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Dr. Jody Sima
Educational Specialist and Neuropsychology Service
Autologous Stem Cell Transplantation
Hemoglobinopathy Center
New York State Designated Hemophilia
Neuro-Oncology
Children's Oncology Group Participation
KNOT Center
Neuro-Oncology
Hemophilia
New York State Designated
Hemoglobinopathy Center
Autologous Stem Cell Transplantation
Educational Specialist and Neuropsychology Service
Pediatric Palliative Care
Dr. William Kerr
Dr. Jody Sima
Dr. Richard Sills
Grants and Contracts
Editorial Service
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Infectious Diseases
Fellows
Affiliated Clinical Staff
Affiliated Research Staff
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Clinical Trials
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Presentations at Scientific Meetings
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Child Sex Abuse Evaluation
Foster Care
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Infectious Diseases
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SELECTED CLINICAL DATA (DIVISION TOTALS)
General Pediatrics, Adolescent, CARE, Enhance
Upstate Pediatrics Outpatient
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Newborn inpatient encounters (General Pediatrics and Upstate Pediatrics)
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INTRODUCTION FROM THE CHAIR

I am happy to share with you our department report for 2008 and 2009! This may have been the most important couple of years for our department since our first Chair, William Tomlinson Plant, published a study of childhood seizures in the inaugural edition of *Archives of Pediatrics*, in 1884. 2009 was the year that we opened the Upstate Golisano Children’s Hospital, realizing a decades-long dream of the community and many of my predecessors. In the short time we have been open, the hospital has already garnered some national recognition for its architecture, and some of our patient care innovations have been the subject of presentations in national meetings.

Although the hospital was only open for the last three months covered by this report, its impact can be seen in many places. Many of the new pediatricians and pediatric surgical specialists who have joined us in the past two years were attracted to Syracuse by the opportunities afforded by a state of the art facility. Our volumes of patient activity, both in the outpatient and the inpatient settings, have been increasing substantially. We have made a number of efforts to streamline our referral process, including opening new regional subspecialty satellite clinics, initiating a “one call” system for transfers and appointments (1-800-464-KIDS), improving the entirety of the family experience during the visit, and providing timely and complete reports to referring professionals.

One of our newest initiatives is a joint effort with the American Board of Pediatrics, which will permit us to offer a project which will help both referring physicians and our subspecialty consultants evaluate each other’s roles in the consultation experience, insure the safety of primary care/subspecialty “hand offs”, and provide ABP Maintenance of Certification (“MOC”) category 4 credit. As I am writing this letter, we are finalizing the operational details of this project, and will make these available on the Golisano Children’s Hospital website shortly.

I hope that you will agree that the activity of our faculty and programs has grown in concert with our new hospital. Keep up with our programs through our newsletter (http://www.upstate.edu/gch/education/newsletters.php) or through our website (http://www.upstate.edu/gch/). Remember that you can also register to use our online clinical question system, ePED Direct, through our website.

Thomas R. Welch, MD
Professor and Chair
Department of Pediatrics
Upstate Medical University
Medical Director
Upstate Golisano Children’s Hospital
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 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.

Ann Botash, MD (botasha@upstate.edu) 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 (schurmas@upstate.edu) 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, and is in charge of the development of our satellites.

Leonard Weiner, MD (weineral@upstate.edu) 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.

The leadership team is supported by Leo Sawyer (saweryl@upstate.edu), practice administrator, Cherlynn Clarry (clarryc@upstate.edu), department office manager, and Barbara Delaney (delaneyb@upstate.edu), assistant to the chair. In the past year, additional support positions have been created. Joy Tompkins, RN, MS, PNP has assumed the role of department research coordinator and provides invaluable support to our investigators. Bonnie Miner, MS, RN, CNS recently assumed the role of patient safety officer. She is leading a number of GCH safety initiatives, including our collaborative involvement with safety projects of the National Association of Children’s Hospitals and Related Institutions.
PEDIATRICS BY THE NUMBERS

A few pertinent numbers provide a snapshot of our growth in child health care activity over the past two years. The Golisano Children’s Hospital did not open until September, 2009, but in the remaining months of the year, our inpatient activity has accelerated significantly.

<table>
<thead>
<tr>
<th>Measure</th>
<th>2008</th>
<th>2009</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient discharges</td>
<td>3,713</td>
<td>3,884</td>
<td>+ 4.6%</td>
</tr>
<tr>
<td>Observation patients</td>
<td>595</td>
<td>671</td>
<td>+ 12.8%</td>
</tr>
<tr>
<td>Average length of stay</td>
<td>4.4</td>
<td>4.3</td>
<td>- 2.3%</td>
</tr>
<tr>
<td>Pediatric ED visits</td>
<td>20,714</td>
<td>23,123</td>
<td>+ 11.6%</td>
</tr>
<tr>
<td>Pediatric outpatient visits</td>
<td>63,334</td>
<td>65,292</td>
<td>+ 3%</td>
</tr>
<tr>
<td>Surgical procedures</td>
<td>3,558</td>
<td>4,076</td>
<td>+ 14.6%</td>
</tr>
</tbody>
</table>

About 46.8% (1,477) of the pediatric inpatients in the Golisano Children’s Hospital in calendar year 2009 came from Onondaga County, and nearly 1.4% (43) were from outside New York State. Approximately 46% (1,460) of inpatients were under the age of five years and about half of admissions come through the Pediatric Emergency Department. Outpatient pediatric visits were drawn from an even wider geographic area throughout New York State, with nearly 30% (19,469) of children from outside Onondaga County. About 1% (529) of our outpatient visits were from outside New York State.
CRITICAL CARE AND INPATIENT PEDIATRICS

FACULTY

Critical Care:
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
Jennifer Zuccaro, MD, Assistant Professor of Pediatrics

Hospital Medicine:
John Andrake, MD, Associate Professor of Pediatrics
Charles Bergstrom, MD, Assistant Professor of Pediatrics
Elizabeth Jamme, MD, Assistant Professor of Pediatrics
James Listman, MD, Associate Professor of Pediatrics
P. David Sadowitz, MD, Associate Professor of Pediatrics
Thomas Welch, MD, Professor of Pediatrics

CLINICAL OVERVIEW

The Pediatric Critical Care service in the Golisano Children’s Hospital 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 15 intensive care beds admitting 800 patients annually. The PICU serves the region’s Level I 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. 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.

The inpatient ("hospitalist") service provides comprehensive, coordinated inpatient care to children who are not on a subspecialty service or whose primary care provider does not serve inpatients. National trends in inpatient child health care over the past few years have been reflected in Syracuse as well, resulting in significant growth of this program.

Outstanding care coordination, including active involvement of nurse practitioners and discharge planners, has resulted in severity adjusted length of stay for children at the Golisano Children’s Hospital being below national benchmarks. The growth in volume and complexity of this program has necessitated its planning to add additional faculty in 2010 and become a separate division within the department.

RESEARCH HIGHLIGHTS

Dr Kanter’s health services research investigates the balance between pediatric acute care needs and existing regional hospital resources. In large public health emergencies, hospital resources would be overwhelmed if large numbers of children were involved. Quantitative modeling studies demonstrate that temporary mass critical care approaches would be essential to accommodate large surges of patients in sudden impact regional emergencies. Sustained mass critical care approaches would be necessary to accommodate pandemic surges (study in progress). A panel of experts demonstrated a method to develop professional consensus regarding those hospital interventions that should be regarded as essential in mass critical care responses to a public health emergency. Evidence-based considerations for pediatric mass critical care in public health emergencies have been reviewed. A recently completed study found persistent changes in child mortality in the New Orleans region recovering from Hurricane Katrina. Persistent population displacement and post-disaster changes in demographics affect children’s needs for hospital services.

SELECTED CLINICAL DATA

Hospitalist service discharges 2008: ................. 2,809
Hospitalist service discharges 2009: ................. 3,309
Pediatric intensive care unit discharges 2008: ........ 209
Pediatric intensive care unit discharges 2009: ....... 266
EDUCATION PROGRAM IN GENERAL PEDIATRICS

FACULTY

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

Graduate Medical Education

John Andrake, MD, Associate Professor of Pediatrics, Director of Residency Program
Bradley Olson, MD, Associate Professor of Pediatrics, Associate Director of Residency
Gloria Kennedy, MD, Assistant Professor of Pediatrics, Associate Director of Residency

Undergraduate Medical Education

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

Administrative

James F. Peacock, MS, Education Program Administrator
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. In 2008, the residency received a full five-year accreditation from the ACGME with no citations.

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. The faculty have translated the core curriculum to an on-line environment that is available to the residents anytime and anywhere. The material is contained within Blackboard and resident participation in the online curriculum is actively monitored. 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 and 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 Golisano Children’s Hospital PICU is 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** – Dedicated hospitalists provide oversight and direct care for the inpatients at the Golisano Children’s 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.

• **Pediatric surgery rotation** – In 2009 our second-year residents began taking a required one-month rotation with the pediatric surgery team. This allows the pediatric residents to gain a better understanding of diagnosis, treatment and management of common pediatric surgical problems and allows them to teach the surgery team basic pediatric examination and communication skills.

• **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.”

• **Systems Based Care** – A program of learning advocacy, established in 1995 as the Community Oriented Advocacy Training program, was one of the first such advocacy training programs nationally. The curriculum now includes experiences in systems based care and educates residents on a wide range of advocacy skills and community related topics. Using a case based approach, residents identify a system issue affecting a patient and research community resources. Throughout this experience, the residents develop advocacy skills and then present their experience at an educational conference.

• **Teaching Skills for Housestaff** – This monthly seminar series is in its 13th 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.

• **Residents and students have the opportunity to participate in international health activities including electives in Central America such as the Rural Health, Adolescent Mentoring and Medical Spanish elective in El Salvador and the STI/HIV Education elective in Panama.**

• **Many of our residents participate in active research with faculty. The underlined authors of the manuscripts in the sections below identify our residents or students.**

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**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. 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 bedside 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.

