, Mink J, Moser H, Naidich T, Orsini J, Parton P, Patterson M, **Pellegrino J**, et al. A consensus protocol for the clinical and neurodiagnostic evaluation of infants with positive newborn screens for krabbe disease. Abstract P24. *Annals of Neurology* Vol 62, Suppl 11; Child Neurology Society annual meeting, 2007.

INVITED WORKSHOPS, CME PRESENTATIONS

Braddock, B., Invited lecture, "Inherited Susceptibility to Gynecologic Cancers", OB-GYN Grand Rounds, Crouse Hospital, April, 2006.

Braddock, B., Invited lecture, "Inherited Colon Cancer Syndromes", VA Hospital GI meeting, May, 2006.

Braddock, B., Invited lecture, "BRCA1 and BRCA2 review", Breast Case Conference, Upstate Medical University, June, 2006.

Braddock, B., Invited lecture, "Hereditary Risk for Cancer and Genetic Testing", Healthlink program, September, 2007.

Braddock, B., Invited lecture, "Hereditary Breast Cancer Syndromes", Regional Oncology Center, November, 2007.

Pellegrino, JE., Invited lecture, "Inherited Metabolic Disease Specialty Center and newborn screening". HealthLink On Air program, January 21, 2007.

Pellegrino, JE., Invited lecture, "Genetic Basics: Chromosomal and Genetic Syndromes". Syracuse University Speech therapy course. April 2007.

GRANTS AND CONTRACTS

Genetic Service Grant from the New York State's Department of Health, in the amount of \$100,000 annually.

Golisano Children's Hospital/Children's Miracle Network Grant. "Patient Supplies for the Inherited Metabolic Diseases Specialty Clinic;" \$4,660.00 for one year. 2006

SELECTED CLINICAL DATA

Total patient CGS visits in 2006: 1,117

Total patient CGS visits in 2007: 602

HEMATOLOGY AND ONCOLOGY

FACULTY

Richard H. Sills, MD, Professor of Pediatrics, Division Director

Abdul-Kader Souid, MD, PhD, Professor of Pediatrics

Irene Cherrick, MD, Associate Professor of Pediatrics

P. David Sadowitz, MD, Associate Professor of Pediatrics

Gloria Kennedy, MD, Assistant Professor of Pediatrics

Trisha Tavares, MD, Assistant Professor of Pediatrics

CLINICAL OVERVIEW

The Division of Hematology/Oncology cares for infants, children and adolescents with the full spectrum of hematologic and malignant disorders. The clinical activity of the section is based in the Waters Center for Children's Cancer and Blood Disorders (CCCBD). Serving a 21 county area in New York and Northern Pennsylvania, we are the sole regional provider for the specialty. The division also provides the primary source of patients for the 13 bed in-patient Pediatric Hematology/Oncology unit on 7H with its supporting staff.

In addition to the five full-time and one part-time faculty, the division currently has two nurse practitioners. Diane Groth provides a primary role in caring for children with bleeding disorders as well as children with malignancies while Susan Shaw provides care part-time to children with malignancies in long term follow up.

The division currently has 5.7 registered nurses, 3.5 office personnel, a social worker, family therapist, educational specialist and two child life specialists. At full staffing, the division will have two clinical research assistants, a research technician and a post doctoral student.

The division cares for approximately 50 newly diagnosed children with cancer annually and more than 70 children are actively on chemotherapy programs. The division also provides care to children with a wide variety of hematologic disorders on an ongoing basis as well as providing consultative services for regional primary care providers who need assistance caring for children with potential hematologic or oncologic diagnoses.

Children's Oncology Group Participation

The division continues to function as a full member of the Children's Oncology Group under the leadership of Dr. Irene Cherrick. All of COG's research protocols are available to our patients and we have been very effective at entering the great majority of newly diagnosed patients onto research protocols.

KNOT Center

This is our program of long-term follow up for late effects which was one of the first of its kind in the nation. Susan Shaw, RN, PNP provides the primary services under the supervision of Irene Cherrick MD. Ms. Shaw has a national reputation for her work and is a frequently invited speaker. Patients usually enter the KNOT program when they are five years from diagnosis and at low risk for relapse. Specific protocols are followed to assure that the longer term effects of chemotherapy, radiation and surgery are recognized and managed appropriately.

Neuro-Oncology

This multidisciplinary neuro-oncology program is now directed by Dr. Gloria Kennedy with the assistance of Dr. Trisha Tavares. The program is held in the CCCBD on a monthly basis and is regularly attended by pediatric neurology, radiation oncology and an educational specialist. The visits focus not only on the medical care and management of long term complications but also focus on the psychosocial and educational needs of these children.

Hemophilia

Diane Groth, RN, PNP and Dr. Kennedy coordinate the federally funded hemophilia program. More than fifty patients with hemophilia and more than 220 with other coagulopathies receive consistent, comprehensive care through this program. Camp High Hopes, co-founded and operated by Ms. Groth, provides a wonderful week-long camp experience for boys with hemophilia. It is open to boys from the entire upstate region and is unique for this area.

New York State Designated Hemoglobinopathy Center

This program is directed by Dr. Richard Sills. Its primary role is to provide the focus of care for children with hemoglobinopathies; most of these children are identified by the New York State Newborn Screening Program and referred to us directly as the regional center. Smaller numbers of children are referred when they move into the area. We currently care for approximately 100 children with sickle cell disease. We also provide service to children with other hemoglobinopathies such as thalassemia and hemoglobin C or E disorders. In addition we provide genetic counseling to families identified as having infants with hemoglobinopathy traits identified by newborn screening or referred by outside physicians.

Autologous Stem Cell Transplantation

The pediatric stem cell transplant program continues to develop and serve the needs of patients with a variety of solid tumors, particularly those with neuroblastoma and brain tumors. We are an approved autologous transplant center for COG studies.

Educational Specialist and Neuropsychology Service

This is an area of innovation in our division. Nan Songer, MS, coordinates inpatient tutoring, school reentry, assessing and guaranteeing adaptation of the educational system to the unique needs of our children, the monitoring of school performance and active participation in the educational planning for children with neurocognitive deficits. Close collaboration with the regional school districts and the use of school visits is integral to the success of this program. She also coordinates our "When Cancer Enters the Classroom" program for school nurses and teachers in our region to learn more about working with our children. Brian Rieger, PhD, a neuropsychologist in the Department of Physical Medicine and Rehabilitation, is a close collaborator with the service and supervises all of the neuropsychological testing. Participation of PhD students from the School of Education at Syracuse University has been funded by the CCCBD and has been an integral part of an innovative research program.

Pediatric Palliative Care

Dr. Irene Cherrick directs this new and critical program. It fills a tremendous void by organizing and providing support for children who are still receiving some therapy to improve their quality of survival in spite of an inability to cure their disease. The traditional hospice program manages patients only after therapies, such as chemotherapy, are no longer being used. Dr. Cherrick's program has expanded beyond the population of children with hematologic and oncologic diagnoses and now includes all children in our region whose insurance qualifies them for this support.

RESEARCH HIGHLIGHTS

Dr. Souid continues his work on the pharmacokinetics of platinum compounds as an important class of neoplastic agents. Several publications have resulted.

Dr. Sills is working with Dr. Norma Lerner in Rochester to develop a regional consortium to provide a research base for children with sickling disorders.

PUBLICATIONS

Badawy SZA, Cuenca V, **Souid A-K**. In vitro studies of gossypol on growth and oxygen consumption of endometrioma cells. *Asian Journal of Andrology*, 9:388-393, 2007.

Chohan KR, **Souid A-K**, Badawy SZA. Respiration of human spermatozoa. *Andrology Update*, 1:123-130, 2007.

Tao Z, Penefsky HS, Goodisman J, **Souid A-K**. Caspase activation by cytotoxic drugs (the caspase storm). *Molecular Pharmaceutics*, 4:583-595, 2007.

DiPasqua AJ, Goodisman J, Kerwood DJ, **Toms BB**, Dabrowiak JC Modification of Carboplatin by Jurkat cells. *J Inorg Biochem*,101(10):1438-41, 2007. Epub 2007 June 21. PMID: 17655933

DiPasqua AJ, Goodisman J, Kerwood DJ, **Toms BB**, Dubowy RI, Dabrowiak JC. Role of carbonate in the cytotoxicity of carboplatin. *Chem Res Toxicol*, 20(6):896-904, 2007. Epub 2007 May 12. PMID: 17497898

SELECTED CLINICAL DATA

Outpatient Visits: 2006: 4,629

Outpatient Visits: 2007: 4,512

Inpatient Visits: 2006: 2,931

Inpatient Visits: 2007: 2,661

INFECTIOUS DISEASES

FACULTY

Leonard B. Weiner, MD, Professor of Pediatrics, Pathology and Family Medicine, Director, Division of Infectious Disease and Immunology

Joseph B. Domachowske, MD, Associate Professor of Pediatrics, Microbiology and Immunology

Jana Shaw, MD, MPH, Assistant Professor of Pediatrics

Jeffrey D. Snedeker, MD, Clinical Assistant Professor of Pediatrics

John A. Bradshaw, MD, Clinical Assistant Professor of Pediatrics

CLINICAL OVERVIEW

The Division of Infectious Diseases provides care for infants, children and adolescents with severe or unusual infections and immune deficiency syndromes, including HIV. Staff infectious disease specialists evaluate and treat children with recurrent infections, persistent or periodic fever syndromes, unusual or severe bacterial, viral, fungal and parasitic diseases, and innate or acquired immune deficiency syndromes. As a designated New York State Department of Health Pediatric AIDS Center of Excellence, we provide medical care for pediatric patients infected with, or exposed to human immunodeficiency virus. Our outpatient care is provided in the Pediatric and Adolescent Infectious Disease and Immunology Center on 5C and 4W, University Hospital. Here, follow-up evaluations on recently hospitalized patients are also carried out, in addition to patients referred by their primary care physicians for infectious disease diagnostic evaluations and treatment recommendations. Outpatient infusions of intravenous antibiotics and intravenous immunoglobulin can also be administered on 5C.

Hospitalized patients are evaluated upon the request of their primary care physician at University, Crouse, and Saint Joseph's Hospitals. Here, the infectious disease specialists work closely with the primary care pediatricians and family physicians, surgical specialist, intensivists, hospitalists, and neonatologists to direct the diagnostic and therapeutic evaluations of patients with infectious disease and/or immunologic problems.

The activities of the Division of Infectious Disease include the only Pediatric Designated AIDS Center in the region. This program has also received a Center of Excellence designation and grant from the New York State Department of Health. Additionally, our center is a NIH-funded pediatric AIDS clinical trials site.

RESEARCH HIGHLIGHTS

Clinical Trials

A major effort of the infectious disease physicians is the participation in multi-center, national and international clinical trials to evaluate the safety and efficacy of new pharmacologic agents and vaccines related to the care of children and adolescents. Specifically, Dr. Weiner currently supervises eight protocols to evaluate different anti-viral therapies and ten clinical vaccine trials. Studies involving newer meningococcal, pneumococcal DTAP/Hib/IPV and MMRV vaccines are currently underway. Some vaccine studies are conducted at our clinical trials site at Northeast Pediatrics in Ithaca, New York, under the guidance of Drs. Snedeker and Bradshaw. Other studies take place at University Pediatric and Adolescent Center, our pediatric department general clinic, or at Brighton Hill Pediatrics.

Dr. Domachowske's clinical research interests focus on the epidemiology and clinical manifestations of lower respiratory tract viral infections. He has paralleled these interests with an extensive laboratory program involving the study of severe respiratory virus infection utilizing an animal model. Severe viral bronchiolitis and pneumonia depend on both active viral replication, and on the host cell immune responses to that infection. Studies to elucidate these host cellular responses, and to determine the clinical effects of inhibiting these responses in a small animal model have revealed that combination therapy with antiviral compounds and specific immunomodulatory agents offer dramatic clinical benefits. Dr. Domachowske's clinical and epidemiologic trials include four RSV-prevention protocols and two RSV/parainfluenza vaccine trials.

PUBLICATIONS

Shibata S, Kiska DL, and **Domachowske JB**. Reactive hemophagocytosis in a patient with systemic lupus erythematosus and disseminated histoplasmosis. *Infectious Dis Clin Practice* 2006;12:45-8.

Swartz JM, Dyer KD, Cheever AW, Pesnicak L, Foster PS, **Domachowske JB**, Wynn TA, and Rosenberg HF. Eosinophils and host defense: *Schistosoma mansoni* infection in deltaDBLGATA eosinophil-deficient mice. *Blood* 2006;108:2420-7

Bonville CA, Bennett NJ, Koehnlein M, Haines DM, Ellis JA, DelVecchio AM, Rosenberg HF, and **Domachowske JB**. Respiratory dysfunction and proinflammatory chemokines in the pneumonia virus of mice (PVM) model of viral bronchiolitis. *Virology* 2006;69(2):53-9

Olson BG and **Domachowske JB**. Mazzotti reaction after presumptive treatment for schistosomiasis and strongyloidiasis in a Liberian refugee. *Pediatr Infect Dis J*. 2006; 25:466-8.