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**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 2008, 89% of our residents passed the American Board of Pediatrics Certifying Examination on the first attempt with a mean score well above the national average. On the NBME subject exam in pediatrics, our medical students’ scores for the years 2006-2007 average above the 50th percentile nationally.
EDUCATION PUBLICATIONS

Book Chapters

PUBLICATIONS WITH RESIDENTS, FELLOWS, OR STUDENTS
Bennett N, Domachowske D. Rocky Mountain Spotted Fever. Emedicine, 9/10/09
Bennett, N – Emedicine
Mononucleosis and Epstein-Barr Virus Infection (10/20/09)
Nocardiosis and Gonorrhea.


de Waal Malefyt D, Pech M, Domachowske J. Poster, “Bacterial Meningitis in Children with Mondini Dysplasia” Poster, PAS, 5/09, Baltimore, MD


Mallick D, Thapa R. An II-year-old boy with dark skin, swallowing difficulty and absence of tears. Indian Journal of Dermatology, 2009; 54(1)


Moro R, Contello K, Holz W, Weiner L, Shaw J. “Subcutaneous (SCIG) Versus Intravenous (IVIG) Immunoglobulin Replacement Therapy in a Pediatric Population with Primary Immunodeficiencies (PID)” Poster, PAS, 5/09, Baltimore, MD


PRESENTATIONS AT NATIONAL MEETINGS


PRESENTATIONS AT NATIONAL MEETINGS WITH RESIDENTS, FELLOWS AND STUDENTS

Bennett N (et al) Poster Presentation: “The Effects of Teaching a Novel Communication Skills Curriculum in Pediatrics on Medical Students’ Perceptions” at MSSNY (Medical Student Society of NY), Friday, May I, 2009.


Dawson E, Greenberg S, Mahar S, Olson B. Poster “The Predictive Value of Eosinophilia in Chronic Schistosomiasis and Strongyloidiasis: An Examination of the CDC Screening Guidelines for Newly Arriving Refugees”


Moro R, Contello K, Holz W, Weiner L, Shaw J. “Subcutaneous (SCIG) Versus Intravenous (IVIG) Immunoglobulin Replacement Therapy in a Pediatric Population with Primary Immunodeficiencies (PID)” Poster, PAS, 5/09, Baltimore, MD

Pekarsky S, Botash A. Poster “Pediatric Patient Assent and Medical Provider Compliance with New York State Guidelines for HIV Post-Exposure Prophylaxis for Sexual Assault” PAS 5/09, Baltimore, MD

GRANTS AND CONTRACTS

**Botash AS**: Child Abuse Medical Provider NYS Training Initiative: 2008-2010 New York State Department of Health, Rape Crisis Program Preventive Health and Health Services Block Grant from CDC, Rape Prevention Education. ~$160,000.

**Botash AS**: Child Abuse Medical Provider Training and Network: 2008-09, NYS Office of Children and Family Services pending legislative approval, $90,000.

**Botash AS**: Child Abuse Medical Provider Training and Network, Children’s Miracle Network Grant, 2009. $30,000.

**Botash AS**: Procedure Management Education (LEAPP). $8,400

**Botash AS**: Friend In Deed Funding for Child Fatality Review Team: $2400


**Botash AS**: Assistance for Abused Children. St. Agatha Foundation. $25,000

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

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
Jennifer E. Mackey, MD, FAAP, Assistant Professor, Emergency Medicine and Pediatrics
Lisa Marie Keough, MD, Assistant Professor, Emergency Medicine and Pediatrics
Alison McCrone MD, 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 opening of the Golisano Children’s Hospital, the Pediatric Emergency Department continues to play an expanded role in the delivery of subspecialty 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 physicians 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 10 years. In addition, under our directorship, 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, Sadowitz, and D’Agostino, are nationally recognized figures in our field and are often invited to present to national and international audiences. This past year, our division was responsible for a reference text, “Neonatal Emergencies”, edited by Drs. Cantor and Sadowitz, and published by McGraw Hill.

Within the Upstate Medical University College of Medicine, 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 five years, we have re-instituted our fellowship program in Pediatric Emergency Medicine, under the leadership of Dr. Richard Cantor. We accept one fellow per year, and at present will have three in place working within our division. These fellows are graduates of both pediatric residencies and emergency medicine residencies. 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

Cantor RM: Respiratory Distress in The Clinical Practice of Emergency Medicine, Wolfson A, Lippincott, Williams and Wilkins 2009
Cantor RM. Neonatal Abdominal Emergencies, in Neonatal Emergency Medicine, Cantor and Sadowitz, McGraw-Hill, 2009

Cantor RM. Neonatal Neurological Emergencies, in Neonatal Emergency Medicine, Cantor and Sadowitz, McGraw-Hill, 2009


Mackey JE. Neonatal Respiratory Emergencies. in Neonatal Emergency Medicine, Cantor and Sadowitz, McGraw-Hill 2009

PRESENTATIONS AT SCIENTIFIC MEETINGS


Cantor RM. Pediatric Emergency Medicine Literature Review; Chief Complaints in Infants Less Than 28 Days of Age; Mistakes You Don’t Want to Make in Pediatric Patients. Presented at the American College of Emergency Physicians Scientific Assembly, Boston, Massachusetts. 2009

Cantor RM. Emergency Medicine Grand Rounds. Presented at NYU Bellevue Medical Center Department of Emergency Medicine, June, 2008


Cantor RM. Keynote Speaker, Methodist Hospital Annual Pediatric Medicine Teaching Day, 2008, 2009: Lit Review, Toxicology, Mistakes, Miami, Florida

Cantor RM. Speaker, NJ ACEP Annual Emergency Medicine Teaching Conference, 2008, 2009: Lit Review, Toxicology, Mistakes, Atlantic City, NJ

Cantor RM. Invited Speaker, Stanford University Annual Emergency Medicine Teaching Conference, 2009: Lit Review, Toxicology, Mistakes, Maui, Hawaii

Cantor RM. Visiting Professor, Department of Emergency Medicine, University of Maryland, August, 2009.

Cantor RM. Visiting Professor, Department of Emergency Medicine, University of Texas Southwestern, November, 2009.

HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Editorial Boards/Reviewer


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 Department Visits, 2008: 21,242
Pediatric Emergency Department Visits, 2009: 21,338
Percentage of patients admitted: 10%
Ambulances received per day: 6-10
Private patient referrals per day: 10-15
Department of Pediatrics

PEDIATRIC ENDOCRINOLOGY, DIABETES & METABOLISM

FACULTY

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

AFFILIATED CLINICAL STAFF

Kathleen Bratt, PNP, CDE
Sheri Hill, RN, Diabetes Educator
Lynn Horowitch, PNP
Joanne Kearns, RD, CDE
Khuyet Le, PA
Barbara Lindenmayer, PNP
Andrea Gross, RN, Diabetes Educator

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 using the team model, under the direction of Dr. Izquierdo 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, dieticians, 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.

Dr. Izquierdo and Kathleen Bratt direct the School Telemedicine Project, supported by a New York State Center of Excellence Grant. This program provides diabetes care via telemedicine to students with diabetes in schools in our northern regions of New York. We are able provide pediatric DXA scanning and consultations on patients at risk for osteoporosis. In 2008, Dr. Sills attained certification as a clinical Densitometrist by the International Society for Clinical Densitometry.

Dr. Irene Sills is a member of the Harry Benjamin International Gender Dysphoria Association, Inc. and directs our program to treat children with gender dysphoria and adolescents with transsexualism.

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.

RESEARCH HIGHLIGHTS

Dr. Izquierdo’s research interests lie in type 1 and 2 diabetes mellitus, and thyroid nodular disease and cancer. He is the principal investigator for the Protégé Study, which is a multi-centered study that 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. He is also involved in the Diamyd clinical trial in which a GAD vaccine is administered to children early in the diagnoses of diabetes to preserve beta-cell function. Dr. Izquierdo continues as co-investigator of the TODAY study, a multicenter NIH-sponsored trial to determine the best treatment options in children and adolescents with type 2 diabetes mellitus.

Dr. Sills is interested in the natural history of type 1 diabetes. She is our Center’s principal investigator for TrialNet, which aims at identifying individuals at high risk for development of type 1 diabetes. Identified high risk individuals are then eligible to participate in trials designed to delay or prevent the development of type 1 diabetes mellitus.

PUBLICATIONS


Shea, S., R.S. Weinstock, J.A. Teresi, W. Palmas, J. Starren, J.J. Cimino, A.M. Lai, L. Field, P.C. Morin, R. Goland,


PRESENTATIONS AT SCIENTIFIC MEETINGS


INVITED WORKSHOPS, CME PRESENTATIONS


Lipeski, L. Thyroid function testing. Endocrine Conference. October 8, 2009.

Sills, I. “Pediatric Endocrine Update” Annual Meeting of New York State Nurse Practitioners, 2008.

Sills, I. “Gender Dysphoric Children and Transsexual Adolescents” Grand Rounds, Plattsburgh Hospital, 2008.


Sills, I. “Transsexuality”. Psychiatry Grand Rounds 2009

GRANTS AND CONTRACTS

Sills, I. NIDDK: Diabetes TrialNet: Natural History Study of the Development of Type I Diabetes (Principal Investigator for our center). Funding accrual based.

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

Izquierdo R. 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 I Diabetes Mellitus. (Dr. Izquierdo, principal investigator for our center). Industry-sponsored Trial (funding accrual based)

Izquierdo R. NYS Department of Health School Centered Telemedicine Program for Children with Type I Diabetes Mellitus (Co-Investigator).