Bonville CA, Rosenberg HF, and **Domachowske JB**. Ribavirin and cysteinyl leukotriene-1 receptor blockade as treatment for severe bronchiolitis. *Antiviral Research* 2006;69:53-59.

Domachowske JB. Infectious triggers of hemophagocytic syndrome in children. *Pediatr Infect Dis J* 2006; 25:45-7.

Bonville CA, Bennett NJ, Percopo CM, Branigan PJ, DelVecchio AM, Rosenberg HF, and **Domachowske JB**. Diminished inflammatory responses to natural pneumovirus infection among older mice. *Virology* 2007;368:182-90.

Dyer KD, Schellens IM, Bonville CA, Martin BV, **Domachowske JB**, and Rosenberg HF. Efficient replication of pneumonia virus of mice (PVM) in a mouse macrophage cell line. *Virol J*. 2007;4:48.

Bennett E. and **Domachowske JB**. New immunization strategies for preventing infectious diseases in adolescents. *Pediatr Annals* 2007; 36:327-335.

Bennett, NJ, Ellis JA, Bonville CA, Rosenberg HF and **Domachowske JB**. Immunization strategies for the prevention of pneumovirus infections. *Expert Rev of Vaccines* 2007; 6:16-82.

Burnett AM and **Domachowske JB**. Therapeutic considerations for children with invasive group A streptococcal infections: A case series report and review of the literature *Clin Pediatr* 2007; 46:550-5.

Ellis JA, Martin BV, Walder C, Dyer KD, **Domachowske JB**, and Rosenberg HF. Mucosal inoculation with an attenuated mouse pneumovirus strain protects against virulent challenge in wild type and interferon receptor deficient mice. *Vaccine*;2007;25:1085-95

PRESENTATIONS AT SCIENTIFIC MEETINGS

Moro MR, Faddoul DA, Kobayaae HR, Bonville CA, and **Domachowske JB**. Pediatric adenovirus infection: features at presentation to an emergency room. *Infectious Disease Society of America*. San Diego, CA October 2007.

Domachowske JB, Bonville CA, and Rosenberg HF. Pneumonia virus of mice in a mouse macrophage cell line: virus replication and production of proinflammatory cytokines. *Infectious Disease Society of America*. San Diego, CA October 2007.

Faddoul DA, Moro MR, Kobayaae HR, Bonville CA, and **Domachowske JB**. The clinical spectrum of adenovirus infection encourages inappropriate antibiotic use. *American Academy of Pediatrics*, San Francisco, CA. October 2007.

Bennett NJ, Bonville CA, Percopo CM, Rosenberg HF, and **Domachowske JB**. Disease manifestations in young and elderly mice infected with pneumonia virus of mice. *Pediatric Academic Societies*, Toronto, Canada, May 2007.

Bonville CA, Rosenberg HF, and **Domachowske JB**. MIP-1 alpha (CCL3)-induced pulmonary inflammation and cachexia are augmented by concurrent administration of gamma interferon. *Pediatric Academic Societies*, Toronto, Canada, May 2007.

Burnett AM and **Domachowske JB**. Treatment practices for children hospitalized with invasive group A streptococcal infections. *Pediatric Academic Societies*, Toronto, Canada, May 2007

Bonville CA and **Domachowski JB**. Heterologous expression of CCL3 in the lower airways of mice using different methods of vector delivery. Infectious Disease Society of America Toronto, Canada, October 2006.

Krilov LR, **Domachowski JB**, Harkness H, Bonville CA, and Welliver RC. Chemokine and Prostaglandin expression in peripheral blood mononuclear cells exposed to RSV and hyperoxia. Infectious Disease Society of America Toronto, Canada, October 2006.

Ellis JA, Gow, JBS, West KH, Waldner C, **Domachowski JB**, and Rosenberg HF. Mucosal administration of pneumoviral vaccines: Insights from bovine and murine models. American College of Veterinary Pathologists, Boston MA, December 2006.

Bonville CA, Rosenberg HF, and **Domachowski JB**. Eosinophils induce expression of the extracellular matrix protein tenascin-C in a ribonuclease-dependent manner. Pediatric Academic Societies, San Francisco, CA May 2006.

HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Domachowski JB: Editor, Clinical Microbiology Reviews

Domachowski JB: Managing Editor, Pediatrics e-medicine, Infectious Diseases Section *www.emedicine.com*

INVITED WORKSHOPS, CME PRESENTATIONS

Domachowski JB: Pertussis Update, The Delaware Nurse Assn 6th Annual Winter Conference. February, 2006.

Domachowski JB: Hot Topics in Pediatric Infectious Disease, 8th Annual Children at Risk Conference. March, 2006.

Domachowski JB: New Vaccines for the Babies 2006. Pediatric Teaching Day, June, 2006.

Domachowski JB: Common Skin Infections: A photo library. Rochester Nurse Practitioner Association, June, 2006.

Domachowski JB: Mentorship in Academic Medicine. Faculty Development Seminar Series. June, 2006.

Domachowski JB: Implementing ACIP recommendations in a busy practice. Port Jervis, NY, July, 2006.

Domachowski JB: Controlling pertussis outbreaks. Herkimer County Health Department, August, 2006.

Domachowski JB: How oncogenic viruses cause cancer. Syracuse, NY, August, 2006.

Domachowski JB: Immunizations: Current Vaccines and Research Developments. Union County, NJ, Department of Human Services, October, 2006.

Domachowski JB: Common Questions on Vaccine Safety Mercy Hospital Grand Rounds, Buffalo, NY, November, 2006.

Domachowski JB: Internal Medicine Infectious Disease Grand Rounds The New HPV Vaccine Syracuse, NY, November, 2006.

Domachowski JB: Hot Topics in Infectious Disease Nurse Practitioner Association of NY State 22nd Annual Convention, Clifton Park, NY, November, 2006.

Domachowski JB: Update on Pertussis and Mumps: Identifying them again. American Academy of Pediatrics and NYS Immunizations Program's Vaccine Summit, New Paltz, NY, November, 2006.

Domachowski JB: Respiratory tract infections in children – from Adenovirus to RSV Community General Family Practice Grand Rounds, Syracuse, NY, December, 2006.

Domachowski JB: Travel Advice from the Infectious Disease Perspective Young Life of Urban and Eastern Syracuse, December, 2006.

Domachowski JB: Preventing Cervical Cancer: A Pediatrician's Responsibility, Golisano Children's Hospital Grand Rounds, Syracuse, NY, January 2007.

Domachowske JB: Lessons Learned about the Importance of Herd Immunity, Golisano Children's Hospital Grand Rounds, Syracuse, NY, January 2007.

Domachowske JB: Prioritizing resources for the prevention of serious infections in infants. Meeting of Public Health Promoters, Bajo Lempe, El Salvador, February 2007.

Domachowske JB: Vaccines for Adults 36th Annual Family Medicine Refresher Course Syracuse, NY, February 2007.

Domachowske JB: Advances in the Prevention of RSV Bronchiolitis. Pediatric Grand Rounds, Rochester, NY, March 2007.

Domachowske JB: Mentorship: Lessons learned during my training and early faculty years as a pediatric infectious disease specialist. On the other side of the glass ceiling: Reflections on the status and future of women in science and academia. President's Symposium, Syracuse, NY, March 2007.

Domachowske JB: The Immunization Imperative: Protecting Families from Pertussis and Influenza. Web-Enhanced Teleconference sponsored by Albert Einstein College of Medicine and Montefiore Medical Center, March 2007.

Domachowske JB: New Respiratory Viruses: What we know, what we don't. Winthrop University Hospital Pediatric Grand Rounds in association with their teaching day symposium on Pediatric Respiratory Viral Infections, Mineola, NY, May 2007.

Domachowske JB: Preventing severe pneumovirus infection in newborns: A role for maternal immunization? NIH, LAD, NIAID, June 2007.

Domachowske JB: The chemokine storm of severe viral pneumonia: Which biomarkers are relevant? NIH, LAD, NIAID, June 2007.

Domachowske JB: From mice to babies. What species-specific pneumoviruses do in their natural hosts. Western Veterinary Medical College, University of Saskatchewan, Saskatoon, Saskatchewan, Canada, June 2007.

Domachowske JB: Travel medicine: What you need to know to visit Central America. Young Life, Syracuse, NY, September 2007.

Domachowske JB: Common questions about vaccines in 2007. Bethesda, MD, September 2007.

Domachowske JB: Skin and soft tissue infections. Is it MRSA? Children at Risk Annual Conference. Liverpool, NY, November 2007.

Domachowske JB: MRSA: A not-so-new public health problem. Pediatric Associates Camillus, NY, Sept 2007 and Maternal Child Health Syracuse, NY, November 2007.

Domachowske JB: Immunizing health care workers against influenza: recommendations, rationale, resistance, and responsibility NYSDOH and American Academy of Pediatrics Vaccine Summit New Paltz, NY, November 2007.

Weiner LB: Primary Care Continuing Medical Education Conference, Bassett Hospital, Cobleskill, NY, "Immunizing Health & Hospital Professionals – Update 2005", March, 2006.

Weiner LB: Medical Grand Rounds, United Health Services Hospitals, Johnson City, NY, "Immunization Update for Health Care Professionals", March, 2006.

Weiner LB: Pediatric Vaccine Advisory Board, Chicago, IL, March, 2006.

Weiner LB: American Academy of Pediatrics District II/NYS Vaccine Summit 2006, Buffalo, NY, "Update on Mumps and Pertussis Outbreaks", June, 2006.

Weiner LB: Influenza Vaccine Advisory Committee, Washington, DC, September, 2006.

Weiner LB: Primary Care Continuing Medical Education Conference, Bassett Healthcare of Schoharie County, "Immunization Update 2006-2007; The Outlook, New Products, The Mission", November, 2006.

Weiner LB: Friday Education Conference, Community General Hospital, "Immunization Update", March, 2007.

Weiner LB: Pediatric Vaccine Advisory Board, Dallas TX, March, 2007.

Weiner LB: Medical Grand Rounds, Our Lady of Lourdes Memorial Hospital, Binghamton, NY “Influenza Update 2007”, June, 2007.

Weiner LB: RSV Prevention & Epidemiology Advisory Committee, Orlando, FL, February, 2007.

GRANTS AND CONTRACTS

Weiner LB

NIH-NICHD/Westat - Pediatric AIDS Clinical Trials Group, \$1,200,000, 2006-2007

NYS DOH – Center of Excellence Grant, Designated Pediatric AIDS Center, \$520,000, 2006-2007

GlaxoSmithKline Research

Sanofi Pasteur Research

Wyeth Vaccine Research

Med Immune

Domachowske JB

Centocor - Impact of senescence on the innate immune responses to pneumovirus infection \$210,000 - 2005-2008

MedImmune Research Grant - A study to evaluate the safety, tolerability, pharmacokinetics, and immunogenicity of MEDI-524, a humanized enhanced potency monoclonal antibody against respiratory syncytial virus (RSV), in children with hemodynamically significant congenital heart disease. \$45,000 - 2005-2006

Centocor - “Pneumonia virus of mice as a model of viral pneumonia in humans” \$65,000 - 2004-2007

Children’s Miracle Network of Central New York - “Pneumovirus infection in vivo: inflammatory and functional consequences to heterologous expression of individual pneumovirus proteins” \$18,000 - 2004-2006

MedImmune Research Grant - A pivotal phase 3 study of Medi-524 (NUMAX), an enhanced potency humanized RSV monoclonal antibody for the prophylaxis of serious RSV disease in high-risk children \$350,000 - 2004-2006

SELECTED CLINICAL DATA

Outpatient visits, 2006: 1,026

Outpatient visits, 2007: 1,959

Inpatient visits, 2006: 1,447

Inpatient visits, 2007: 1,440

NEPHROLOGY

FACULTY

James Listman, MD, Assistant Professor of Pediatrics

Scott Schurman, MD, Associate Professor of Pediatrics, Section Head

Thomas Welch, MD, Professor of Pediatrics, Chairman, Department of Pediatrics

CLINICAL OVERVIEW

The Section of Nephrology provides care for children and adolescents with the full spectrum of disorders of the kidneys and urinary tract. Staff nephrologists evaluate and treat children with nephrotic syndrome, glomerulonephritis, and electrolyte disturbances (such as renal tubular acidosis). The section has long-standing interest and expertise in providing care to children with hypertension, and provides complete diagnostic and treatment services for children with high blood pressure, including 24-hour ambulatory blood pressure monitoring. Drs. Schurman and Welch also have interest and expertise in the management of metabolic bone disease and related disorders of mineral metabolism. This includes problems such as rickets, juvenile osteoporosis, and osteogenesis imperfecta.

The section also provides coordinated care to infants and children with complex urogenital anomalies, including hydronephrosis and vesicoureteral reflux. When necessary, urologic intervention is accessed. As an extension of these efforts, the section maintains a Voiding Improvement Program (VIP) for evaluation and treatment of children with voiding disorders. These include daytime urinary incontinence, urinary frequency, recurrent urinary tract infections, and nocturnal enuresis. When appropriate, visits include evaluation of voiding dynamics and bladder emptying.

The section also provides a full array of acute and chronic renal replacement services, including hemodialysis, hemofiltration, and peritoneal dialysis. In close cooperation with the Division of Transplantation of the Department of Surgery, renal transplantation service and follow-up care are provided.

Outpatient care in Syracuse is provided in the Center for Children's Kidney Diseases at 725 Irving Ave., Suite 401. The section also provides care for children at satellite facilities in Watertown (Dr. Listman), Utica (Dr. Schurman), and Binghamton (Dr. Welch).

RESEARCH HIGHLIGHTS

Role of Local Complement Synthesis in the Kidney

The major effort in Dr. Welch's laboratory has been understanding the role of local complement synthesis in the kidney. The laboratory was the first to demonstrate local complement synthesis in the human kidney, and to localize this activity to the proximal renal tubular epithelium.

Recently, the laboratory has been working to establish a link between this local tubular synthesis and the development of the tubulointerstitial disease which seems to presage the evolution of acute glomerulonephritis to a chronic state and, eventually, to renal failure. A hypothesis has been developed which suggests that inflammatory mediators in the glomeruli gain access to the tubules, upregulating the synthesis of several complement components. These, in turn, are activated in the peritubular region, causing direct cellular injury as well as attracting other inflammatory mediators to the interstitium.

Our strategy to test this hypothesis has employed an immune complex glomerulonephritis model in mice. This model is accompanied by the development of significant interstitial disease, which is preceded by the expression of mRNA for several components in the tubular epithelium. The specific role of complement can be dissected in this model with the use of various mice in which the gene for certain complement components or receptors has been disrupted by homologous recombination ("knock out" mice). Lack of the C5a receptor, for example, results in significant attenuation of the inflammatory component of the interstitial disease; C5a is an anaphylotoxin produced by complement activation, which is a potent attractant of inflammatory cells.

We have been employing a series of experiments in which "chimeras" are constructed between wild type mice and C3 knock-out animals using sub-lethal irradiation followed by bone marrow transplantation.

This has allowed us to examine the course of nephritis in animals whose kidneys lack the capability to synthesize C3, but whose reticuloendothelial system can produce the protein. Additionally, we have begun using microarray technology to examine differences in kidney gene expression profiles between wild type and C3 knock-out animals as a way of dissecting the down stream events occurring after local complement synthesis and activation. These latter studies have provided us with a genetic “signature” showing the effort of tubular complement expression. We have most recently shown that the clinical phenotype of this disorder is significantly altered when the animals are treated with the ACE inhibitor captopril. Examining the effect of this treatment on this signature will help further define the way in which complement is working in this model.

Development of Novel Inhibitors of Inflammation

The major goal of Dr. Listman’s laboratory is to define small molecules that will specifically inhibit transcription of the IL-1 β gene. IL-1 β is a potent cytokine with diverse roles in inflammation including induction of the acute phase response, activation of the cellular components of acquired immunity, and promotion of chronic inflammation. Thus, inhibiting IL-1 β expression (and other similarly regulated cytokines like TNF) has major therapeutic potential for the treatment of a variety of disease states including sepsis, arthritis, autoimmune diseases and transplant rejection among others.

To accomplish our goal, the laboratory is investigating the structural/functional interactions of several transcription factors that regulate the IL-1 β gene. These include Spi-1 and C/EBP β , which are endogenous regulators of the IL-1 β promoter, and the exogenous regulator Immediate-Early 2 (IE2) protein of Cytomegalovirus (CMV). The IE2 protein provides a powerful tool for our task because it is a potent regulator of numerous host genes besides IL-1 β , including TNF , IL-8 and IL-2. Our laboratory is investigating the structural interactions that allow IE2 to participate with Spi-1 and C/EBP β to induce IL-1 β expression. By narrowing down the peptide or, better yet, amino acid interactions between these molecules we hope to devise mimetic peptides would lack the major functional components of the parent molecule, but retain ability to bind to ligand, thus, interfering with the normal productive interactions that permit gene transcription. This goal is achieved by utilizing a combination of functional and biochemical techniques including recombinant DNA technology, gene reporter assays, and NMR spectroscopy, among others.

Thus far, we identified a 14-residue fragment of the IE2 molecule can function in a dominant negative manner to inhibit IL-1 β promoter activity in heterologous systems. We are currently performing confirmatory analyses in CMV infected monocytic cell lines and in LPS activated monocytes to determine the effectiveness of this technology.

PUBLICATIONS

Welch, TR: Parenteral fluid therapy for infants and children. In Conn’s Current Therapy 2006 edition, Rakel, R.E., Bope, E.T., ed. Philadelphia: W.B. Saunders, 760-765, 2006.

Balistreri WF, Welch TR, Daniels SR: Care of children with solid organ transplants. In Oski’s Pediatrics: Principles and Practice 4th edition, McMillan JA, Feigin RD, DeAngelis CD, Jones MD, ed. Philadelphia: Lippincott-Williams & Wilkins, 2065-68, 2006.

Welch, TR: Who provides physician advice over the internet: A study of a pediatric subspecialty discussion group. *J Pediatr*, 151:96-98, 2007.

Shapiro O, Welch TR, Sheridan M, Stred S, Upadhyay J: Mixed gonadal dysgenesis and Denys-Drash syndrome: urologists should screen for nephritic syndrome. *Can J Urol*, 14(6):3767-9, 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Welch, T.R., Blystone, L.W. Dissecting the role of complement synthesis by infiltrating inflammatory cells in immune glomerulonephritis. Pediatric Academic Societies Abstract #750849, San Francisco, CA, 2006.

Listman, J.A., Race JE, Unlu S, Auron PE, Inhibition of IL-1 β Transcription by Peptides Derived from the hCMV IE2 Transactivator. Pediatric Academic Societies Annual Meeting, Toronto, ON, May, 2007.

Welch, T.R., Middleton, F.A., Gentile, K.L., Blystone, L.W. Complement dependence of interstitial collagen deposition in experimental immune complex glomerulonephritis. Pediatric Academic Societies Annual Meeting, Toronto, ON, May, 2007.

HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Welch, T.R. Associate editor, The Journal of Pediatrics

Welch, T.R. NIH/NIDDK Special Review group, July, 2007

INVITED WORKSHOPS, CME PRESENTATIONS

Welch, T.R. Manuscript Preparation for Peer Reviewed Publication workshop, Southern Society for Pediatric Research Annual Meeting, Atlanta, GA, March, 2006.

Welch, T.R. Manuscript Preparation for Peer Reviewed Publication workshop, Southern Society for Pediatric Research Annual Meeting, New Orleans, LA, February, 2007.

Welch, T.R. Conference Co-Chair, 18th Annual Spring Conference on Pediatrics, Symposia Medicus, May, 2007.

SELECTED CLINICAL DATA

Outpatient visits, 2006: 2,114

Outpatient visits, 2007: 2,255

Inpatient visits, 2006: 463

Inpatient visits, 2007: 364

Inpatient dialysis 2006: 217

Inpatient dialysis 2007: 152

Kidney transplants, 2006-2007: 5

NEURODEVELOPMENTAL PEDIATRICS

FACULTY

Nienke Dosa, MD, MPH, Assistant Professor of Pediatrics

Gregory Liptak, MD, MPH, Professor of Pediatrics, Division Director

Louis Pellegrino, MD, Assistant Professor of Pediatrics

Carol Grant, PhD, Clinical Assistant Professor

Laura Lee McIntyre, PhD, Adjunct Assistant Professor, Syracuse University

CLINICAL OVERVIEW

The Center for Neurodevelopmental Pediatrics provides evaluation, treatment, and management services for children and adolescents with developmental delays and disabilities. Outpatient clinical services are located in the Physician Office Building, Suite 112. These include interdisciplinary programs in Autism Spectrum Disorders, Child Development, Clinical Genetics, Inherited Metabolic Diseases (accredited by New York State), Physical Disabilities, and Spina Bifida. Dr. Nienke Dosa focuses on the care of children with physical disabilities, Dr. Louis Pellegrino focuses on children with cognitive challenges, while Dr. Liptak provides care for children with physical disabilities and cognitive disorders. Genetic services are also provided under the umbrella of this program, and are described separately in the “Genetics” section.

Dr. Dosa directs the Physical Disabilities Program for children with cerebral palsy and those with other physical disabilities. She also directs the Spina Bifida Clinic, which is one of the few in the country to care for both children and adults with spina bifida. Dr. Pellegrino directs the Autism Spectrum Program and the Child Development Program, which includes children with developmental delays from other causes.

In addition, the Center is staffed by Mary MacBlane, RNC, PNP, a pediatric nurse practitioner, who provides care for patients with metabolic disorders and developmental disabilities. Laura Lee McIntyre, PhD, is a psychologist who specializes in children on the autism spectrum and children with severe behavioral problems. The Center also has professionals in pediatric nursing, nutrition, physical therapy, occupational therapy, and social work. Pediatric specialists in orthopaedics, psychiatry, neurosurgery, and urology provide on-site consultation.

PROGRAMS

The Child Development Program offers diagnostic, management and counseling services to the families of children with a variety of neurodevelopmental concerns, including the autistic spectrum disorders, cognitive and learning disabilities, speech and language disorders, attention deficit hyperactivity disorder, motor coordination disorders, and Down syndrome. Children from birth through the teenage years are served through the program. Diagnostic evaluations are provided by Drs. Liptak and Lou Pellegrino, both of whom are certified in general pediatrics and neurodevelopmental pediatrics. Special, standardized testing is employed in the assessment of children on the autistic spectrum. The physicians, with the support of Mary MacBlane for the Child Development Program, also provide ongoing support and management of children with a variety of neurodevelopmental disorders, including targeted medication management when appropriate. Laura Lee McIntyre, a clinical psychologist from Syracuse University, and Amy Beale a social worker at Upstate Medical University provide behavioral assessment, counseling services and support for the development of social-adaptive skills, targeting children less than 6 years of age.

The Physical Disability Program at SUNY Upstate Medical University’s Center for Neurodevelopmental Pediatrics provides specialty care to children who are multiply disabled by conditions such as cerebral palsy, vision impairment/blindness, and genetic disorders. The focus is on habilitation. Some children may be referred for a single visit, such as spasticity evaluation, while other children may receive ongoing care for complex medical problems. The program offers a multidisciplinary approach and address both medical and behavioral/developmental issues. It helps to establish a diagnosis and to develop a care plan. The Physical Disability Program offers an interdisciplinary approach and collaboration with other pediatric specialists and surgeons. The program is staffed by Dr. Dosa who is board-certified in neurodevelopmental disabilities, and professionals in occupational therapy, physical therapy, nutrition, and specialty nursing.

The Spina Bifida Center of Central New York provides comprehensive specialty care to children and adults with spina bifida. The center is staffed by Dr. Dosa who is board-certified in neurodevelopmental disabilities, and professionals in psychiatry, occupational therapy, physical therapy, social work, nutrition, and specialty nursing. Our focus is the prevention of secondary conditions. The program schedules screening studies as needed and coordinate care with surgical sub-specialists in neurosurgery, orthopaedics and urology. It also collaborates with specialists in wound care and facilitates the ordering of adaptive equipment. It offers a multidisciplinary approach and address both medical and behavioral/developmental issues.

RESEARCH HIGHLIGHTS

Dr. Dosa's work is focused on improving community-based health services for children and adolescents with disabilities and complex medical conditions, especially as they transition from adolescence to adulthood. She heads the New York State Institute for Health Transition Training (www.HealthyTransitionsNY.org) and coordinates the Parent Partners in Health Education home visit program for pediatric and family medicine residents.

Dr. Lou Pellegrino's research interests include the early identification of children with autism and the early identification of children with hearing loss through newborn screening. Research partners include Laura Lee McIntyre, PhD (Department of Psychology, Syracuse University) and Dr. Liptak.

Dr. Liptak is interested in researching the health services received by children who have special needs. He is completing a project that examined the use of group visits in children with vision impairments to evaluate its feasibility as a model of care. He is working with Laura Lee McIntyre, PhD (Department of Psychology, Syracuse University) and Dr. Lou Pellegrino to evaluate the initial diagnosis and management of children and families with autism spectrum disorder. He currently is analyzing data from the National Longitudinal Transition Study-2 to evaluate the transitions of adolescents who are blind or visually impaired. He is co-investigator on the clinical trial of glycopyrrolate with Dr. Dosa, and serves as an epidemiological consultant to NASPGHAN (North American Society for Pediatric Gastroenterology Hepatology and Nutrition).

PUBLICATIONS

Original Scientific Articles

Liptak GS, Stuart T, Auinger P. Health Care Utilization and Expenditures for Children with Autism: Data from U.S. National Samples. *Journal of Autism and Developmental Disorders*. 36:871–879, 2006.

Liptak GS, Fried R, Baltus-Hebert E, Eyer S, Doremus TL. Do Grip and Pinch Strength Predict Neurologic Complications in Children with Spina Bifida and Hydrocephalus? *Pediatric Neurosurgery*. 42(4):208-13, 2006.