Izquierdo R. Diamyd: A Phase III, 3- Arm, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study to Investigate the Impact of Diamyd on the Progression of Diabetes in Newly Diagnosed with Type I Diabetes Mellitus. Industry-sponsored Trial (funding accrual based)

SELECTED CLINICAL DATA

Children in the diabetes mellitus program: 1000

Children with new onset diabetes seen in 2009: 100

Children followed with congenital hypothyroidism: 100

Children with diagnosed with congenital hypothyroidism in 2009: 12

Children with congenital adrenal hyperplasia who are actively followed: 50

Children with septo-optic dysplasia who are actively followed: 30

Endocrine component of KNOT Clinic: 80
GASTROENTEROLOGY & NUTRITION

FACULTY
Manoochehr Karjoo, MD, Professor of Pediatrics, Section Chief
Mirza Beg, MD, Assistant Professor of Pediatrics
Christopher Justinich, MD, Clinical Associate Professor

AFFILIATED CLINICAL STAFF
Shannon Kesselring, MSN, FNP

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 and all forms of hepatitis. We offer multi-modal therapy for children with a variety of functional intestinal disorders ranging from cyclic vomiting and chronic abdominal pain to constipation.

Our division has a particular interest in the management of children with inflammatory bowel disease and the gastrointestinal manifestations of food allergy. Gastroesophageal reflux disease is an increasingly recognized entity in children from infancy through young adulthood. We offer a broad range of diagnostic and therapeutic approaches for such disorders.

The section works closely and collaboratively with a number of other programs, including pediatric surgery, ENT, general pediatrics, pulmonary, and endocrinology. We are particularly expert in the gastroenterological issues impacting children with developmental delays. 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 Hirschsprung’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 Pietrafesa Center for Children’s Surgery, while others are done in our clinic.

Outpatient care is provided in the newly remodeled and expanded office located in the 725 Irving Avenue, Suite 805, in Syracuse. For the past few years, a satellite clinic in Watertown, NY has been staffed by one of our part-time faculty, Dr. Justinich. With the recruitment of two new full-time gastroenterologists in 2010, our plan is to continue that service and add a satellite clinic in Utica, NY.

The section continues to be very active in medical student and resident education. Many of our residency graduates have gone on to train in pediatric gastroenterology.

RESEARCH HIGHLIGHTS
The section currently is participating in a multi-center trial of treatment of eosinophilic esophagitis using an antagonist of IL5.
We are also preparing to join a Phase 3, multi-center, double-blind randomized placebo controlled, parallel-group, withdrawal study to evaluate the safety and efficacy of delayed release Rabeprazole in 1 to 11 month old pediatric subjects with symptomatic erosive gastroesophageal reflux disease.

SELECTED CLINICAL DATA
Outpatients seen in 2008: .......................... 5,243
Outpatients seen in 2009: .......................... 5,300
Endoscopies in 2008: ................................. 494
Endoscopies in 2009: ................................. 544
Colonoscopies in 2008: .............................. 249
Colonoscopies in 2009: .............................. 276
Ph probe studies in 2008: ............................ 280
Ph probe studies in 2009: ............................ 240
Bravo Ph Analysis in 2008: ........................... 26
Bravo pH analysis in 2009: ........................... 47
GENERAL PEDIATRICS

FACULTY

John Andrake, MD, Associate Professor of Pediatrics, Director, Pediatric Residency
Joseph Bearman, MD, Clinical Assistant Professor of Pediatrics
Charles Bergstrom, MD, Assistant Professor of Pediatrics, Director, Undergraduate Medical Education
Steven Blatt, MD, Associate Professor of Pediatrics, Director, General Pediatrics, Associate Professor Syracuse University College of Law (courtesy appointment)
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
John Friedman, MD, Clinical Professor of Pediatrics and Psychiatry
Paul Fuller, MD, Professor of Pediatrics
Robert Cavanaugh, MD, Professor of Pediatrics, Section Head, Adolescent Medicine
Katherine Chang, MD, Assistant Professor of Pediatrics
John Friedman, MD, Clinical Professor of Pediatrics and Psychiatry
Paul Fuller, MD, Professor of Pediatrics
Robert Hingre, MD, Assistant Professor of Pediatrics
Elizabeth Jamme, MD, Assistant Professor of Pediatrics
Toby Kressel, MD, Clinical Assistant Professor of Pediatrics
Ellen McHugh, MD, Clinical Assistant Professor of Pediatrics
Victoria Meguid, MD, Associate Professor of Pediatrics
Bradley Olson, MD, Associate Professor of Pediatrics, Associate Director, Pediatric Residency
Alicia Pekarsky, MD, Assistant Professor of Pediatrics
Ronald Saletsky, PhD, Associate Professor of Psychiatry
Ellen Schurman, MD, Clinical Assistant Professor of Pediatrics
Anne Sveen, MD, Assistant Professor of Pediatrics
Howard Weinberger, MD, Professor of Pediatrics

AFFILIATED CLINICAL STAFF

Wendy Broton, RN, FNP, Nurse Practitioner
Karen Dygert MS, RN, PNP, PMHNP, Nurse Practitioner
Susan Mahar, RN, PNP-BC Nurse Practitioner
Nancy Mitchell, RN, PNP, Nurse Practitioner
Terri Morse, RN-BC, FNP, Nurse Practitioner

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 Golisano Children’s Hospital, 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, a busy three-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 Medical Legal Partnership 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. 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 McMahon/Ryan Child Advocacy Site.

The McMahon/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 McMahon/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.mcmahonryan.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

**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 Medical-Legal Partnership (SMLP) is a Medical-Legal Partnership 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, SMLP 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. SMLP helps improve health outcomes for low-income children and their families through collaborative advocacy and legal intervention. Cases handled through SMLP 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. SMLP provides students, faculty and staff from both the Department of Pediatrics and the College or Law with opportunities to learn about Pediatrics and Legal Advocacy from experts in both disciplines. SMLP has been instrumental in educating state and national legislators about this new and growing national movement.

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, pneumococcus, and influenzae.

**Child Sex Abuse Evaluation**
Dr. Ann Botash was one of the founders of the McMahon/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.

**PRESENTATIONS AT NATIONAL MEETINGS**


- **Blatt SD.** The Wonder Years: Children in Foster Care in the Courtroom. New York State Judicial Institute. Rye Brook, NY, (Presented at three different Judicial Institutes) June 24, July 8, August 26, 2008.


**HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY**

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

- **Blatt SD:** New York State Children’s Cabinet Advisory Board Member (Appointed by the Governor)

- **Blatt SD:** National Center for Medical-Legal Partnership, Assistant National Medical Director

- **Blatt SD:** National Center for Medical-Legal Partnership, Medical Advisory Board Member

- **Blatt SD:** Peace Action of Central New York: Peace Award November 16, 2008

- **Botash AS:** Ray E. Helfer Society Vice President, 2007-2009

- **Botash AS:** Ray E. Helfer Society President, 2009-2010

- **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

- **Friedman J:** Island Peer Review Organization, Vice President

- **Meguid V:** National Committee-AAMC Group on Women in Medicine and Science
INVITED WORKSHOPS, CME PRESENTATIONS


Blatt SD, Morton S, Tichner J. Ethics at 40,000 Feet: Big Picture Ethical Dimensions of MLP Practice. Medical-Legal Partnership National Summit, Cleveland, OH, March 27, 2009.


GRANTS AND CONTRACTS

Blatt SD
Syracuse Medical Legal Partnership for Children, The John Ben Snow Foundation, 7/09: $10,000
Regional Lead Poisoning Resource Center, NY State Health Department in the amount of $200,000 per year for five years.

Botash AS
Rape Crisis Program (CHAMP), 2009, NYS DOH: $36,000
Rape Crisis Program for CHAMP, 2008, NYS DOH: $75,000
PI: 2009-2010, NYS Office of Children and Family Services CHAMP Initiative, through a grant from Senator Valesky’s office ($65,000) and from Sen. Aubertine’s Office ($30,000)
PI: Child Fatality Review Team, NYS OCFS, 2010-2009: $52,000
PI: Child Fatality Review Team, NYS OCFS, 2009-2010: $52,000
PI, with grant assistance from Catherine Unger and Martha Ryan for Child Fatality Review Team, 2007-2009, NYS OCFS: $ 88,224
2009: Friend in Deed Foundation for Child Fatality Review Team: $2,400
2009: St. Agatha’s Foundation for CARE program: $25,000
2009: CHAMP medical education grant: $30,000
2009: Golisano Children’s Hospital education grant for Procedure Management (LEAPP) project: $8400

SELECTED CLINICAL DATA (DIVISION TOTALS)

General Pediatrics, Adolescent, CARE, Enhance
2008: ............ 23,632
2009: ............ 23,766

Upstate Pediatrics Outpatient
2008: ............ 13,611
2009: ............ 13,336

Inpatient encounters (General Pediatrics and Upstate Pediatrics)
2008: ............ 1,043
2009: ............ 833

Newborn inpatient encounters (General Pediatrics and Upstate Pediatrics)
2009: ............ 1,172
2009: ............ 1,397
GENETICS

FACULTY

Robert Roger Lebel, MD, FACP, Chief, Section Medical Genetics, Professor of Pediatrics, Internal Medicine, Ob/Gyn & Pathology, Lecturer in Bioethics & Humanities

Joan Pellegrino, MD, FAAP, FACP, Associate Professor of Pediatrics

Adjunct Faculty:

Constance Stein, PhD, Director Cytogenetics Laboratory; Professor, Pathology

Antony Shrimpton, PhD, Director, Molecular Diagnostic Laboratory; Associate Professor, Pathology

AFFILIATED CLINICAL STAFF:

Bonnie R. Braddock, MPH, CGC, Senior Certified Genetic Counselor

Ryan T. Miller, MS, CGC, Certified Genetic Counselor

CLINICAL OVERVIEW

The section of Medical Genetics provides high quality and comprehensive clinical genetics services, including screening, diagnosis, treatment, counseling and preventive services to the 11 counties defined as Health Services Area 3 (HSA3) and to several other surrounding counties. Medical Genetics provides genetic evaluation and genetic counseling services for a wide range of neonatal, pediatric and adult onset indications. The Medical Genetics staff of clinical geneticists and genetic counselors work in a team approach to providing services. The program includes general genetic evaluation clinics, Inherited Metabolic Disease Specialty Center (IMD), inpatient genetic evaluation consultations, cancer and general genetic counseling, and genetic counseling within various specialty clinics at Upstate, including in conjunction with the Multidisciplinary Breast Cancer Program, the cystic fibrosis newborn screening program and craniofacial clinic. Medical Genetics also provides outreach genetic evaluation services at satellite clinics in Watertown and Binghamton.