Liptak GS, Orlando M, Yingling J, Theurer-Kaufman K, Malay D, Tompkins L, Flynn J. Satisfaction with Primary Health Care Received by Families of Children with Developmental Disabilities. *Journal of Pediatric Health Care*. 20(4):245-252, 2006.

Stevenson RD, Conaway M, Chumlea WC, Rosenbaum P, Fung EB, Henderson RC, Worley G, **Liptak GS**, O'Donnell M, Samson-Fang L, Stallings VA; North American Growth in Cerebral Palsy Study. Growth and health in children with moderate-to-severe cerebral palsy. *Pediatrics*. 118(3):1010-8, 2006.

Liptak GS, Shone LP, Auinger P, Dick AW, Ryan SA, Szilagyi PG. Short-Term Persistence of High Health Care Costs in a Representative Sample of Children. *Pediatrics*. 118(4):e1001-9, 2006.

Dosa NP, Eckrich M, Katz DA, Turk M, **Liptak GS**. Incidence, Prevalence and Characteristics of Fractures in Children, Adolescents, and Adults with Spina Bifida. *The Journal of Spinal Cord Medicine*. 30:S5–S9, 2007.

Nolan K, Orlando M, **Liptak GS**. Care Coordination Services for Children with Special Health Care Needs: Are We Family Centered Yet? *Families, Systems, & Health*. 25(3): 293–306, 2007.

Reviews

Nolan KW, Cole LL, **Liptak GS**. Use of botulinum toxin type A in children with cerebral palsy. *Physical Therapy*. 86:573–584, 2006.

Baker SS, **Liptak GS**, Colletti RB, Croffie JM, DiLorenzo C, Ector W, Nurko S. Evaluation and treatment of constipation in infants and children: Summary of updated recommendations of the North American Society for Pediatric Gastroenterology and Nutrition. *J Pediatr Gastroenterol Nutr.* 43:405-7, 2006 (also *J Pediatr Gastroenterol Nutr* 2006;43:e1-e13). Also published in Agency for Healthcare Research and Quality (AHRQ) National Guideline Clearinghouse.

Liptak GS. Disparities in children with developmental disabilities. *The Bulletin: Journal of the Monroe County Medical Society.* 73(2):14-15, 2007.

Books and Book Chapters

Dosa NP, White P, Schuyler V. Future Expectations: Transition from adolescence to adulthood. In Batshaw MB, **Pellegrino L** & Roizen NJ, editors. *Children with disabilities*, 6th edition Baltimore: Paul H. Brookes Publishing Co; pp. 613-622, 2007.

Liptak GS. Spina bifida and hydrocephalus. In Coffey CE & Brumback RA (Eds.) *Pediatric Neuropsychiatry*. Baltimore: Lippincott, Williams & Wilkins. pp 549-563, 2006.

Liptak GS. Cognition, education, and learning disorders. In Wyszynski DF (Ed.) *Neural Tube Defects: From Origin to Treatment*. London: Oxford University Press. pp 271-282, 2006.

Liptak GS. Transition to adulthood. In Wyszynski DF (Ed.) *Neural Tube Defects: From Origin to Treatment*. London: Oxford University Press. pp 283-292, 2006.

Liptak GS. Neural tube defects. In Batshaw MB, **Pellegrino L** & Roizen NJ, editors. *Children with disabilities*, 6th edition Baltimore: Paul H. Brookes Publishing Co; pp. 419-438, 2007.

Liptak GS. Adult Issues—Mental Health and Vocational. In Oppenheimer S (Ed.) *Neural Tube Defects*. New York: Informa Healthcare USI, Inc. pp 117-136, 2007.

Batshaw MB, **Pellegrino L** & Roizen NJ, editors. *Children with disabilities*, 6th edition Baltimore: Paul H. Brookes Publishing Co; 2007.

Pellegrino JE and **Pellegrino L**. Fetal Alcohol Syndrome and Related Disorders. In: Capute & Accardo's *Neurodevelopmental Disabilities in Infancy and Childhood*, Third edition. Pasquale J. Accardo (ed.), Baltimore, MD: Brooks Publishing Co. 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Webb T, **Dosa NP**. Transition to Adulthood for Adolescents with Developmental Disabilities, Educational Workshop, Pediatrics Academic Societies annual meeting, San Francisco, CA, April 29, 2006.

Dosa NP. Incidence, Prevalence, and Characteristics of Fractures in Children, Adolescents, and Adults with Spina Bifida. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. November 30, 2006.

Dosa NP, Eckrich M, Katz D, Turk M, **Liptak GS**. Incidence, prevalence, and characteristics of spontaneous fractures in children, adolescents and adults with spina bifida. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. December 1, 2006.

Dosa NP. Keynote Address: Improving Transition to Adulthood for Adolescents with Spina Bifida. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. December 1, 2006.

Liptak GS, **Dosa NP**. Challenging Cases in Spina Bifida Care. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. December 1, 2006.

Liptak GS. Keynote Address: What is new in the care of people who have spina bifida: Priorities for research. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. December 1, 2006.

Liptak GS, **Dosa NP**. Diagnostic Dilemmas in Myelodysplasia. Presented at the Shriners Hospitals Howard H. Steel Conference: Injuries and Dysfunction of the Spinal Cord in Children. Orlando, FL. December 1, 2006.

Liptak GS, Worley G. The year's top ten articles on developmental disabilities. Instructional Course presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Boston, MA, September 15, 2006.

Mruzek DW, Liptak GS, Wade CM, Thingvoll MA, Benzoni LB, Nolan KW, Fryer GE. Children with Autism: Morbidity, Co-Morbidity and Family Burden. Presented at the International meeting for Autism Research, Montreal, Canada, June 1, 2006. Presented at the Child Health Services Research Annual Meeting, Seattle, Washington, June 24, 2006. Presented at the Academy Health 2006 Annual Research Meeting June 26, 2006.

Liptak GS, Benzoni LB, Mruzek DW, Nolan KW, Thingvoll MA, Wade CM, Fryer GE. Disparities in Health Care among Children with Autism. Presented at the International meeting for Autism Research, Montreal, Canada, June 3, 2006. Presented at the Child Health Services Research Annual Meeting, Seattle, Washington, June 24, 2006. Presented at the Academy Health 2006 Annual Research Meeting June 26, 2006.

Liptak GS, Foley JT, Dosa NP, Cleary D, Welch TR, Columna L. A group visit model program for children who are blind/visually impaired. Poster presented at the annual meeting of the American Academy of Cerebral Palsy and Developmental Medicine. Vancouver, BC, Canada, October 10 - 13, 2007.

Liptak GS, Worley G. The year's top ten articles on developmental disabilities. Instructional Course presented at the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Vancouver, BC, Canada, October 12, 2007.

Liptak GS. Autism Update. Specialty Day presentation for the American Academy of Cerebral Palsy and Developmental Medicine annual meeting, Vancouver, BC, Canada, October 10, 2007.

Liptak GS, Patanella L. Managing and troubleshooting intrathecal Baclofen pumps. Breakfast with the Experts. Presented at the annual meeting of the American Academy of Cerebral Palsy and Developmental Medicine. Vancouver, BC, Canada, October 12, 2007.

INVITED WORKSHOPS, CME PRESENTATIONS

Dosa NP. Transition. Presented at the New York State Institute for Health Transition Training, annual meeting, New York State Association of School Nurses, Syracuse, NY, November 4, 2006.

Dosa NP. Improving Transition to Adulthood for Adolescents with Spina Bifida: An Update from the SBAA Transition Consortium. Presented at the Spina Bifida Association of America annual meeting, Atlanta GA, June 27, 2006.

Dosa NP. On the Other Side of Transition: Summit on Transition to Adulthood of Youth with Spina Bifida (invited meeting sponsored by CDC/CCHP/NCBDDD) Atlanta, GA. September 17-18, 2007.

Dosa NP. Presenting speaker, Greater Syracuse Disability Mentoring Day, Syracuse, New York October 17, 2007.

Liptak GS. Mobility and independence in individuals with spina bifida. Presented at the annual meeting of the Chesapeake-Potomac Spina Bifida Association. Silver Springs, MD. October 6, 2007.

Liptak GS. Hyperbaric oxygen, horses and hemiplegia: CAM in CP. Presented at the District I regional meeting of the American Academy of Pediatrics. Findley Lake, NY April 28, 2007.

Liptak GS. What's new in spina bifida. Internationally broadcast Internet presentation. American Academy of Cerebral Palsy and Developmental Medicine. March 13, 2007.

Liptak GS. The Spectre of the Spectrum: Autism. HealthLink program. Syracuse, NY. April 26, 2007.

Liptak GS. Children Dependent on Technology, Home Care, & the Ashley Treatment. Pediatric Grand Rounds, New York University. New York City. April 10, 2007.

GRANTS AND CONTRACTS

Grants

A Six-Month, Multi-Center, Open-Label Study to Assess the Safety and Efficacy of Oral Glycopyrrolate Liquid for the Treatment of Pathologic (Chronic Moderate to Severe) Drooling in Pediatric Patients 3 to 16 Years of Age with Cerebral Palsy or other Neurologic Conditions, Protocol No. Sc-06-01: IND #61,716, Sciele Pharmaceuticals. (Dosa NP, Principal Investigator, Liptak GS, Co-PI) June 2007-February 2008. (per enrollment).

New York State Department of Health Youth Advisory Council Collaboration: Usability Testing for Healthy Transitions Network software. Maternal Child Health Bureau/New York State Department of Health. (Dosa NP, Principal Investigator). August 2007-April 2008. \$9,600.

Burton Blatt Institute Innovation Award: Usability Testing of Social Networking Software for Youth with Developmental Disabilities. Burton Blatt Institute, Syracuse University (Dosa NP, Principal Investigator) May 2007: \$1,200

Exercise Promotion for Adults with Spina Bifida, Upstate Advocates Project Grant (Dosa NP, in collaboration with Anne Sheridan PT, PCS and Mary MacBlane PNP): 2006: \$4,000

Digital Library for Children with Vision Impairments, Central New York Children's Miracle Network Project Grant (Dosa NP, in collaboration with Mary MacBlane PNP and Terry Welch PhD): 2006-2007 \$9,799

Trajectory of Transition for Adolescents and Young Adults with Spina Bifida, a multi-center longitudinal study of medical and social outcomes among youths with spina bifida. (Dosa NP, in collaboration with Kimberlee Garver CSW, Mary MacBlane PNP, Judy Hodge RN, and Gwen Trufant LPN) 2007-2008 (underway, not funded).

Institute for Health Transition Training, (Dosa NP, Principal Investigator, 0.2 FTE) New York State Developmental Disabilities Planning Council: 2006-2009: \$450,000

Parent Partners in Health Education. (Dosa NP, Principal Investigator, 0.1 FTE) New York State Developmental Disabilities Planning Council: 2006-2009: \$135,000

Group visits for families and children who are visually impaired. Central New York Community Foundation Grant Award. \$16,480. Liptak GS, PI; Dosa NP, Co-PI: 2007-2008.

Contracts

2007-8 Onondaga County Health Department, Early Interventions Services, for medical and neurodevelopmental evaluations of children ages birth to 3 years with developmental delays and disabilities.

2007-8 Oswego County Health Department, Early Interventions Services, for medical and neurodevelopmental evaluations of children ages birth to 3 years with developmental delays and disabilities.

SELECTED CLINICAL DATA

Neurodevelopmental Pediatrics (Child Development, Autism, Down's Syndrome):

Outpatient Visits 2006: 736

Outpatient Visits 2007: 1,129

Inpatient Visits 2006: 4

Inpatient Visits 2007: 4

Physical Disability

Outpatient Visits 2006: 161

Outpatient Visits 2007: 196

Inpatient Visits 2006: 47

Inpatient Visits 2007: 14

Spina Bifida Clinic

Outpatient Visits 2006: 308

Outpatient Visits 2007: 291

NEUROLOGY

Child neurology services are provided through the Section of Child Neurology of the Department of Neurology. These faculty have joint appointments in the Department of Pediatrics.

FACULTY

Carl J. Crosley, MD, Professor of Neurology and Pediatrics, Director

Shelley D. Williams, MD, Associate Professor of Neurology and Pediatrics (relocated 6/07)

Nancy Havernick, MD, Clinical Assistant Professor of Neurology and Psychiatry

Malavalli Seetharam, MD, Clinical Assistant Professor of Neurology

Leigh B. Wilson, RN MS, Pediatric Nurse Practitioner

CLINICAL OVERVIEW

The Section of Child Neurology provides diagnosis, treatment, and management for children and adolescents with neurodevelopmental and neurologic disorders. The outpatient offices are located in the University Health Care Center, 90 Presidential Plaza, Syracuse, NY 13202. Extensive services are in particular available for children with epilepsy, headaches, cerebral palsy, muscular dystrophy, neurofibromatosis. The neurodevelopmental conditions of developmental delay, attention deficit disorder and autism also receive full attention.

Children with epilepsy are reviewed as appropriate with the additional input and services of the epilepsy team of the Department of Neurology and have the full services of the Department of Clinical Neurophysiology available to them including, electroencephalography, long-term video electroencephalographic monitoring, ambulatory electroencephalograms, and epilepsy surgery.