Medical Genetics is staffed by clinical geneticists, Robert Roger Lebel, MD, FACP, and Joan Pellegrino, MD, FACP, FACP, and two full time board certified genetic counselors, Bonnie R. Braddock, MPH, CGC, and Ryan T. Miller, MS, CGC. Dr. Lebel arrived as new section chief in July 2008, and has interacted extensively with the extended Pediatrics department as well as other sectors of the medical university. As such, he supervises the activities of the genetic counselors and administers the section. He has seen over 700 new patients since arriving, and has had the opportunity to make diagnoses of a number of very rare syndromes, and also to lead the group in proposing a syndrome “new” to the medical literature. The lengthy waiting list which had grown during the interim has been reduced to manageable length and the satellite clinics in Watertown and Binghamton were re-established after Dr. Lebel arrived.

Dr. Joan Pellegrino manages the Inherited Metabolic Diseases Specialty Center (IMD), which has continued to grow. The center is staffed by a dedicated nurse practitioner, registered nurse, dietician, social worker, genetic counselor and geneticist. The IMD evaluates infants with abnormal newborn screens or suspected metabolic disorders and manages those individuals with a known inborn error of metabolism. In 2008, 144 patients were seen and, in 2009, 179 patients have been seen. The Center has also had an increase in the number of abnormal newborn screening patients sent in for evaluation. In the year 2009 alone, 9 newborns with PKU were identified and treated. The IMD is actively involved with the other Metabolic centers in the state.

Ryan T. Miller, MS, CGC, works closely with Dr. Pellegrino in the IMD. He also works closely with the Craniofacial Clinic and the Pediatric Pulmonary section providing genetic counseling input at their locations.

Bonnie R. Braddock, MPH, CGC, provides genetic counseling for the inherited cancer risk services, which has continued to grow over the last several years. In 2008 and 2009, a total of 386 patients were seen for cancer genetic counseling.

Medical Genetics coordinates the monthly Genetics Professional Review Group meeting at Upstate. Attendees include a range of clinical- and research-based genetics professionals and students throughout various departments at Upstate. The goals of the meetings are to foster collaboration of cases and research opportunities and to provide in-house educational opportunities.

RESEARCH HIGHLIGHTS

The IMD participates with the Lysosomal Storage Registry sponsored by Genzyme and has IRB approval to participate in studies on Gaucher, Fabry, Pompe and MPSI diseases. Patients are enrolled into long term follow-up studies after being identified on newborn screen to have an increased risk for Krabbe disease.

Dr. Lebel’s research interests include syndrome identification and ethical issues in genetics. Dr. Stein’s research interests include investigation of chromosomal fragile sites, cytogenetic and molecular characterization of malignant tumors, chromosome imprinting. Dr. Shrimpton has research interest in sequencing Neuroserpin in patients with autism.
PUBLICATIONS


Riccardi GF, Stein CK, de la Roza G, Damron TA. Newly described translocation, t[(18;19)(p11.2;p13.1)] in abdominal wall soft tissue tumor resembling Ewing sarcoma/Peripheral Neuroectodermal Tumor. (accepted pending modification by Cancer Genetics and Cytoanalytics).


PRESENTATIONS AT SCIENTIFIC MEETINGS


INVITED WORKSHOPS AND CME PRESENTATIONS


**Lebel R.** Invited Lecture, Grand Rounds, Dept Int Med, SUNY Upstate Med Univ (8/28/08, 4/30/09)

**Lebel R.** Invited Lecture, Grand Rounds, Dept Obstet/Gynecol, SUNY Upstate Med Univ (10/10/08, 2/6/09, 11/3/09)

**Lebel R.** Invited Lecture, Grand Rounds, Dept Pathology, SUNY Upstate Med Univ (11/19/08)

**Lebel R.** Invited Lecture, Grand Rounds, Dept Bioethics & Humanities, SUNY Upstate Med Univ (12/12/08)

**Lebel R.** Invited Lecture, Onondaga County Pediatrics Society (11/8/08)

**Lebel R.** Invited Lecture, Central New York Medical Academy (2/2/09)

**Lebel R.** Invited Lecture, St. Olaf College, Northfield, MN, Scientific Day (5/1/09)

**Lebel R.** Invited Lecture, Central New York Cytogeneticists’ Seminar (9/12/09)

**Lebel R.** Invited Lecture, Regional seminar for Lutheran Pastors (10/7/09, 12/2/09)

**Lebel R.** Invited Lecture, Onondaga Community College Special Education Class (11/9/09)

**Lebel R.** Invited Lecture, Cato-Meridian High School Biology Classes (11/30/09)

**Miller R.** Invited Lecture, Grand Rounds, Pediatrics, Chromosomal Microarray: New Diagnostic Frontier (5/27/09)


**Pellegrino J.** Invited Lecture, Brighton Hills Pediatric Group, Update on Newborn Screening, Syracuse NY 10/9/09

**Pellegrino J.** Invited Lecture, Children at Risk Nursing Conference, Update on Newborn Screening, Syracuse NY 11/19/08

GRANTS AND CONTRACTS

New York State Department of Health Genetic Services Program grant, in the amount of $140,858 annually from January 1, 2009 through December 31, 2013.

CNY Children’s Miracle Network Patient Supplies for Metabolic Clinic, $4660, awarded in 2006.

SELECTED CLINICAL DATA

2008 total number of patients seen by Medical Genetics: 865

2009 total number of patients seen by Medical Genetics: 1,019
HEMATOLOGY & ONCOLOGY

FACULTY

Richard H. Sills, MD, Professor of Pediatrics, Division Director
Irene Cherrick, MD, Associate Professor of Pediatrics
Gloria Kennedy, MD, Assistant Professor of Pediatrics
Trisha Tavares, MD, Assistant Professor of Pediatrics
Jody Sima, M.D., Assistant Professor of Pediatrics
Karol Kerr, M.D., Assistant Professor of Pediatrics
William Kerr, Ph.D., Murphy Family Professor of Children's Oncology Research

AFFILIATED CLINICAL STAFF

Diane Groth, R.N., C.P.N.P., Pediatric Nurse Practitioner
Susan Shaw, M.S.N, P.N.P., A.N.P., Pediatric and Adult Nurse Practitioner
Karen Leshko, L.M.S.W., Licensed Medical Social Worker
Brittany Metcalf, C.C.L.S., Certified Childlife Specialist
Ruth McKay, M.A., L.M.F.T., Licensed Family Medical Therapist
Kristi Scully, M.S. Ed., Education Specialist

AFFILIATED RESEARCH STAFF

Michelle Cavallerano, C.C.R.P., Clinical Research Associate
Gayle Froio, M.T., Clinical Research Associate

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 11G Pediatric Hematology/Oncology Inpatient unit in the new Golisano Children's Hospital.

The Center employs five full-time and one part-time physician. We currently have two nurse practitioners; Diane Groth provides a primary role in caring for children with bleeding disorders, as well as, children with malignancies. Susan Shaw provides care part-time to children and young adults who were previously treated for a malignancy but are now considered long-term survivors. William Kerr, Ph.D., provides the basic science research component to the division.

At the present time, the division has 5.7 registered nurses, 3.5 office personnel, a social worker, family therapist, educational specialist, two clinical research associates, a research technician and a post doctoral student.

The division cares for over 50 newly diagnosed children with cancer annually and more than 70 children on active 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. The program follows more than 500 patients. Susan Shaw, RN, PNP provides the primary clinical services under the supervision of Dr. Jody Sima. Dr. Sima's prime research interest has been late effects, providing a research component to this clinical service. Dr. Sima has begun to better organize our databases on late effects and has been able to publish her initial studies looking at primary care providers and their understanding (or relative lack of understanding) of readily available resources concerning late effects of the malignancies and their treatment.

Ms. Shaw has a national reputation for her work and is a frequently invited speaker. She is on the COG late effects committee. 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. It is a true multi-disciplinary program which makes it much simpler for patients and their families; they are able to see all their neuron-oncology providers at a single visit.
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. Kristi Scully has taken over the role since Nan Songer’s death. This was a difficult time for the division, but Ms. Scully is doing a remarkable job. Ms. Scully’s role is to coordinate tutoring, school re-entry, 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 has very successfully expanded the palliative care program which is becoming a separate program as much of its activity has moved beyond pediatric hematology and oncology. It has been very successful. 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. William Kerr
An important area of investigation for Dr. Kerr’s lab is the role that SHIP plays in stem cell biology, both pluripotent stem (PS) cells and hematopoietic stem cells (HSC). In 2001 we identified a stem cell specific isoform of SHIP, s-SHIP, that is expressed by PS cells and HSC. s-SHIP associates with Grb2 and is constitutively recruited to the plasma membrane to receptor components like gpi30. Thus, we propose that s-SHIP sets signaling thresholds for PS cell populations. We also found that SHIP expression is required to sustain their multi-lineage repopulating capacity. We have recently demonstrated that SHIP is required for the normal function of the BM niche that supports HSC. Future studies will define the cell types and signaling pathways that SHIP influences which are required for niche function. We have recently developed SHIP inhibitors that our research suggests might be used to mobilize HSC for transplant purposes and to improve blood cell recovery in myelosuppressed patients. Applications of SHIP inhibition that we will be examining in the near future.

We find that SHIP is critical to maintaining a diverse repertoire of activating and inhibitory receptors in mature Natural Killer (NK) cells. The NK repertoire disruption that occurs in SHIP-/- mice has profound functional consequences and disables rejection of allogeneic bone marrow (BM) grafts. Surprisingly, SHIP-deficiency also appears to abrogate graft-versus-host-disease (GVHD) - the major cause of treatment-related mortality in human allogeneic BM transplantation. This appears to be due to a dramatic expansion of a myeloid and T lymphoid immunoregulatory cells in SHIP-/- hosts that suppress allogeneic T-cell responses that mediate GvHD or organ graft rejection. We have recently developed chemicals inhibitors of SHIP that might be used to increase both the efficacy and utility of allogeneic BM transplantation in cancer and genetic diseases. SHIP1/2 inhibitors might also find utility in prevention of solid organ rejection and in the treatment of malignancy - two possibilities we will be examining in the future.
Dr. Jody Sima

Dr. Sima has effectively examined the current understanding of late effects of childhood cancer by primary care providers. As these children age out of pediatrics and begin to often be followed by primary care providers, it is essential to improve the ability of these providers to understand and recognize potential complications.

Dr. Richard Sills

Dr. Sills is trying to re-establish the planned regional consortium involving Rochester, Buffalo and Syracuse for a research basis into children with sickle cell disease.

PUBLICATIONS


GRANTS AND CONTRACTS

COG – Irene Cherrick, PI

Novartis Exjade Study – Richard Sills, PI

NIH – William Kerr

2002-2011 ROI HL72523: Role of SHIP in NK Cell Biology (PI)

2008-2012 R01HL085580: SHIP and Immunoregulatory Cell Function (PI)

2007-2010 R2ICA118632: Defining the Multiple Myeloma Kinome (PI)

2007-2010 R2ICA25398: The Kinomes of Non-Hodgkin Lymphoma (PI)

EDITORIAL SERVICE

Dr. Sills serves as a consulting editor of PREP 2001-present and continues to be a question writer for PREP.

SELECTED CLINICAL DATA

Outpatient visits: 2008: ................. 4,608
2009: ................. 5,261

Inpatient Visits: 2008: ................. 2,718
2009: ................. 3,291
INFECTIONOUS DISEASES

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

FELLOWS
Nicholas Bennett MD, PhD, MB/BChir
Manika Suryadevara, MD

AFFILIATED CLINICAL STAFF
Kathie Contello, RN, MS, CPNP
M. Christine Crandall, RN, MS, PNP
Wendy Holz, RN, MS, PNP

AFFILIATED RESEARCH STAFF
Cynthia Bonville, MS, Senior Research Support Technologist
Lisa Susko RN, Study Coordinator
Christy Tabarani, MD, Research Assistant
Joy M. Tompkins, RN, MS, PNP, Administrator

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. 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 in the pediatric subspecialty outpatient setting located in the Golisano Children's Hospital. Patients referred by their primary care physicians for infectious disease immunologic diagnostic evaluations or who need intravenous antibiotics and immunoglobulin infusions are administered in this Center. Follow-up evaluations on recently hospitalized patients also take place in this setting.

Hospitalized patients are evaluated upon the request of their primary care physician at University, Crouse and Saint Joseph's Hospitals. Our 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.

The Pediatric Infectious Disease Division has an accredited fellowship program that accommodates one post graduate resident a year. The focus of this specialty education is on clinical care and research.

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 protocols to evaluate novel antiviral therapies and multiple clinical vaccine trials. Studies involving newer meningococcal, pneumococcal, influenza, DTAP/Hib/IPV and MMRV vaccines are currently underway. Vaccine trials usually take place at University Pediatric and Adolescent Center or Upstate 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 animal models. 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 responses and to determine the clinical effects of inhibiting these responses 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, two RSV/parainfluenza vaccine trials, and a large scale pediatric influenza vaccine trial.

Dr. Shaw's clinical research interests focus on epidemiology and severity of S. aureus infection among healthy children. Current research focuses on establishing the role of S. aureus virulence factors among seriously ill children and the importance of S. aureus colonization among children with cystic fibrosis.
Dr. Shaw has also been interested in a quality of life and clinical outcomes among immunocompromised patients receiving immunoglobulin replacement therapy. She has been mentoring and supervising medical students and fellows engaged in her research.

**PUBLICATIONS**


**PRESENTATIONS AT SCIENTIFIC MEETINGS**


**Bonville CA, Rosenberg HF, and Domachowske JB.** Newborn inflammatory responses to severe viral bronchiolitis. *Infectious Disease Society of America. Washington, DC October, 2008.*


**Cummings E, Suryadevara M, Bonville CA, Bartholoma N, Riddell S, Kiska D, and Domachowske JB.** Viral coinfection is common in RSV-infected hospitalized children. *Infectious Disease Society of America. Washington, DC October, 2008.*

Moro MR, Bonville CA, Suryadevara M, Cummings E, Faddoul D, Kobayaa H, Branigan PJ and Domachowske JB. Adenovirus Infection Induces a Series of Pro-Inflammatory Mediators, but only Interleukin-1α and Interleukin-8 Correlate with Illness Severity. Pediatric Academic Societies, Honolulu HI, May 2008.


**HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY**

**Joseph Domachowske, MD**

Leonard Tow Humanism in Medicine Award 2009

Editor, Clinical Microbiology Reviews 2002-2007, 2007-2012

Managing Editor, Pediatrics e-medicine

Infectious Diseases Section www.emedicine.com 1999-present

**INVITED WORKSHOPS, CME PRESENTATIONS**


Domachowske JB: Travel advice for college students: vaccines, food, water, and malaria. Syracuse University Teaching Day, Syracuse, NY January 2008


Weiner LB: Invited Speaker – Ulster County Medical


**GRANTS AND CONTRACTS**

**Weiner LB**

**2005-2009** Comparative Immunogenicity of Different Multivalent Component Pertussis Vaccine Formulations Based on a 5-component Acellular Pertussis in Infants and Toddlers, M5A10: Principal Investigator

**2006-2008** Phase III Study for the Immunogenicity and Consistency Evaluation of 3 Hib-MenCY-TT Vaccine Lots and Evaluation of Safety and Immunogenicity of GSK Biologicals’ Haemophilus Influenzae Type B and Neisseria Meningitidis Serogroups C & Y-tetanus T, Hib 009/010: Principal Investigator

**2006-2008** A phase III, single-blind, Randomized, Controlled, Multinational Study for the Evaluation of Safety of GSK Biologicals’ Haemophilus Influenzae Type B and Neisseria Meningitidis Serogroups C and Y-Tetanus Toxoid Conjugate Vaccine Combined, Hib 011/012: Principal Investigator

**2007-2008** Wyeth Pharmaceuticals: Trial Evaluating the Safety, Tolerability, and Immunogenicity of Three Lots of 13-valent Pneumococcal Conjugate Vaccine in Healthy Infants, 6096AI-3005: Principal Investigator

**2007-2009** GlaxoSmithKline: A Phase II Randomized, Observer Blind, Multicenter Study of GlaxoSmithKline Biologicals’ Combined Measles-Mumps-Rubella-Varicella Vaccine (MMRV) Versus ProQuad, According to a One Dose Schedule, both Administered Subcutaneously at 12-14 months, MMRV-054: Principal Investigator


**2007-2009** Novartis: A Phase I, Open Label, Randomized Multi-Center Study to Evaluate the Safety and Immunogenicity of ProQuad Vaccine When Administered Concomitantly with Novartis Meningococcal ACWY Conjugate Vaccine to Healthy Toddlers, Protocol # V59P21: Principal Investigator

**2008-2010** Novartis: A Phase 3b, Open-Label, Randomized, Parallel-Group, MultiCenter Study to Evaluate the Safety of Novartis MenACWY Conjugate Vaccine when Administered with Routine Infant Vaccinations to Healthy Infants, V59P23: Principal Investigator

**2008-2009** Tibotec: A Phase II, Open-Label Trial to Evaluate the Safety, Tolerability and Antiviral Activity of TMC125 in Antiretroviral Experienced HIV-I Infected Children and Adolescents, TMC125-TiDP35-C213: Principal Investigator

**2008-2009** Sanofi Pasteur: An Immunogenicity, Safety, and Non-Interference Evaluation of Pediatric Vaccines Administered Concomitantly with Menactra® (Meningococcal [Groups A, C, Y and W-135] Polysaccharide Diphtheria Toxoid Conjugate Vaccine) to Healthy Toddlers, MTA37: Principal Investigator

**2008-2009** Evaluation of Safety of GSK Biologicals’ Haemophilus Influenzae Type B and Neisseria Meningitidis Serogroups C and Y-Tetanus Toxoid Conjugate Vaccine Combined, Hib 011/012: Principal Investigator

**2006-2010** Novartis: A Phase 3b, Open-Label, Randomized, Parallel-Group, MultiCenter Study to Evaluate the Safety and Immunogenicity of ProQuad Vaccine When Administered Concomitantly with Novartis Meningococcal ACWY Conjugate Vaccine to Healthy Toddlers, Protocol # V59P21: Principal Investigator
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<th>Year</th>
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<tr>
<td>2006-2008</td>
<td>An Immunogenicity and Safety Evaluation of Two Doses of Menactra® (Meningococcal [Groups A,C,Y and W-135] Polysaccharide Diphtheria Toxoid Conjugate Vaccine) Given to Healthy Subjects at 9 and 12 Months of Age (MTA44): Principal Investigator</td>
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<td>2006-2008</td>
<td>Immunogenicity and Safety of Meningococcal (Serogroups A,C,Y, and W-135) Polysaccharide Diphtheria Toxoid Conjugate Vaccine (Menactra) in Children Aged 4 to 6 Years in the US when Administered Concomitantly with a Fifth Dose Diphtheria and Tetanus Toxoids and Acellular Pertussis Vaccine Adsorbed, MTA 43: Principal Investigator</td>
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<td>2004-2010</td>
<td>New York State, Department of Health, AIDS Institute – Center of Excellence, Pediatric HIV Care. A Double Blind, Placebo-Controlled, Virologic Efficacy Trial of Pleconaril (VP63843) in the Treatment of Neonates with Enteroviral Sepsis Syndrome, NIH/NIAID/CASG 106</td>
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<td>2004-2010</td>
<td>A Phase III, Randomized, Placebo-Controlled, Blinded Investigation of Six Weeks Vs. Six Months Of Oral Valganciclovir Therapy In Infants With Symptomatic Congenital Cytomegalovirus Infection (NIH/NIAID/CASG 112) Protocol Number: 06-0046: Principal Investigator</td>
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<td>2008-2009</td>
<td>Neonatal inflammatory responses to acute viral infection of the lung. Role: PI</td>
</tr>
<tr>
<td>2008-2009</td>
<td>Golisano Children’s Hospital Simultaneous infection with respiratory viruses and Bordetella pertussis in hospitalized children Role: PI</td>
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**SELECTED CLINICAL DATA**