Children with muscular dystrophies are eligible for care under the auspices of the Muscular Dystrophy Association weekly clinic centrally located in Syracuse with continuing care available in Utica and Watertown, New York.

In collaboration with Dr. Gloria Kennedy children with brain tumors and other tumors of the central nervous system are cared for at the monthly Pediatric Brain Tumor Clinic at University Hospital.

Dr. Crosley is Medical Director at Enable in Syracuse where children with developmental disabilities including cerebral palsy and pervasive developmental disorders are provided the locally unique mix of ongoing multidisciplinary therapies including physical occupational and speech therapy as well as on site aquatherapy, and individual and group behavioral therapies.

RESEARCH HIGHLIGHTS

The section is currently participating in sponsored clinical trials investigating the efficacy and safety of two anti-epileptic drugs in infants and toddlers and in a sponsored clinical trial studying the efficacy and safety of a particular triptan in adolescents with migraine.

PULMONOLOGY

FACULTY

Ran D. Anbar, MD, Professor of Pediatrics and Medicine, Division Director

Robert V. Hingre, MD, Assistant Professor of Pediatrics

Lawrence E. Kurlandsky, MD, Assistant Professor of Pediatrics

Kevin G. Ragosta, DO, Associate Professor of Pediatrics

Zafer N. Soultan, MD, Assistant Professor of Pediatrics

CLINICAL OVERVIEW

The Division of Pulmonology provides care for children and adolescents with lung and airway diseases. Major clinical activities of the division include care of patients with asthma, allergies, cystic fibrosis, bronchopulmonary dysplasia, and children who require assistance from technology, such as patients with tracheostomies, some of whom are ventilator dependent.

The Asthma Program includes the Pulmonary Function On-Site Testing Program, through which respiratory therapists from the Division of Pediatric Pulmonology travel to the offices of primary care providers and to school-based health clinics in Central New York. These therapists perform pulmonary function testing for patients who have been diagnosed with or are suspected of having asthma. Interpretation of this testing is provided by a Pediatric Pulmonologist from our Division, and results are faxed or mailed to the primary care providers within a few days. This Program has helped improve the care of patients with asthma who are followed by primary care providers exclusively.

At University Hospital, the Division provides state of the art pulmonary function testing including, spirometry, lung volume measurements, measurement of diffusion capacity, and oscillometry. Exercise pulmonary function testing is provided in coordination with the Division of Cardiology.

The Cystic Fibrosis (CF) Foundation accredited CF Care Center for pediatric patients is directed by Dr. Anbar. The Center staff includes two nurse practitioners, three respiratory therapists, three research coordinators, a social worker, and a dietician. The Center consistently ranks in the top quartile nationally in terms of our CF patients' pulmonary function. The Center evaluates all patients referred for possible CF through the State of New York Newborn Screening Program. The Division transitions its patients between the ages of 18 to 21 to an adult CF program administered through the SUNY Upstate University Department of Medicine Division of Pulmonology.

An active flexible bronchoscopy service is under the direction of Dr. Soultan. Patients utilizing the bronchoscopy service include those who are technology dependent, and patients with airway illnesses of unclear etiology, e.g., patients with stridor, or recurrent lower respiratory infections, including some of our patients with cystic fibrosis.

The Allergy Program is under the supervision of Dr. Kurlandsky. Through this Program patients who have been referred for evaluation of asthma our Center, can undergo skin scratch testing and other allergy evaluations, as indicated. Administration of immunotherapy, if necessary, is coordinated with the patients' primary care provider.

The Bronchopulmonary Dysplasia Program is under the supervision of Dr. Hingre. This Program provides follow-up care to all high risk newborns who are discharged from the Neonatal Intensive Care Unit, and helps coordinate their care between different sub-specialty services and their primary care providers.

The High Technology Program is under the supervision of Dr. Ragosta. This Program provides long-term care and coordination of services for patients who require ventilator support, including both in the in-patient and out-patient settings.

The Hypnotherapy Program is under the supervision of Dr. Anbar. Common reasons for referral for hypnotherapy include patients with chest pain, habit cough, shortness of breath without a clear etiology, vocal cord dysfunction, anxiety, chronic pain, enuresis, habits, headaches, and irritable bowel syndrome.

Outpatient care in Syracuse by the Division of Pulmonology is provided at the Pediatric Multispecialty Center on 4 West, University Hospital. The Division also supplies care at an almost weekly Satellite Clinic in Binghamton General Hospital.

RESEARCH HIGHLIGHTS

The Division is conducting the following studies involving asthma, cystic fibrosis, and hypnosis.

Asthma

The Division participates in an epidemiological study of omalizumab (Xolair), evaluating its clinical effectiveness and long-term safety in patients with moderate to severe asthma, sponsored by Genentech. The Division also participates in a sub-study of this investigation involving an examination of sequential IgE levels in patients with asthma.

In collaboration with the Syracuse University Department of Psychology we are studying the effects of asthma on family dynamics in a five year National Institutes of Health funded investigation.

In collaboration with the University Hospital Department of Pathology we are studying the effects of environmental pollutants on the development of asthma in infancy.

In collaboration with the University Hospital Department of Pathology we are participating in the Syracuse Health Indoor Environment Living Demonstration study sponsored by the United States Department of Housing and Urban Development.

Cystic Fibrosis

In collaboration with the University of Massachusetts Department of Pediatrics the Division is involved in a study of DHA formula fortification for infants with cystic fibrosis, sponsored by the Cystic Fibrosis Foundation and Meade Johnson.

In collaboration with Johns Hopkins University Department of Genetics the Division is studying the genetic makeup of twins and siblings with cystic fibrosis, sponsored by the Cystic Fibrosis Foundation.

In collaboration with Case Western Reserve University the Division is studying the genetic makeup of patients with cystic fibrosis who have severe lung or liver disease, sponsored by the Cystic Fibrosis Foundation.

In collaboration with SUNY Downstate, the Division is studying the barriers to implementation of Infection Control Guidelines, sponsored by the Cystic Fibrosis Foundation.

The Division just completed a phase II, multicenter, randomized controlled, open label study of the safety and efficacy of Nutropin AQ for the treatment of growth restriction in children with cystic fibrosis, sponsored by Genentech.

The Division is participating in the EPIC Observational study: Longitudinal assessment of risk factors for an impact of *Pseudomonas aeruginosa* acquisition and early anti-pseudomonal treatment in children with cystic fibrosis, sponsored by the Cystic Fibrosis Foundation.

The Division is participating in the EPIC Interventional study: Effectiveness and safety of intermittent antimicrobial therapy for the treatment of new onset *Pseudomonas aeruginosa* airway infection in young patients with cystic fibrosis, sponsored by Novartis and the Cystic Fibrosis Foundation.

The Division just completed a study of the safety and pharmacokinetics of 552-203 following 14 days of dosing by inhalation in subjects with cystic fibrosis, sponsored by Parion.

The Division is participating in a randomized, open label, multicenter, phase III trial to assess the safety of tobramycin inhalation powder in comparison to TOBI in cystic fibrosis subjects, sponsored by Novartis.

The Division completed a study of nebulized aztreonam in subjects with cystic fibrosis earlier this year. Currently, we are participating in a phase III, open label, follow-on study of multiple course of aztreonam lysinate for inhalation in cystic fibrosis patients, sponsored by Gilead Sciences.

The Division is participating in a multicenter, double blind, placebo-controlled, randomized, efficacy and safety study of denufosal tetrasodium inhalation solution in patients with mild cystic fibrosis lung disease, sponsored by Inspire.

The Division is participating in a study of antimicrobial resistance in sputum obtained from patients with cystic fibrosis, sponsored by the Cystic Fibrosis Foundation.

The Division is participating in a multicenter, randomized, placebo-controlled trial of azithromycin in subjects with cystic fibrosis 6 to 18 years old, culture negative for *Pseudomonas aeruginosa*, sponsored by the Cystic Fibrosis Foundation.

The Division is participating in an open label clinical study evaluating the long-term safety of Altu-135 for the treatment of patients with cystic fibrosis related exocrine pancreatic insufficiency, sponsored by Altus Pharmaceuticals.

The Division is participating in a multicenter, randomized, double blind, placebo-controlled trial of Pulmozyme withdrawal on exercise tolerance in cystic fibrosis subjects with severe lung disease, sponsored by Genentech.

Hypnosis

In collaboration with the Syracuse University Department of Psychology the division is studying the content of patient self-analysis expressed during hypnosis, as compared to when patients describe their thoughts without use of hypnosis.

PUBLICATIONS

Anbar RD, Savedoff AD. Treatment of binge eating with automatic word processing and self-hypnosis: a case report. *Am J Clin Hypnosis*. 48:191-198, 2005-2006.

Linden JH, Bhardwaj A, **Anbar RD**. Hypnotically enhanced dreaming to achieve symptom reduction: a case study of 11 children and adolescents. *Am J Clin Hypnosis*. 48:279-289, 2006.

Crawford JA, Hargrave TM, Hunt A, Liu CC, **Anbar RD**, Hall GE, Naishadham D, Czerwinski MH, Webster N, Lane SD, Abraham JL. Issues in design and implementation in an urban birth cohort study: the Syracuse AUDIT project. *J Urban Health*. 83:741-759, 2006.

Anbar RD, Slothower MP. Hypnosis for treatment of insomnia in school-age children: a retrospective chart review. *BMC Pediatrics*. 6:23, 2006.

Anbar RD. Disruptions in maternal-infant bonding and children's respiratory symptoms (letter). *Am J Clin Hypnosis*. 48:245-246, 2006.

Anbar RD. Hypnosis: an important multifaceted therapy. *J Pediatr*. 149:438-439, 2006.

Anbar RD. Enhancing the use of hypnosis in medical practice. *Am J Clin Hypnosis*. 49:97-99, 2006.

Anbar RD. Hypnosis for children with chronic disease. In: Wester WC, Sugarman LI (eds), *Therapeutic Hypnosis with Children and Adolescents*. Bethel, CT: Crown House Publishing, 357-385, 2007.

Santos RP, Awa E, **Anbar RD**. Inhaled tobramycin solution-associated recurrent eosinophilia and severe persistent bronchospasm in a patient with cystic fibrosis: a case report. *BMC Pediatrics*. 7:11, 2007.

Fiese BH, Winter MA, Sliwinski M, **Anbar RD**. Nighttime waking in children with asthma: an exploratory study of daily fluctuations in family climate. *J Fam Psychol*. 21:95-103, 2007.

Anbar RD. Designing effective research protocols for medical applications of hypnosis. *Am J Clin Hypnosis*. 50:105-107, 2007.

Anbar RD. User friendly hypnosis as an adjunct for treatment of habit cough: a case report. *Am J Clin Hypnosis*. 50:171-176, 2007.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Siwinski G, Rosenbaum PF, Abraham JL, **Anbar RD**, Fernandez A, Laquatra J. Syracuse healthy environmental living demonstration (SHIELD) research project: Transcending barriers to conducting home-based environmental asthma research (abstract). Syracuse Symposium on Environmental and Energy Systems, Syracuse, NY, October, 2006.

Hummell KE, Sullivan ML, Soutlan ZN, **Anbar RD**. Educating the educators: school based education program to increase knowledge about cystic fibrosis (abstract). *Pediatr Pulm. Supplement* 29, 364-365, 2006.

Anbar RD, Zoughbi G. Children's insights into the meaning of their headaches. American Society of Clinical Hypnosis Annual Meeting, Dallas, TX, January, 2007.

Anbar RD. Automatic word processing for generation of insight. American Society of Clinical Hypnosis Annual Meeting, Dallas, TX, January, 2007.

Soultan ZN, Samkari A, **Anbar RD.** Evaluation of children diagnosed by primary care providers as having cough variant asthma (abstract). Am J Resp Crit Care Med. May, 2007.

Anbar RD. Automatic word processing: A new method for insight generation with hypnosis (abstract). Pediatric Academic Societies Abstracts2View, May, 2007.

Anbar RD, Zoughbi, G. Insights of children regarding causes of their headaches (abstract). Pediatric Academic Societies Abstracts2View, May, 2007.

Soultan ZN, Samkari A, **Anbar RD.** Evaluation of children diagnosed by primary care providers as having cough variant asthma (abstract). Pediatric Academic Societies Abstracts2View, May, 2007.

Soultan ZN, Foster MM, Kurlandsky LE, **Anbar RD.** The reference range for sweat chloride testing and genotype analysis for newborns who are heterozygote carriers of cystic fibrosis (abstract). Pediatr Pulm. Supplement 30, 266, 2007.

Soultan ZN, Foster MM, Kurlandsky LE, **Anbar RD.** Natural histories of novel and rare cystic fibrosis gene mutations (abstract). Pediatr Pulm. Supplement 30, 267, 2007.

Stalvey MS, Geller DE, **Anbar RD, Konstan MW, Jacobs JR, Bakker B.** Growth hormone increases height, weight, and lean body mass in prepubertal children with cystic fibrosis: results of a multicenter, randomized control trial (abstract). Pediatr Pulm. Supplement 30, 393, 2007.

HONORS, VISITING PROFESSORSHIPS

Anbar RD. Visiting professor at SUNY Downstate Department of Pediatrics. Topic: "Self-Hypnosis for Patients with Respiratory Complaints", Stony Brook, NY, March, 2006.

Ragosta KG. Visiting professor at West Virginia School of Osteopathic Medicine. Topic: "Topics in Pulmonary System", Homestead, WV, July, 2006.

Anbar RD. Visiting professor at Wesley Medical Center. Topic: "Hypnosis for Treatment of Respiratory Disorders with a focus on Cystic Fibrosis", Wichita, KS, October, 2006.

Ragosta KG. Visiting professor at West Virginia School of Osteopathic Medicine. Topic: "Topics in Pulmonary System", Homestead, WV, October, 2006.

Anbar RD. American Journal of Clinical Hypnosis Josephine Hilgard Award for scientific excellence in writing on pediatric/adolescent uses of hypnosis, for "Hypnotically enhanced dreaming to achieve symptom reduction: a case study of 11 children and adolescents", 2007.

Anbar RD. American Society of Clinical Hypnosis Award of Merit, 2007.

Anbar RD. Visiting professor at Maria Fareri Children's Hospital. Topic: "Hypnosis in Pediatrics", Valhalla, NY, April, 2007.

Anbar RD. Visiting professor at Duke Children's Hospital Cystic Fibrosis Center. Topic: "Hypnosis for People with Cystic Fibrosis", Durham, NC, May, 2007.

Anbar RD. Visiting professor at Children's Hospital of Michigan. Topics: "Newborn Screening for Cystic Fibrosis", "Hypnosis for People with Cystic Fibrosis", "Hypnosis for Pain Relief", Detroit, MI, May, 2007.

Ragosta KG. Visiting professor at West Virginia School of Osteopathic Medicine. Topic: "Topics in Pulmonary System", Homestead, WV, October, 2007.

INVITED WORKSHOPS, CME PRESENTATIONS

Anbar RD. SUNY Upstate Medical University Department of Pediatrics Grand Rounds on, "Hypnosis for Treatment of Childhood Respiratory Disorders", Syracuse, NY, January, 2006.

Anbar RD. Arnold Palmer Children's Hospital Grand Rounds on, "Hypnosis for Treatment of Childhood Respiratory Disorders", Orlando, FL, February, 2006.

Anbar RD. SUNY Downstate Department of Pediatrics Grand Rounds on, "Hypnosis for Treatment of Childhood Respiratory Disorders", Stony Brook, NY, March, 2006.

Anbar RD. American Society of Clinical Hypnosis presentation on, "Use of Hypnosis for Pain Control", Orlando, FL, March, 2006.

Anbar RD. American Society of Clinical Hypnosis presentation on, "Floating into the Publication Mainstream: How to Publish your Hypnosis Article", Orlando, FL, March, 2006.

Anbar RD. American Society of Clinical Hypnosis presentation on, "How to Become Inspired: Breathe", Orlando, FL, March, 2006.

Anbar RD. Basic Hypnosis Workshop presentation on, "Integrating Hypnosis into the Care of Children with Chronic Disease", Syracuse, NY, April, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "Hypnosis in Children and Adolescents", Albany, NY, April, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "The Psychology of Symptoms", Albany, NY, April, 2006.

Anbar RD. Intermediate American Society of Clinical Hypnosis Workshop presentation on, "Hypnosis in Pediatrics", Albany, NY, April, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "Hypnosis for Treatment of Childhood Respiratory Disorders", Albany, NY, April, 2006.

Anbar RD. Bryant and Stratton College Introductory Psychology course presentation on, "States of Consciousness", Syracuse, NY, June, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "Hypnosis in Children and Adolescents", Schaumburg, IL, September, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "The Psychology of Symptoms", Schaumburg, IL, September, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "Language of Hypnosis and Refinement of Induction", Schaumburg, IL, September, 2006.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, "Review of Hypnosis Techniques", Schaumburg, IL, September, 2006.

Anbar RD. Intermediate American Society of Clinical Hypnosis Workshop presentation on, "Hypnosis in Pediatrics", Schaumburg, IL, September, 2006.

Anbar RD. Basic American Society of Clinical Hypnosis Workshop presentation on, "Hypnosis Induction Techniques with Demonstration", Schaumburg, IL, September, 2006.

Anbar RD. Wesley Medical Center Pediatric Grand Rounds on, "Hypnosis for Treatment of Childhood Respiratory Disorders", Wichita, KS, October, 2006.

Anbar RD. Morristown Memorial Hospital 1st Annual Pediatric Functional Abdominal Pain Symposium presentation on, "Clinical Hypnosis for Functional Abdominal Pain: A Pediatrician's Approach", Morristown, NJ, October, 2006.

Anbar RD. Morristown Memorial Hospital 1st Annual Pediatric Functional Abdominal Pain Symposium presentation on, "Introduction to Pediatric Hypnosis", Morristown, NJ, October, 2006.

Anbar RD. Morristown Memorial Hospital 1st Annual Pediatric Functional Abdominal Pain Symposium presentation on, "Hypnosis Induction Techniques", Morristown, NJ, October, 2006.

Anbar RD. Morristown Memorial Hospital 1st Annual Pediatric Functional Abdominal Pain Symposium presentation on, "Hypnosis Techniques for Functional Abdominal Pain", Morristown, NJ, October, 2006.

- Anbar RD.** Syracuse University presentation to Pediatric Psychology class on “Introduction to Pediatric Hypnosis”, Syracuse, NY, October, 2006.
- Anbar RD.** Paediatric Society of New Zealand Interactive Workshop, on “Basic Pediatric Hypnosis”, Nelson, New Zealand, November, 2006.
- Anbar RD.** Paediatric Society of New Zealand presentation on, “Beyond Pain: How Hypnosis can Augment Paediatric Care”, Nelson, New Zealand, November, 2006.
- Anbar RD.** Basic Hypnosis Workshop presentation on, “Hypnosis Induction Techniques”, Nelson, New Zealand, November, 2006.
- Anbar RD.** Basic Hypnosis Workshop presentation on, “Developmental Considerations in Paediatric Hypnosis”, Nelson, New Zealand, November, 2006.
- Anbar RD.** Basic Hypnosis Workshop presentation on, “Hypnotic Phenomena and Pain Control”, Nelson, New Zealand, November, 2006.
- Anbar RD.** Basic Hypnosis Workshop presentation on, “Integrating Hypnosis into the Care of Children with Chronic Disease”, Nelson, New Zealand, November, 2006.
- Anbar RD.** Tulane University Department of Psychiatry Grand Rounds on, “Automatic Word Processing: A New Forum for Hypnotic Expression”, New Orleans, LA, December, 2006.
- Anbar RD.** Basic American Society of Clinical Hypnosis Workshop presentation on, “Use of Posthypnotic Suggestion with Demonstration”, New Orleans, LA, December, 2006.
- Anbar RD.** Intermediate American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis with Children and Adolescents”, New Orleans, LA, December, 2006.
- Anbar RD.** Advanced American Society of Clinical Hypnosis Workshop presentation on, “Symptoms as Solutions: Hypnotic Phenomena and Trauma Recovery”, New Orleans, LA, December, 2006.
- Anbar RD.** Advanced American Society of Clinical Hypnosis Workshop presentation on, “Automatic Word Processing for Generation of Insight”, New Orleans, LA, December, 2006.
- Hingre RV.** SUNY Upstate Medical University Department of Pediatrics Grand Rounds on, “Understanding the New AAP Guidelines for Management of Neonatal Jaundice”, Syracuse, NY, March, 2006.
- Hingre RV.** Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Neonatal Respiratory Problems”, Syracuse, NY, May, 2006.
- Hingre RV.** Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Respiratory Failure, ECMO, Liquid Ventilation”, Syracuse, NY, May, 2006.
- Hingre RV.** Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Bronchopulmonary Dysplasia”, Syracuse, NY, May, 2006.
- Hingre RV.** Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Maternal Substance Abuse in Pregnancy”, Syracuse, NY, June, 2006.
- Hingre RV.** Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Fetal Alcohol Syndrome”, Syracuse, NY, June, 2006.
- Hingre RV.** Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Jaundice and Kernicterus”, Syracuse, NY, June, 2006.
- Hingre RV.** SUNY Upstate Medical University Respiratory Therapy Teaching Day presentation on, “Respiratory Distress Syndrome and Bronchopulmonary Dysplasia: Basic Review and New Updates”, Syracuse, NY, September, 2006.
- Hingre RV.** SUNY Upstate Medical University Respiratory Therapy Teaching Day presentation on, “New Modalities of Mechanical Ventilation and Update on Nitric Oxide Therapy”, Syracuse, NY, September, 2006.
- Hingre RV.** Annual Arnot Ogden Hospital Perinatal Symposium presentation on, “Optimizing Nutrition and Improving Post-Discharge Growth in Preterm Infants:”, Elmira, NY, October, 2006.

Hingre RV. Central New York Regional Perinatal Symposium presentation on, “New Issues with the Management of Jaundice in Term Newborns”, Syracuse, NY, October, 2006.

Ragosta KG. Respiratory Therapy Association of Central New York presentation on, “Bronchiolitis”, Syracuse, NY, April, 2006.

Anbar RD. SUNY Upstate Medical University Department of Pediatrics Grand Rounds on, “Automatic Word Processing: A New Forum for Hypnotic Expression”, Syracuse, NY, January, 2007.

Anbar RD. Intermediate American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis with Children and Adolescents”, Dallas, TX, January, 2007.

Anbar RD. American Society of Clinical Hypnosis presentation on, “Writing and Publishing your Hypnosis Articles”, Dallas, TX, January, 2007.

Anbar RD. Children’s Hospital of Michigan Grand Rounds on, “Hypnosis for Treatment of Childhood Respiratory Disorders”, Detroit, MI, March, 2007.

Anbar RD. Maria Fareri Children’s Hospital Grand Rounds on, “Hypnosis for Treatment of Childhood Respiratory Disorders”, Valhalla, NY, April, 2007.

Anbar RD. Duke Children’s Hospital Cystic Fibrosis Center Family Day presentation on, “Hypnosis for People with CF”, Durham, NC, May, 2007.

Anbar RD. Children’s Hospital of Michigan presentation on, “Newborn Screening for Cystic Fibrosis”, Detroit, MI, May, 2007.

Anbar RD. Children’s Hospital of Michigan presentation on, “Hypnosis for People with CF”, Detroit, MI, May, 2007.

Anbar RD. Children’s Hospital of Michigan presentation on, “Hypnosis for Pain Relief”, Detroit, MI, May, 2007.

Anbar RD. Basic American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis for Children and Adolescents”, Niagara Falls, NY, June, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis for Children and Adolescents”, Niagara Falls, NY, June, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Symptoms as Solutions”, Niagara Falls, NY, June, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Automatic Word Processing for Generation of Insights”, Niagara Falls, NY, June, 2007.

Anbar RD. St. Joseph’s Hospital Family Medicine Grand Rounds on, “Hypnosis for Children with Respiratory Disease”, Syracuse, NY, June, 2007.

Anbar RD. Basic American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis for Children and Adolescents”, Schaumburg, IL, September, 2007.

Anbar RD. Basic American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis in Chronic Disease”, Schaumburg, IL, September, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis for Children and Adolescents”, Schaumburg, IL, September, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Hypnosis and Dreams”, Schaumburg, IL, September, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Automatic Word Processing for Generation of Insight”, Schaumburg, IL, September, 2007.

Anbar RD. Advanced American Society of Clinical Hypnosis Workshop presentation on, “Symptoms as Solutions”, Schaumburg, IL, September, 2007.

Anbar RD. SUNY Upstate Medical University Child Psychiatry presentation on, “Automatic Word

Processing”, Syracuse, NY, October, 2007.

Anbar RD. American Academy of Pediatrics Interactive Workshop, on “Introduction to Basic Pediatric Hypnosis”, San Francisco, CA, October, 2007.

Anbar RD. Cortland Hospital presentation on, “Hypnosis and the Pediatric Patient”, Cortland, NY, December, 2007.

Hingre RV. Pediatric Society presentation on, “Preterm Lung Development, Pulmonary Function, and Effects of RSV Infections”, Rochester, NY, January, 2007.

Hingre RV. Kaleida Health Group Educational Conference presentation on, “Understanding the New Guidelines for Management of Jaundice in Newborns”, Buffalo, NY, May, 2007.

Hingre RV. Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Neonatal Respiratory Problems”, Syracuse, NY, May, 2007.

Hingre RV. Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Chronic Lung Diseases in Babies”, Syracuse, NY, May, 2007.

Hingre RV. Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “SIDS, Apnea, and Sleep Position Recommendations”, Syracuse, NY, May, 2007.

Hingre RV. Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Drug Abuse in Pregnancy: Legal and Illegal Substances”, Syracuse, NY, June, 2007.

Hingre RV. Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Pregnancy and Post-partum Depression and SSRIs”, Syracuse, NY, June, 2007.

Hingre RV. Graduate seminar at Syracuse University: “The At-risk Infant: Medical Insults and Intervention” presentation on “Fetal Alcohol Syndrome”, Syracuse, NY, June, 2007.