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<th>Year</th>
<th>Type</th>
<th>Visits</th>
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<td>Outpatient</td>
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<td>Outpatient</td>
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<td>2008</td>
<td>Inpatient</td>
<td>549</td>
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<tr>
<td>2009</td>
<td>Inpatient</td>
<td>717</td>
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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

AFFILIATED CLINICAL STAFF
Susan Sheffield, PNP, Nurse Practitioner and Coordinator Voiding Improvement Program
Vickie Keeler, RN, BSN, MA

AFFILIATED RESEARCH STAFF
Lisa W. Blystone, MS, Instructional Support Specialist
JoAnne E. Race, MS, Instructional Support Specialist

CLINICAL OVERVIEW
The Section of Nephrology provides inpatient consultation and acute dialysis care, including peritoneal dialysis, hemodialysis, and hemofiltration at the Upstate Golisano Children's Hospital. Outpatient dialysis care, both peritoneal dialysis and hemodialysis, is provided at the University Dialysis Center in Syracuse. Other outpatient services are provided at our primary site in Syracuse, 725 Irving Ave., Suite 401, and satellite facilities in Watertown (Dr. Listman), Utica (Dr. Schurman), and Binghamton (Dr. Welch).

The section evaluates and treats infants, children, and adolescents with the full spectrum of disorders of the urinary tract. This activity includes bread and butter nephrology, disorders such as nephrotic syndrome, glomerulonephritis, and all stages of chronic renal insufficiency. However, the section’s activity has few limits. We have an established expertise in the diagnosis and treatment of children with hypertension, including 24 hour ambulatory blood pressure monitoring. We care for patients with mineral metabolism disorders and metabolic bone disease, including inherited and acquired forms of rickets, osteogenesis imperfecta, and osteoporosis. Metabolic evaluations of children with urolithiasis are performed, stressing dietary measures that can minimize risk of recurrence.

The section provides coordinated care to infants and children with simple and complex urologic abnormalities, including prenatal visits. Patients with congenital or other hydronephrosis and vesicoureteral reflux are evaluated and followed. When necessary, urologic intervention is accessed.

In addition, the section has attempted to address the growing number of children with voiding dysfunction, particularly children with associated daytime urinary urgency/incontinence and recurrent urinary tract infections. This effort, the “Voiding Improvement Program” (VIP) is coordinated by our pediatric nurse practitioner and nephrology nurse specialist, Susan Sheffield and Vickie Keeler. A multimodal approach to treatment is employed, including dietary, behavioral modification, and medication therapy.

RESEARCH HIGHLIGHTS
Role of Local Complement Synthesis in the Kidney
Dr. Welch’s laboratory has continued its study of novel roles for the human complement system in progressive renal disease. The role of activation and deposition of serum complement in the glomerulus as a major mediator of glomerulonephritis has long been established. We were the first laboratory to demonstrate that the human kidney itself could be a source of a number of complement components and that activation of these components in the peritubular interstitium was a major mediator of progressive renal damage.

Over the past few years, we have developed a murine model of chronic immune complex glomerulonephritis and have used animals lacking various complement components as a mechanism for dissecting the specific role of complement in this process. We have further demonstrated that expression of the third component of complement, C3, is differentially regulated in the kidney and the liver. This has opened the possibility of specifically targeting renal complement expression without interfering with the important role of the complement cascade in the systemic immune response.

We are now using the technique of gene expression analysis through microarray in order to examine differences in gene expression profiles between wild type animals and those lacking specific complement components. This is permitting us to understand the downstream molecular mechanisms by which peritubular complement activation induces renal damage.

Finally, we have very recently been investigating ways in which progressive interstitial scarring can be attenuated. We have now shown in our murine model that angiotensin converting enzymes (ACE) inhibitors have a very important effect in attenuating interstitial injury in this model. Examining this effect in various complement deficient animals suggests preliminarily that this effect is mediated by a non-complement-dependent mechanism. Further examination of microarray data will allow us to explore more deeply the interplay between the many inflammatory cascades participating in renal damage. The ultimate goal of this would be to identify important pathways to target pharmacologically.
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-1β gene. IL-1β 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-1β expression (and other similarly regulated cytokines like TNFα) 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-1β gene. These include Spi-1 and C/EBPβ, which are endogenous regulators of the IL-1β 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-1β, including TNFα, IL-8 and IL-2. Our laboratory is investigating the structural interactions that allow IE2 to participate with Spi-1 and C/EBPβ to induce IL-1β 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-1β 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


PRESENTATIONS AT SCIENTIFIC MEETINGS


HONORS, VISITING PROFESSORSHIPS, EDITORIAL DUTY

Welch TR: Associate editor, the Journal of Pediatrics
Welch TR: Visiting Professor, Columbia University, Department of Pediatrics, New York, NY, September, 2008.

INVITED WORKSHOPS, CME PRESENTATIONS


SELECTED CLINICAL DATA

Outpatient visits, 2008: ........................................ 2,704
Outpatient visits, 2009: ........................................ 2,653
Inpatient visits, 2008: ........................................ 648
Inpatient visits, 2009: ........................................ 564
Inpatient dialysis procedures, 2008: .................. 128
Inpatient dialysis procedures, 2009: .................. 79
Kidney transplants, 2008-2009: ......................... 9
NEURODEVELOPMENTAL PEDIATRICS

FACULTY

Nienke Dosa, MD, MPH, Associate Professor of Pediatrics
Gregory Liptak, MD, MPH, Upstate Foundation Professor of Development, Division Director
Louis Pellegrino, MD, Assistant Professor of Pediatrics
Carol Grant, PhD, Clinical Assistant Professor
Henry Roane, PhD, Associate Professor, Psychiatry and Behavioral Sciences, Pediatrics
Terry Hargrave, MD, MPH, Assistant Professor, Psychiatry and Behavioral Sciences, Pediatrics

AFFILIATED CLINICAL STAFF

Susan Delaney, FNP
Mary MacBlane, RNC, PNP

CLINICAL OVERVIEW

The Center for Development, Behavior and Genetics 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 cognitive disorders and physical disabilities. 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 who other physical disabilities. She also directs the Spina Bifida Clinic. 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 two nurse practitioners, Mary MacBlane, RNC, PNP, and Susan Delaney, FNP; they provide care for patients with metabolic disorders (MM) and developmental disabilities (both). The Center also has professionals in pediatric nursing, nutrition, occupational therapy, and social work. Pediatric specialists in orthopaedics, psychiatry, neurosurgery, and urology provide on-site consultation.

Most recently, the team has been joined by Drs. Henry Roane and Terry Hargrave, faculty with joint appointments in Pediatrics and Psychiatry.

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 and Susan Delaney, also provide ongoing support and management of children with a variety of neurodevelopmental disorders, including targeted medication management when appropriate. Amy Beale, a social worker at Upstate Medical University’s Psychiatry Department, 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 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 and management, including injections with botulinum toxin (Botox), while other children may receive ongoing care for complex medical problems. The program offers a multidisciplinary approach and addresses 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 pediatrics and 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 adolescents with spina bifida. The center is staffed by Dr. Dosa who is board-certified in pediatrics and in neurodevelopmental disabilities, and professionals in psychiatry, occupational therapy, physical therapy, social work, nutrition, and specialty nursing. Our focus is on wellness and the prevention of secondary conditions. The Spina Bifida program schedules screening studies as needed and coordinate care with surgical subspecialists 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. In collaboration with
faculty from SUNY Cortland, Dr. Dosa has developed a Group Visit Model for individuals with spina bifida.

In collaboration with faculty in adapted physical education from SUNY Cortland, Dr. Dosa has developed a Group Visit Model for individuals with spina bifida, cerebral palsy, and other motor disabilities. Group Visits focus on adapted sports and physical activity for the entire family. Group Visits take place at a state-of-the-art gym and pool facility at the Institute for Human Performance on the SUNY Upstate campus.

**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 residents in pediatrics, psychiatry and family medicine. She is collaborating with the Family Medicine Department on a funded grant entitled, “Center for Excellence in Primary Care,” whose purpose is to increase the knowledge of primary care providers in areas of developmental pediatrics. She is part of a multi-institutional study, funded by the NIH, to evaluate the safety and efficacy of oral Baclofen in children who have cerebral palsy.

Dr. Liptak is interested in researching the health services received by children who have special needs. He completed a project that examined the use of group visits in children with vision impairments to evaluate its feasibility as a model of care. He currently is analyzing data from the National Longitudinal Transition Study-2 to evaluate the transitions of adolescents who have spina bifida as well as those who have autism. He is working on the clinical trial of Baclofen with Dr. Dosa, and serves as an epidemiological consultant to NASPGHAN (North American Society for Pediatric Gastroenterology Hepatology and Nutrition).

**PUBLICATIONS**

**Original Scientific Articles**


**Reviews**


**Reviews with American Academy of Pediatrics Council on Children with Disabilities (Dr. Liptak)**


**Books and Book Chapters**


**Other**

**Educational DVDs**

Dosa NP, Judd-Litera K, Nellis J, LaMacchia S, LaValley R. Special Needs Advocacy Partners: (a) Preparing Your Child For Surgery (b) What We Can Do To Make Your Hospital Stay Better. Instructional DVD, published August 2009 in collaboration with Child Life Service at Golisano Children's Hospital at SUNY Upstate Medical University with grant support from the New York State Developmental Disabilities Planning Council.