Hingre RV. Pediatric Society meeting presentation on, “Optimizing Nutrition and Improving Post-discharge Growth of Preterm Infants”, Binghamton, NY, June, 2007.

Hingre RV. March of Dimes Children at Risk conference presentation on, “Maternal Substance Abuse in Pregnancy: Legal, Illegal, and Doctor Prescribed”, Liverpool, NY, November, 2007.

Kurlandsky LE. SUNY Upstate Medical University Department of Pediatrics Grand Rounds on, “Breathing is for the Birds: Case Presentation and Discussion of Bronchiectasis”, Syracuse, NY, February, 2007.

Ragosta KG. Respiratory Therapy Association of Central New York presentation on, “Development of the Respiratory System”, Syracuse, NY, April, 2007.

Soultan ZN. SUNY Upstate Medical University Department of Pediatrics Grand Rounds on, “Update in Asthma”, May, 2007.

Soultan ZN. SUNY Upstate Medical University Department of Pediatrics Teaching Day presentation on, “Asthma Management in Children: New Guidelines”, Syracuse, NY, June, 2007.

Soultan ZN. American Academy of Respiratory Care Regional Conference for Central and Northeastern New York presentation on, “Update in Asthma: What the Recent Evidence Tells Us”, Rome, NY, September, 2007.

GRANTS AND CONTRACTS

Cystic Fibrosis Foundation Care Center Grant, \$173,208 total in 2006 and 2007

Cystic Fibrosis Foundation Clinical Research Facilitation Award, \$60,000 in 2007

State of New York Environmental Health Center of Excellence Award, \$20,000 in 2007

SELECTED CLINICAL DATA

Outpatient visits: 11,930

Inpatient encounters: 962

Outreach encounters: 1,078

Bronchoscopies: 135

Hypnotherapy encounters: 1,350

Cystic Fibrosis Patients: 132

New York State Cystic Fibrosis Newborn Screening Program evaluations: 118

Pulmonary Function On-Site Program Tests: 499

Pulmonary Function Tests at University Hospital: 5,163

RHEUMATOLOGY

FACULTY

William P. Hannan, MD, Associate Professor of Pediatrics, Director, Pediatric Arthritis Center
Paul E. Phillips, MD, Professor of Medicine and Pediatrics

CLINICAL OVERVIEW

The Division of Pediatric Rheumatology provides comprehensive evaluation and treatment of children, adolescents and young adults with juvenile rheumatoid arthritis (JRA), systemic lupus erythematosus (SLE), juvenile dermatomyositis, and other related disorders. Other children seen in the Pediatric Arthritis Center include those referred for evaluation of acute and chronic joint pain, limp, fevers of unknown origin, and post-infectious causes of joint pain and arthritis.

All patients referred to the Pediatric Arthritis Center are seen and evaluated by a pediatric rheumatologist. There is a nurse dedicated to the Pediatric Arthritis Center who is available for teaching families and children. Other ancillary services available to assist in the care of referred children include pediatric physical and occupational therapists, social workers, and child life specialists. Approximately 200 children with chronic rheumatologic disease are followed in the Pediatric Arthritis Center.

PUBLICATIONS

Goldbach-Mansky R, Dailey NJ, Canna SW, Gelabert A, Jones J, Rubin BI, Kim HJ, Brewer C, Zalewski C, Wiggs E, Hill S, Turner ML, Karp BI, Aksentijevich I, Pucino F, Penzak SR, Haverkamp MH, Stein L, Adams BS, Moore TL, Fuhlbrigge RC, Shaham B, Jarvis JN, O'Neil K, Vehe RK, Beitz LO, Gardner G, **Hannan WP**, et al: Neonatal-onset multisystem inflammatory disease responsive to interleukin-1 β inhibition. *New England Journal of Medicine*. 355:581-592, 2006.

EDITORIAL DUTY

Phillips, P.E. Editorial Board, *Clinical and Experimental Rheumatology*.

CLINICAL DATA

Total Pediatric visits, 2006: 600

New patient referrals, 2006: 131

Total Pediatric visits, 2007: 628

New patient referrals, 2007: 137

PEDIATRIC SURGICAL SPECIALTIES

It is impossible to operate a tertiary pediatric program without substantial surgical support. Syracuse is fortunate to have a group of pediatric surgeons and surgical subspecialists that are technically superb and extraordinarily collegial with their pediatric medical colleagues. While these surgeons have primary appointments in a surgical department, most have joint appointments in the department of pediatrics.

PEDIATRIC ANESTHESIOLOGY

FACULTY

Full-Time:

Bettina Smallman, M.D., Associate Professor of Anesthesiology and Pediatrics, Director of Pediatric Anesthesiology

Mirna Abdallah, M.D., Clinical Instructor of Anesthesiology

Jadwiga Bednarczyk, M.D., Clinical Instructor of Anesthesiology

Richard Beers, M.D., Professor of Anesthesiology

Debnath Chatterjee, M.D., Assistant Professor of Anesthesiology and Pediatrics

Judit Szolnoki, M.D., Assistant Professor of Anesthesiology. (Relocated to Denver in Sept 06)

Part-Time:

Tracy Buckingham, M.D., Assistant Professor of Anesthesiology

Robert Calimlim, M.D., Associate Professor of Anesthesiology

Dorothy Hwang, M.D., Assistant Professor of Anesthesiology

Fenghua Li, M.D., Clinical Instructor of Anesthesiology

David Romano, M.D., Assistant Professor of Anesthesiology

Xiuli Zhang, M.D., Assistant Professor of Anesthesiology

CLINICAL OVERVIEW

The Division of Pediatric Anesthesia in the Department of Anesthesiology at SUNY Upstate Medical University Hospital continued to experience significant growth in 2006-2007. More than 4,800 children were anesthetized each year in the Pietrafesa Center for Children's Surgery (CCS), spanning the full spectrum of pediatric surgical specialties, as well as procedures conducted outside the operating room environment (CT, MRI, Interventional Radiology, Radiation Therapy and Nuclear Medicine).

The pediatric medical specialties, such as pulmonology and gastroenterology, have increased their procedural volume, and the pediatric oncologists have continued to utilize pediatric anesthesiology services frequently for their interventional procedures. As one of the few referral centers in Central New York for children undergoing MRIs and CTs, we have been able to streamline the process, making it safe and efficient to accommodate an ever-increasing demand.

Three new faculty were hired during this period. Dr. Jadwiga Bednarczyk joined the faculty in 2007 after completing her fellowship at Arkansas Children's Hospital. Drs. Mirna Abdallah and Fenghua Li joined the faculty in 2007 after completing their residencies at SUNY Upstate Medical University.

The Pediatric Anesthesia Division continued to show a strong commitment to the education of our anesthesiology residents and medical students. In addition to active participation in patient care, residents rotating in pediatric anesthesiology undergo a series of didactic lectures and journal clubs. Our team also teaches basic pediatric airway skills to Pediatric and Emergency Medicine residents and fellows who rotate through the CCS.

PUBLICATIONS

- Aron J, Schwartz G, Fernandez-Silva J, Mahajan A, Kasperowicz K, **Smallman B**: Novel distraction technique for pediatric pre-operative anxiety prevention. *The Internet Journal of Anesthesiology*. 14:1, 2007.
- Aron J, **Chatterjee D**: Transient pourfour du petit syndrome. *Anesthesia and Analgesia*, 104:1616, 2007.

PRESENTATIONS

- Beers R**. Optimizing perioperative outcomes for the patient with co-morbidities. Scientific Panel Host. Postgraduate Assembly in Anesthesiology. New York. NY State Society of Anesthesiologists, December 2006.
- Smallman B**. Regional anesthesia in children, focus session, postgraduate assembly in NYSSA, New York, NY. December 2006.
- Beers R**. Depth of consciousness monitors and total intravenous anesthesia: “A perfect marriage?” Problem-Based Learning Discussion; Post-Graduate Assembly in Anesthesiology, New York. NY State Society of Anesthesiologists, December 2006 and December 2007.
- Beers R**. Caring for the patient with a co-morbid failing organ. Scientific Panel Host. Postgraduate Assembly in Anesthesiology. New York. NY State Society of Anesthesiologists. December 2007.
- Beers R**. Does Intra-operative consciousness monitoring improve quality of care? Current Status in the US. Panel Discussion at the European Anesthesiology Congress 2007. Munich: European Society of Anaesthesiologists, June 2007.
- Calimlim JR**. Use of propofol & other conscious sedation. –A little something extra. Foundation for Ambulatory Surgery in America, New Orleans, April 2007.
- Chatterjee D**, Parikh J, **Smallman B**, Mortelliti A. Anesthetic management of a child with dystrophic epidermolysis bullosa presenting with a supraglottic mass – Poster Presentation. Postgraduate Assembly in NYSSA, New York, NY, December 2007.
- Smallman B**. Pain management in children: A pharmacological approach, Focus Session, Postgraduate Assembly in NYSSA, New York, NY. December 2007.
- Smallman B**. Novel distraction technique for pediatric pre-operative anxiety prevention, ASA, San Francisco, CA, October 2007.

PEDIATRIC CARDIOVASCULAR-THORACIC SURGERY

FACULTY

George Alferis, MD, Assistant Professor of Clinical Surgery and Pediatrics

CLINICAL OVERVIEW

For a city of its size, Syracuse is very fortunate to have a high quality, nationally known program in congenital cardiac surgery. Part of the reason this program has been successful is the innovative arrangement Dr. Alferis has developed with the University of Rochester, by which his time is shared between both institutions. This has enabled both programs to benefit from skilled surgery and has allowed Dr. Alferis to undertake a higher volume of cases than he would in either center alone.

PEDIATRIC GENERAL SURGERY

FACULTY

Michael Ratner, MD, Professor of Clinical Surgery and Pediatrics, Director, Division of Pediatric Surgery

Linda Nicolette, MD, Associate Professor of Clinical Surgery and Pediatrics

Cynthia Corpron, MD, Assistant Professor of Clinical Surgery and Pediatrics

CLINICAL OVERVIEW

Surgeons in the division provide care to children both at University Hospital and at Crouse Hospital. This includes the Neonatal Intensive Care Unit at Crouse Hospital. The group cares for the full range of surgical problems of infancy and childhood, including complex congenital anomalies. University Hospital's busy pediatric oncology program particularly benefits from the support of the general surgery service.

The full-time surgery faculty is supplemented by additional part-time contract pediatric surgeons, while active recruitments are in progress.

PEDIATRIC NEUROSURGERY

FACULTY

Walter Hall, MD, Professor of Clinical Neurosurgery

James Holsapple, MD, Associate Professor of Clinical Neurosurgery

CLINICAL OVERVIEW

The pediatric neurosurgeons, with help from their other colleagues in the Department of Neurosurgery, are valued partners in the care of many complex childhood problems. Most visible are their work with our hematology oncology section in the care of children with brain tumors, and their care of children with traumatic brain and central nervous system injuries.

Dr. Hall, who recently assumed leadership of the department, has a nationally known expertise in the use of intraoperative MRI to guide the resection of childhood brain tumors. He is developing this technology for application in Syracuse.

PEDIATRIC OPHTHALMOLOGY

FACULTY

Leon-Paul Noël, MD, Professor of Clinical Ophthalmology and Pediatrics

Walter W. Merriam, MD, Associate Professor of Ophthalmology

Stephen W. Merriam, MD, Assistant Professor of Ophthalmology

Marc J. Safran, MD, Assistant Professor of Ophthalmology

CLINICAL OVERVIEW

The pediatric ophthalmology service is involved in the gamut of infant and child ocular disorders, ranging from simple errors of refraction to significant anomalies. Dr. Noël also works closely with Dr. Botash and the critical care medicine division in the evaluation and documentation of ocular manifestations of child abuse. The service also has a growing experience with the use of intraocular lens placement in infants.

PRESENTATIONS AT SCIENTIFIC MEETINGS

Cosmam, W, Noel, LP: Internuclear Ophthalmoplegia in an Infant. Canadian Association of Pediatric Ophthalmologist Annual Meeting. Toronto, Ont. June 24, 2006.

Nagao, K, Noel, LP, Noel, ME, Walton, DS: Spontaneous Resolution of Primary Congenital Glaucoma. Joint Meeting of the American Academy of Ophthalmology and the Asia Pacific Academy of Ophthalmology. Las Vegas, NE. Nov. 13, 2006.

Noel, LP: Retinopathy of Prematurity. 58th Annual Post-Graduate Review Course. JCAPHO Regional Education Program. SUNY Upstate Medical University, Syracuse, NY. Nov. 30, 2007.

HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Noel, LP: Reviewer, British Journal of Ophthalmology, Canadian Journal of Ophthalmology, Journal of the American Association for Pediatric Ophthalmology and Strabismus, Journal of Pediatrics.

Noel, LP: Visiting Professor, Dept. of Ophthalmology, Albany Medical College, Albany N.Y. February, 2007.

PEDIATRIC ORTHOPEDIC SURGERY

FACULTY

Stephen Albanese, MD, Professor Chair of Orthopedic Surgery, Professor of Pediatrics

Timothy Damron, MD, Professor of Orthopedic Surgery

Danielle Katz, MD, Assistant Professor of Orthopedic Surgery

Kathryn Palomino, MD, Assistant Professor of Orthopedic Surgery

Brian Harley, MD, Associate Professor of Orthopedic Surgery

CLINICAL OVERVIEW

Upstate Medical University's pediatric orthopedic group is one of upstate New York's largest resources for children's orthopedic care. In addition to the management of traumatic injuries for children in the immediate Syracuse area, the group provides advanced care for complex disorders such as scoliosis and vertebral anomalies for an extensive referral area.

Several other orthopedic surgeons within the Department of Orthopedic Surgery also play a major role in the care of children. Prominent among these are Dr. Timothy Damron and Dr. Brian Harley. Dr. Damron is trained in children's orthopedic oncology and is an expert in the management of skeletal malignancies. He works closely with the pediatric hematology oncology service. Dr. Harley completed a pediatric and congenital upper extremity fellowship. His expertise includes hand surgery as well as microsurgery and trauma reconstruction.

PUBLICATIONS

Spadaro JA, **Damron TA**, Horton JA, Margulies BS, et al: Density and structural changes in the bone of growing rats after weekly alendronate administration with and without a methotrexate challenge. *J Orthop Res.* 2006; 24(5):936-44.

Margulies BS, Horton JA, Wang Y, **Damron TA**, Allen MJ: Effects of radiation therapy on chondrocytes in vitro. *Calcif Tissue Int.* 2006; 78(5):302-13.

Ratcliff JR, Naqvi A, de la Roza G, Strauss JA, **Damron TA**: Soft tissue osteochondroma: case report and immunohistochemistry for parathyroid hormone-related protein. *Ann Diagn Pathol.* 2006; 10(4):222-9.

Horton JA, Margulies BS, Strauss JA, Bariteau JT, **Damron TA**, et al: Restoration of growth plate function following radiotherapy is driven by increased proliferative and synthetic activity of expansions of chondrocytic clones. *J Orthop Res.* 2006; 24(10):1945-56.

Katz DA: Slipped capital femoral epiphysis: the importance of early diagnosis. *Pediatr Ann.* 2006; 35(2):102-11.

Setter KJ, **Palomino KE**: Pediatric tibia fractures: current concepts. *Curr Opin Pediatr.* 2006; 18(1):30-5.

Pohar S, Haq R, Liu L, Koniarczyk M, Hahn S, **Damron T**, Aronowitz JN: Adjuvant high-dose-rate and low-dose-rate brachytherapy with external beam radiation in soft tissue sarcoma: a comparison of outcomes. *Brachytherapy.* 2007; 6(1):53-7.

Damron TA, Ward WG, Stewart A: Osteosarcoma, chondrosarcoma, and Ewing's sarcoma: National Center Data Base Report. *Clin Orthop Relat Res.* 2007; 459:40-7.

Reichel LM, Pohar S, Heiner J, Buzaianu EM, **Damron TA**: Radiotherapy to bone has utility in multifocal metastatic renal carcinoma. *Clin Orthop Relat Res.* 2007; 459:133-8.

Khamsi BR, de la Roza G, **Damron TA**: Orthopaedic-radiology-pathology conference: Forearm mass in a 15-year-old girl. *Clin Orthop Relat Res.* 2007; 463:229-36.

Zhang M, Wang Y, Middleton FA, Horton JA, Farnum CE, **Damron TA**: Growth plate zonal microarray analysis shows upregulation of extracellular matrix genes and down regulation of metalloproteinases and cathepsins following irradiation. *Calcif Tissue Int.* 2007; 81:26-38. Epub 2007 Jun. 5.

Dosa NP, Eckrich M, **Katz DA**, Turk M, Liptak GS: Incidence, prevalence, and characteristics of fractures in children, adolescents, and adults with spina bifida. *J Spinal Cord Med.* 2007; 30 Suppl 1:S5-9.

PEDIATRIC OTOLARYNGOLOGY

FACULTY

Anthony Mortelliti, MD, Assistant Professor of Otolaryngology and Pediatrics

Robert Shprintzen, PhD, Professor of Otolaryngology and Pediatrics

Sherard Tatum, MD, Associate Professor of Otolaryngology

CLINICAL OVERVIEW

The Department of Otolaryngology provides state-of-the art management for children with ear, nose, and throat disorders, as well as severe craniofacial anomalies and airway problems. The department is particularly known for its work with children affected by velocardiofacial syndrome, providing a multidisciplinary approach to evaluation and treatment through the VCF Center. This program also directs a highly visible research program in this disorder.

PUBLICATIONS

Reynders AL, Goyal P, **Mortelliti AJ**: Pathology quiz case. Gingival granular cell tumor of the newborn (GGCTN) (congenital epulis). *Arch Otolaryngol Head Neck Surg.* 2006; 132(7):807-8.

Awwad RJ, **Mortelliti AJ**: Postcricoid hemangioma of childhood: report of four cases. *Ann Otol Rhinol Laryngol.* 2006; 115(3):191-4.

Goyal P, **Tatum SA**: Combined extended midface degloving and endoscopic approach for resection of sinonasal lesions. *J Otolaryngol.* 2006; 35(4):275-77.

Chegar BE, **Tatum SA**, Marrinan E, **Shprintzen RJ**: Upper airway asymmetry in velo-cardio-facial syndrome. *Int J Pediatr Otorhinolaryngol.* 2006; 70(8):1375-81. Epub 2006 Mar 23.

Butts SC, **Tatum SA**: Fundamentals of dental occlusion. *Ear Nose Throat J.* 2006; 85(5):312, 314.

Schmidt CJ, **Tatum SA**: Cosmetic dentistry. *Curr Opin Otolaryngol Head Neck Surg.* 2006; 14(4):254-9.

Chegar BE, **Shprintzen RJ**, Curtis MS, **Tatum SA**: Pharyngeal flap and obstructive apnea: maximizing speech outcome while limiting complications. *Arch Facial Plast Surg.* 2007; 9(4):252-9.

Suryadevara AC, **Tatum SA**: Floating the uvula: an intraoperative method for detecting bifidity. *Int J Pediatr Otorhinolaryngol.* 2007; 71(1):175-7. Epub 2006 Oct. 17.

Tatum SA: Two-stage unilateral cleft lip repair. *Facial Plast Surg.* 2007; 23(2):91-9.

Losquadro WD, **Tatum SA**: Direct gingivoperiosteoplasty with palatoplasty. *Facial Plast Surg.* 2007; 23(2):140-5.

Goyal P, Kellman RM, **Tatum SA**: Transglabellar subcranial approach for the management of nasal masses with intracranial extension in pediatric patients. *Arch Facial Plast Surg.* 2007; 9(5):314-7.

PEDIATRIC UROLOGY

FACULTY

Jyoti Upadhyay, MD, Associate Professor of Clinical Urology and Pediatrics

Umesh Patil, MD, Professor of Urology

CLINICAL OVERVIEW

An excellent collaborative relationship exists between the Division of Nephrology in the Department of Pediatrics and the Division of Pediatric Urology Department of Urology. This relationship permits a coordinated approach to the care of children with complex urogenital anomalies, as well as those with more common problems such as voiding dysfunction. With additional input from the division of transplantation in the department of surgery, we can offer the full range of medical and surgical care for children with urinary tract disorders. With the pending relocation of Dr. Upadhyay, the Department of Urology is actively recruiting two additional pediatric urologists.

PUBLICATIONS

Singh A, Shah G, Young J, Sheridan M, Haas G, **Upadhyay J**: Ureteral access sheath for the management of pediatric renal and ureteral stones: a single center experience. *J Urol*. 175(3 Pt 1):1080-2, 2006.

Szolnoki JM, Puskas F, Sweeney DM, Camporesi EM, **Upadhyay J**: Hyponatremic seizures after suprapubic catheter placement in 7-year-old child. *Paediatr Anaesth*, 16(2):192-4, 2006.

Shapiro O, Welch TR, Sheridan M, Stred S, **Upadhyay J**: Mixed gonadal dysgenesis and Denys-Drash syndrome: urologists should screen for nephritic syndrome. *Can J Urol*, 14(6):3767-9, 2007.

AFFILIATED FACULTY

The clinical and educational missions of the Department of Pediatrics are enhanced by several specialty groups in affiliated institutions or private practice. These pediatricians have academic appointments in the department and are fully integrated into our activities.

PEDIATRIC CARDIOLOGY

FACULTY

Nader H. Atallah, MD, Associate Professor of Pediatrics
Craig J. Byrum, MD, Professor of Pediatrics and Medicine
Daniel A. Kveselis, MD, Associate Professor of Pediatrics
Frank C. Smith, MD, Professor of Pediatrics
Ellen Weinstein, MD, Assistant Professor of Pediatrics

CLINICAL OVERVIEW

The Division of Pediatric Cardiology provides the full spectrum of non-invasive and interventional diagnostic and therapeutic services. This activity occurs in the neonatal intensive care unit at Crouse Hospital as well as in the inpatient and critical care units at University Hospital. A number of satellite clinics are staffed by these faculty as well.

NEONATOLOGY: ST. JOSEPH'S HOSPITAL

FACULTY

Larry Consenstein, MD, Clinical Associate Professor of Pediatrics
James Pergolizzi, MD, Clinical Assistant Professor of Pediatrics
Jonathan Chai, MD, Clinical Assistant Professor of Pediatrics
Michele Chai, MD, Clinical Assistant Professor of Pediatrics

CLINICAL OVERVIEW

These physicians staff the Neonatal Intensive Care Unit at St. Joseph's Hospital as well as providing normal newborn coverage for other hospitals and pediatric practices. One of the three one-month neonatology rotations in our pediatric residency is served at St. Joseph's Hospital under the supervision of faculty members of neonatology.

NEONATOLOGY: CROUSE HOSPITAL

FACULTY

Steven Gross, MD, Clinical Professor of Pediatrics
Ellen Bifano, MD, Clinical Professor of Pediatrics
Bonnie Marr, MD, Clinical Assistant Professor of Pediatrics
Michelle Bode, MD, Clinical Assistant Professor of Pediatrics
Beverly Roy, MD, Clinical Assistant Professor of Pediatrics
Paula Farrell, MD, Clinical Assistant Professor of Pediatrics
Susan Miller, MD, Clinical Assistant Professor of Pediatrics
Thomas Curran, MD, Clinical Assistant Professor of Pediatrics

CLINICAL OVERVIEW

These neonatologists staff the 50 bed neonatal intensive care unit at Crouse Hospital. In addition to the clinical activity in this busy unit, two of the one-month neonatology rotations of our pediatric residents are spent in this NICU.

FACULTY RECOGNITION

Many of our faculty received national recognition in 2006-2007.

American Pediatric Society

The following faculty were elected to the American Pediatric Society recognizing their national reputation as academic pediatricians:

Ann Botash, MD

Irene Sills, MD

Society for Pediatric Research

The Society for Pediatric Research is an elective society which recognizes nationally prominent accomplishments in research:

Ann Botash, MD

James Listman, MD

American Academy of Pediatrics, Section on Endocrinology

Irene Sills, MD – Elected to the Executive Committee

Best Doctors in America

Best Doctors is a national program which recognizes physicians in the United States who are considered by their peers to be outstanding clinicians. Nearly a quarter of the physicians in Onondaga County recognized by Best Doctors are members of our pediatric full-time or volunteer faculty.

Stephen Albanese, MD (Orthopedic Surgery)

Ran Anbar, MD (Pulmonology)

John Andrade, MD (Hospitalist)

Steven Blatt, MD (General Pediatrics)

Ann Botash, MD (Child Abuse)

H. James Brown, MD (General Pediatrics)

Robert Cavanaugh, MD (Adolescent Medicine)

Carl Crosley, MD (Neurology)

Joseph Domachowske, MD (Infectious Diseases)

Paul Fuller, MD (General Pediatrics)

Gregory Liptak, MD (Child Development)

Paul Phillips, MD (Rheumatology)

Michael Ratner, MD (Surgery)

Scott Schurman, MD (Nephrology)

Irene Sills, MD (Endocrinology)

Richard Sills, MD (Hematology/Oncology)

Bettina Smallman, MD (Anesthesiology)

Zafer Sultant, MD (Pulmonology)

Anne Sveen, MD (General Pediatrics)

Leonard Weiner, MD (Infectious Diseases)

Thomas Welch, MD (Nephrology)

These physicians in private practice are active members of our voluntary faculty and were also honored:

Walter Merriam, MD (Ophthalmology)

Ellen Bifano, MD Neonatal-Perinatal Medicine)

Cynthia Battaglia, MD (General Pediatrics)

Sara Farchione, MD (General Pediatrics)

Margaret Hellems-Stanley, MD (General Pediatrics)

Leonard Levy, MD (General Pediatrics)

Thomas Little, MD (General Pediatrics)

Stephen Mintz, MD (General Pediatrics)

Jennifer Panasci, MD (General Pediatrics)

Michael Soeder, MD (General Pediatrics)

Kathleen Stoeckel, MD (General Pediatrics)

The Research Foundation of the State of New York

Recognition Award for Research and Scholarship, 2007 – Joseph Domachowske, MD