Cleary D and Dosa NP. Collaboration for Orientation and Mobility at the Elementary School Level. Instructional DVD, published May 2009 in collaboration with Syracuse City School District and Syracuse University School of Education. Distributed state-wide to teachers for visually impaired children with grant support from the New York State Developmental Disabilities Planning Council.


**PRESENTATIONS AT SCIENTIFIC MEETINGS**


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, Atlanta, GA, September 19, 2008.


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, Scottsdale, AZ, September 24, 2009.


Liptak GS, Myers SM. Beyond Developmental Screening: Office Management of the Child with a Developmental Disability in the Primary Care Medical Home. Presented at the National Conference and Exhibition, American...
Academy of Pediatrics, Washington, DC, October 17 and 18, 2009.


**Dosa NP**, Transition and Adult Health Care, plenary panel, Spina Bifida World Congress, Orlando, Florida, March 17, 2009.


**INVITED WORKSHOPS, CME PRESENTATIONS**

**Pellegrino L.** Sensory Integration Dysfunction. 2009 Menichello Teaching Day, Wilson Hospital, Johnson City, New York (Regional Conference), May 2009


**Dosa NP** and Epling J. Making Health Transitions Caring for Young Adults with Disabilities. 37th Annual Family Medicine Refresher Course. SUNY Upstate Department of Family Medicine, Syracuse, NY, March 29, 2008.

**Pellegrino L.** Autism Spectrum Disorders: What We Think We Know. 2008 Menichello Teaching Day, Wilson Hospital, Johnson City, New York (Regional Conference), May 2008

**GRANTS**


Fit Families Group Visits: Physical Activity and Medical Services for Hispanic and Caucasian Children with Spina Bifida and their Families, Christopher and Dana Reeve Foundation Quality of Life Award, Co-Principal Investigator with Luis Columna, PhD Department of Adapted Physical Education, SUNY Cortland, $6000 (2009).

Center for Excellence in Primary Care (HRSA AAU Grant Award Number 2 D54HP05462-04-00). September 2008-August 2011. ($858,000) 0.10 FTE.


New York State Institute for Health Transition Training for Youth with developmental Disabilities, (Principal Investigator, 0.2 FTE) New York State Developmental Disabilities Planning Council: 2006-2010: $580,000.

Group Visits for Children with Spina Bifida. American Legion Auxiliary (in collaboration with SUNY Cortland Adapted Physical Education Department), 2008: $2,500.


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. (In collaboration with Kimberlee Garver CSW, Mary MacBlane PNP, and Judy Hodge RN), Spina Bifida Association of America, local co-investigator, 2007-2010 ($1,500).

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.
Bi-Annual Report • 37

(Principal Investigator, SUNY Upstate Medical University)


SELECTED CLINICAL DATA

Neurodevelopmental Pediatrics
Outpatient Visits 2008: .............................. 1,356
Outpatient Visits 2009: .............................. 1,474
Inpatient Visits 2008: ................................. 16
Inpatient Visits 2009: ................................. 6

Physical Disabilities (excluding spina bifida)
Outpatient Visits 2008: ............................... 210
Outpatient Visits 2009: ............................... 263
Inpatient Visits 2008: ................................. 35
Inpatient Visits 2009: ................................. 15

Spina Bifida Program
Outpatient Visits 2008: .............................. 254
Outpatient Visits 2009: .............................. 243
Inpatient Visits 2008: ................................. 11
Inpatient Visits 2009: ................................. 15
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
Nancy Havernick, MD, Clinical Assistant Professor of Neurology and Psychiatry
Melissa Ko, MD, Assistant Professor of Neurology
Malavalli Seetharam, MD, Clinical Assistant Professor of Neurology

AFFILIATED CLINICAL STAFF

Leigh B. Wilson, MSN, PNP, Pediatric Nurse Practitioner
Mary MacBlane, MS, RN, PNP

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.

PUBLICATIONS


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

AFFILIATED CLINICAL STAFF
Susan Delaney, NP, Nurse Practitioner, High Technology Program
Mary Foster, NP, Nurse Practitioner, Cystic Fibrosis Center Coordinator
Margaret O’Shea, NP, Nurse Practitioner, Hypnosis Program

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, sleep disorders, 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.

In the Golisano Children’s 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 dietitian. 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 or 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 Pediatric Sleep Program is under the supervision of Dr. Soultan. Through this program, patients who have been referred for evaluation of sleep disorders to our Center undergo a comprehensive medical and psychological evaluation. Sleep studies are performed, when indicated, in collaboration with Community General Hospital in Syracuse.

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 multi-specialties Center at University Hospital. The Division also supplies care at an almost weekly satellite clinic in Binghamton General Hospital and a monthly satellite clinic at Good Samaritan Hospital in Watertown.
CURRENT RESEARCH HIGHLIGHTS

Members of our division are conducting studies involving asthma, cystic fibrosis, and hypnosis.

Dr. Anbar is principle investigator in a number of epidemiological studies involving pediatric patients with asthma, which include evaluation of drug effects, environmental pollutants, and family dynamics in these patients.

Doctors Anbar, Kurlandsky, and Soultan have been involved in the i6 studies of patients with cystic fibrosis including multi-center therapeutic trials, as well as observational studies. Because of our CF Center’s high rate of enrollment in a number of multi-center trials, Dr. Anbar has been asked to be an author of publications regarding TOBI for patients with CF with early lung disease, DHA formula fortification for infants with CF, growth hormone for patients with CF, and use of nebulized denufosol for patients with CF.

Dr. Anbar is a national authority regarding use of hypnotherapy with children, and has authored several publications regarding hypnosis. Current research includes 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. Perspectives of a physician parent. In: Center for Spiritual Care at University Hospital (ed). A Second Set of Hands. Syracuse, NY: SUNY Upstate Medical University, 2008; 18-25.


Irland JM, Anbar RD, Kohen DP. Hypnoanalgesia: No clamps and needles required. American Society of Clinical Hypnosis Newsletter. Spring, 2009; II.


Irland JM, Anbar RD, Kohen DP. A note of dissent: authors’ response. American Society of Clinical Hypnosis Newsletter. Summer, 2009; II.


PRESENTATIONS AT SCIENTIFIC MEETINGS


Kurlandsky LE, Anbar RD, Soultan ZN. Carboxyhemoglobin level has a positive correlation with FEV1 in patients with cystic fibrosis (abstract). Pediatr Pulmonary. 2009; Supplement 32, 255.


HONORS, VISITING PROFESSORSHIPS


Anbar RD. Cystic Fibrosis Foundation Distinguished Service Award, September, 2008.


Anbar RD. University Hospital Upstate Star for “Innovation and Discovery”, May, 2009.

Hingre RV. Appointed adjunct faculty for Syracuse University in the Special Education department to guest lecture at undergraduate and graduate seminars on topics related to preterm infants, survival and disabilities, 2009.


INVITED WORKSHOPS, CME PRESENTATIONS


Kurlandsky LE. SUNY Upstate Medical University Department of Pediatrics Grand Rounds on, “Respiratory Effects of Gastroesophageal Reflux”, Syracuse, NY, April, 2008.


Hingre, RV. SUNY Upstate Medical University Pediatric Teaching Day presentation on, “Primary Care of Preemies for the Community Pediatrician”, Syracuse, NY, June, 2008.


Anbar RD. Syracuse University presentation to Pediatric Psychology class on “Introduction to Pediatric Hypnosis”, Syracuse, NY, June, 2008.


Anbar RD. Syracuse University presentation to Pediatric Psychology class on “Introduction to Pediatric Hypnosis”, Syracuse, NY, April, 2009.


**GRANTS AND CONTRACTS**

Cystic Fibrosis Foundation Care Center Grant, $184,655 total in 2008 and 2009

Cystic Fibrosis Foundation Clinical Research Facilitation Award, $156,600 in 2008 and 2009

**SELECTED CLINICAL DATA**

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<td>Outreach encounters</td>
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<td>Bronchoscopies</td>
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<tr>
<td>Hypnotherapy encounters</td>
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<td>Cystic Fibrosis Patients</td>
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<td>New York State Cystic Fibrosis Newborn Screening Program evaluations</td>
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<tr>
<td>Pulmonary Function On-Site Program Tests</td>
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<tr>
<td>Pulmonary Function Tests at University Hospital</td>
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</table>
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.

EDITORIAL DUTY


CLINICAL DATA

Total Pediatric Arthritis Center visits, 2008: 636
New patient referrals, 2008: 161
Total Pediatric Arthritis Center visits, 2009: 726
New patient referrals, 2009: 164
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 anesthesia

Faculty

Full-Time:
Bettina Smallman, M.D., Associate Professor of Anesthesiology and Pediatrics, Director of Pediatric Anesthesiology
Richard Beers, M.D., Professor of Anesthesiology
Debnath Chatterjee, M.D., Assistant Professor of Anesthesiology and Pediatrics
Elizabeth Demers-Lavelle, M.D., Assistant Professor of Anesthesiology
Mirna Abdallah, M.D., Clinical Instructor of Anesthesiology
Vipin Bansal, M.D., Clinical Instructor of Anesthesiology

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 2008-2009. 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.

Two new faculty were hired during this period. Dr. Vipin Bansal joined the faculty in 2008 after completing a pediatric fellowship at The Cleveland Clinic. Dr. Elizabeth Demers-Lavelle joined the faculty in 2008 after a pediatric fellowship at the Cleveland Clinic.

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.

The highlight of 2009 was the opening of Upstate Golisano Children’s Hospital. While the philosophy of care “Patients First” was a maxim for many years, the development of a Center of Excellence enabled an intensified focus on collaborative communication on patient and family centered care.

Publications

Beers RA. Office Based Anesthesia Practice: Which patients? In Twersky R, Rosenberg A, eds. Post Graduate Assembly in Anesthesiology; New York State Society of Anesthesiologists. 2008

Smallman B. Timing All When Propofol is Used to Limit Emergence Delirium. Anesthesiology News, October 2009


PRESENTATIONS

Bansal V, Rosen K. Lesser Evil in Multiple Metabolic Diseases. Problem Based Learning Discussion, Society of Pediatric Anesthesiology (SPA), San Diego, CA, Spring 2008

Beers R. Office Based Anesthesia Practice: Which Patients? Presented at the Post Graduate Assembly in Anesthesiology, New York, NY, December, 2008

Beers R. Preventing Healthcare Acquired Infections: Implementing the CDC Guidelines into Anesthesiology Practice. Presentation in conjunction with the New York State Department of Health at the Post Graduate Assembly in Anesthesiology, New York, NY, December, 2008


Koskel M, Chatterjee D. Anesthetic Challenges in a Three Year Old Male with Mitochondrial Myopathy. 2nd Annual NYSSA Conference for Anesthesiology Residents and Fellows, Syracuse, NY, May, 2008


Li F, Su Z, Barry WH. Effect of Endothelin-1 on [Ca2+]i In Rabbit Myocytes During Metabolic Inhibition. IARS, March 2008

Smallman B. Regional Anesthesia in Children Focus session. Postgraduate Assembly in NYSSA, New York, NY, December 2008


Trusilo M, Smallman B, Puthumana N, Romano D. Spinal Anesthesia in a Two Week Old Full Term Neonate Presenting with Hypotonia and Failure to Thrive with Suspected Congenital Myopathy for Vastus Muscle Biopsy. 2nd Annual NYSSA Conference for Anesthesiology, Syracuse, NY, May 4, 2008

Smallman B, Puthumana N, Romano D. Spinal Anesthesia in a Two Week Old Full Term Neonate Presenting with Hypotonia and Failure to Thrive with Suspected Congenital Myopathy for Vastus Muscle Biopsy. 62nd Annual Post Graduate Assembly, New York, NY, December, 2008


Smallman B. Pediatric Regional Anesthesia. Post Graduate Assembly, New York, NY 2008

Bansal V, Oliver J, Romano D. Difficult Pediatric Airway: Laceration with Glidescope. 63rd Annual Post Graduate Assembly, New York, NY, December, 2009

Beers R. Undiagnosed Myopathy in a Toddler: Inhalation or Intravenous Anesthesia? Problem-Based Learning Discussion presented at the Post Graduate Assembly in Anesthesiology, New York, NY, December 2009

Beers R. Implementing Infection Prevention Guidelines in Anesthesia Practice. Focus Session Presentation at the Post Graduate Assembly in Anesthesiology, New York, NY December, 2009

Beers R. Patient Safety in Office Based Anesthesia. Focus Session Presentation at the Post Graduate Assembly in Anesthesiology, New York, NY, December, 2009


PEDIANTRIC CARDIOVASCULAR-THORACIC SURGERY

**FACULTY**
George Alfieris, MD, Assistant Professor of Clinical Surgery and Pediatrics
Francisco Gensini, MD, Assistant Professor of Clinical Surgery

**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. Alfieris 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. Alfieris to undertake a higher volume of cases than he would in either center alone.

PEDIANTRIC GENERAL SURGERY

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

**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. This year, we have concluded a joint venture in pediatric surgery services with Cincinnati Children’s Hospital, and have recently recruited two new surgeons to join us on a full-time basis in 2010.

PEDIANTRIC NEUROSURGERY

**FACULTY**
Zulma Tovar-Spinoza MD – Assistant Professor of Neurosurgery, Director of Pediatric Neurosurgery
Satish Krishnamurthy MD, Mch- Associate Professor of Neurosurgery
Walter Hall MD- Professor of Neurosurgery
Jim Holsapple, MD- Associate Professor of Neurosurgery – No longer in our practice-

Other Department Neurosurgeons, although not sub-specialized in Pediatrics, have the essential training and provide supplementary care as needed.

**CLINICAL OVERVIEW**
The Pediatric Neurosurgery division provides care for children with structural disorders of the brain and spinal cord. Our patients are from the regional community, with some referrals from other states and some international referrals. We enjoy collaborating with expert pediatric neurologists, neuroradiologists, neonatologists and intensivists in the community. We participate regularly with the Upstate Epilepsy Center, Spina Bifida Program , Cranio-facial Center, the Center for Development, Behavior and Genetics and the Physical Medicine and Rehabilitation Program.

During the last year the Department of Neurosurgery recruited Dr. Zulma Tovar- Spinoza to lead the Division of Pediatric Neurosurgery. Dr Tovar Spinoza is a fellowship trained pediatric neurosurgeon with international expertise in the field of pediatric neurosurgery and epilepsy surgery. Under her direction, the division is consolidating services with the other disciplines of pediatric care. Two new multidisciplinary services are being established: the spasticity center and the Pediatric Comprehensive Epilepsy Center. The Division has incorporated the spina bifida patients for pre-natal and post-natal care with the cooperation of the Pre-natal center and the Spina bifida clinic. Preventive and
educational campaigns are being designed in conjunction with the Trauma center and pediatric department, i.e. the use of helmets to avoid brain trauma. The division is strongly involved with the planning and funding for the Cancer Center. Research clinical activities are currently focused on positional plagiocephaly, decompressive craniectomies and tethered cord.

Dr. Satish Krishnamurthy has recently returned to the Department of Neurosurgery. Dr. Krishnamurthy has recognized national and international expertise in pediatric and minimally invasive neurosurgery. His very well known interest in hydrocephalus and device less solutions for this condition are meritorious of several grants and publications. He is a frequent speaker in national and international conferences on this topic. His current interest is to develop a Comprehensive Program for Hydrocephalus at SUNY Upstate.

Dr. Walter Hall joined our Department in 2007. He is a nationally respected expert in infectious diseases of the nervous system and in the use of intraoperative MRI to guide the resection of childhood brain tumors. He brings his subspecialty expertise to the management of our pediatric patients.

Community education regarding the services the Division provides has been an important goal. The division has been working on providing local community updates on TV and newspapers about our services and noteworthy cases. Constant feedback has been established with the pediatric services in regional hospitals at Syracuse, Rochester, Albany and Boston in order to facilitate the care to our patients.

In the national and international arena, the division was recently linked to the American Association for Pediatric Neurosurgery, the International Society for Pediatric Neurosurgery. These links represent the opportunity to be involved in national and international research projects like the Chiari Consortium, the Hydrocephalus International Study and the Pediatric Craniovascular Society.

### Conditions Treated:
- Brain and Spine tumors
- Chiari malformation
- Congenital and developmental malformations of the nervous system
- Epilepsy
- Hydrocephalus
- Nervous system vascular lesions
- Pediatric brain trauma
- Spasticity

### Clinical Services Provided:
- Surgical treatment of congenital and developmental lesions of the nervous system [Spina bifida, Chiari Malformation, Cranio cervical spine abnormalities, tethered cord]
- Surgical treatment of brain and spine tumors [Open surgery and endoscopic]
- Surgical treatment of craniosynostosis [skull reconstructive surgery]
- Surgical treatment of epilepsy [invasive monitoring and resection of the brain area producing epilepsy]
- Surgical treatment of hydrocephalus [shunts and endoscopic third ventriculostomies -without shunt]
- Surgical treatment of spasticity [Baclofen Pumps, Dorsal Rhizotomies]
- Surgical treatment of vascular lesions of the nervous system [aneurysms, arterio-venous malformations, Moyamoya disease]

### Publications


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.

PUBLICATIONS

PEDiATRIC ORTHOPEDIC SURGERY

FACULTY
Stephen Albanese, MD, Professor of Orthopedic Surgery and Pediatrics, Department Chairman
Timothy Damron, MD, Professor of Orthopedic Surgery
Danielle Katz, MD, Associate 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

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
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
Michelle Bode, MD, Clinical Assistant Professor of Pediatrics
Boura’a Bou Aram, M.D, Clinical Assistant Professor of Pediatrics
Thomas Curran, MD, Clinical Assistant Professor of Pediatrics
Bonnie Marr, MD, Clinical Assistant Professor of Pediatrics
Beverly Roy, MD, Clinical Assistant Professor of Pediatrics

CLINICAL OVERVIEW
These neonatologists staff the 60 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 department faculty have received national recognition.

**AMERICAN PEDIATRIC SOCIETY**
The following faculty are members of the American Pediatric Society, recognizing their national reputation as academic pediatricians:
- Ann Botash, MD
- Robert Kanter, MD
- Gregory Liptak, MD
- Irene Sills, MD
- Leonard Weiner, MD
- Thomas Welch, MD

**SOCIETY FOR PEDIATRIC RESEARCH**
The Society for Pediatric Research is an elective society which recognizes nationally prominent accomplishments in research by pediatricians. Upstate faculty members include:
- Ann Botash, MD
- Joseph Domachowske, MD
- James Listman, MD
- Scott Schurman, MD
- Thomas Welch, MD

**AMERICAN ACADEMY OF PEDIATRICS, SECTION ON ENDOCRINOLOGY**
Irene Sills, MD - Executive Committee

**AMERICAN BOARD OF PEDIATRICS**
Gregory Liptak, MD – Chair, Neurodevelopmental Disabilities Sub-Board

**THE HELFER SOCIETY**
Ann Botash, MD – President

**THE AMERICAN SOCIETY OF CLINICAL HYPNOSIS**
Ran Anbar, MD - President

**SIGMA XI SCIENTIFIC RESEARCH SOCIETY**
William Kerr, PhD - Member

**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
- Ran Anbar
- John Andrake
- Mirza Beg
- Steven Blatt
- Ann Botash
- Robert Cavanaugh
- Irene Cherrick
- Carl Crosley
- Timothy Damron
- Joseph Domachowske
- Wanda Fremont
- William Hannan
- Gregory Liptak
- Victoria Meguid
- Paul Phillips
- Michael Ratner
- Scott Schurman
- Irene Sills
- Richard Sills
- Zafer Souldan
- Ann Sveen
- Leonard Weiner
- Thomas Welch
- Denise Woodall-Ruff

The following outpatient centers were also included in the Best Doctors list:
- Pediatric and Adolescent Center