



Upstate Golisano Children's Hospital  
Upstate Medical University

# DEPARTMENT OF PEDIATRICS REPORT

January 1, 2017 – December 31, 2017

# **PUBLICATIONS**

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## INTRODUCTION FROM THE CHAIR

I am excited to be sharing with you our department academic report for 2017. This report details the activities of our divisions in clinical care, education, and research. We have an additional annual report to the community, which focuses on the people and facilities of the Upstate Golisano Children's Hospital, as well as some of our patients.

Since our last department report, we have continued to experience significant faculty growth, having welcomed 11 new pediatric or affiliated faculty. This growth has allowed us to expand capacity in most of our clinical programs, as well as undertake a number of new initiatives.

Our rheumatology division, for example, has expanded to include pediatric integrative medicine. Caitlin Sgarlat, DO, division director, is also fellowship trained in integrative medicine. We can now offer a complete array of services to children with chronic pain conditions, anxiety disorders and difficulty coping with the stress of chronic disease. Of course, our two pediatric rheumatologists and their staff continue to care for children with the full spectrum of childhood arthritis and auto-immune disorders.

With the recent opening of our new cancer center, we are now operating a dedicated child-friendly "infusion center" for all children requiring intravenous medications as an outpatient. Staffed with nurses highly trained in IV placement and the use of implanted vascular access, the unit has an on-site physician overseeing therapy. With the wealth of new drugs available for chronic diseases, the center treats children with gastrointestinal, genetic, renal, rheumatologic, immunologic and other conditions. In 2017, the unit provided 2162 treatments.

On the horizon, we are soon to open our pediatric dialysis center for children requiring hemodialysis or peritoneal dialysis. Although we have long offered these services, we now will do so in a new child-only facility. We also have just received approval from New York State to open an eight bed adolescent psychiatry unit, the only such facility in our region. We are also working with New York State to open a 12 bed, inpatient facility for children with dual (mental health and behavioral) diagnoses.

Our education programs continue both to train the next generation of pediatricians, as well as helping all of our regional providers stay up to date with the many advances in child health care. In last year's report, I mentioned our plans to launch Project EHCO. I am excited to report that this initiative is moving forward, and will soon link an extensive network of primary care providers in our region to real-time teleconference subspecialty consultation.

The report also demonstrates the growth in our research programs, with 71 presentations at scientific meetings and 102 publications in peer-reviewed journals. Several of our investigators have received recognition and awards.

This will be my last report as Chair. I will be stepping down in mid-2018 to retire, although I will continue some pediatric nephrology clinical activity in the GCH. I appreciate your support and interest over the past 17 years!

We always welcome and value your feedback. You can continue to keep up with our programs through our newsletter at: <http://www.upstate.edu/gch/education/newsletters.php> or through our website: <http://www.upstate.edu/gch/>.

**Thomas R. Welch, MD**

*Stanley A. August Professor and Chair*  
Department of Pediatrics  
Upstate Medical University

*Medical Director*  
Upstate Golisano Children's Hospital

## DEPARTMENT LEADERSHIP

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We 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 also serves the institution in several educational roles.

Ann is a well-known figure in pediatrics nationally. She has received the Advocacy Award from the Ambulatory Pediatrics Association, is past-president of the Helfer Society, and is a child abuse pediatrician.

**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. As we have grown and expanded into new ambulatory areas, Scott has overseen these as medical director.

**Leonard Weiner, MD** (*weinerl@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. A recent bequest to establish a Pediatric Research Institute has led to further growth in this important area.

The leadership team is supported by Cherlynn Clarry (*clarryc@upstate.edu*), department office manager, Barbara Delaney (*delaneyb@upstate.edu*), assistant to the chair, and Leo Sawyer, business manager. Bonnie Miner, MS, RN, CNS acts as our patient safety officer and is important in coordinating our collaborative safety projects. James Peacock, MS, plays a very important role in the department as Education Program Administrator, especially with residents and medical students.

## PEDIATRICS BY THE NUMBERS

A few pertinent metrics provide a summary of our child health care activity during the period of this review. More detailed information is highlighted further within the clinical snapshot listed at the end of each individual division report.

Measure	2017
Inpatient admissions	5,553
Observation patients	1,496
Total inpatients	7,049
Average length of stay	4.00
Pediatric ED visits	30,825
Admissions from ED	4,595
% of Peds admissions that came from ED	65%
Pediatric outpatient visits	67,930
Pediatric surgery procedures	6,629

## PEDIATRIC CRITICAL CARE

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### FACULTY

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**Neal Seidberg, MD**, Associate Professor of Pediatrics, Division Director<sup>1</sup>

**William Hannan, MD**, Associate Professor of Pediatrics<sup>2</sup>

**Jennifer Zuccaro, MD**, Assistant Professor of Pediatrics

**I. Federico Fernandez, MD**, Associate Professor of Pediatrics

**Robert Newmyer, MD**, Assistant Professor of Pediatrics

**Allison Fahy, MD**, Assistant Professor of Pediatrics

**Ramesh Sachdeva, MD, PhD, JD, MBA**, Professor of Pediatrics<sup>3</sup>

### CLINICAL OVERVIEW

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The Division of Pediatric Critical Care provides comprehensive medical-surgical care for all critically ill children from a 17 county referral area. Patients are cared for in a 15 bed pediatric ICU (PICU) by a multidisciplinary team led by the intensivists. The team consists of dedicated PICU nursing, respiratory therapists, pharmacists, dietitians, and child life personnel. Surgical patients are co-managed with various surgical teams and include, among others, trauma, cardiothoracic, general pediatric surgery, neurosurgery, urology, otolaryngology and orthopedic patients. The PICU has access to a full complement of pediatric sub-specialists.

The faculty of the PICU provide technologically advanced care across the full range of ICU therapies. Available therapies include, but are not limited to, invasive and non-invasive ventilation, ECMO, renal-replacement therapy, invasive cardiovascular monitoring, and neurocritical monitoring.

The division is also responsible for the management of a regional transport system dedicated to bringing critically ill children (non-trauma) from referral hospitals to Upstate Golisano Children's Hospital. The transport team utilizes specially trained nurses and respiratory therapists for this service. Our specialized pediatric transport team allows us to bring the resources and expertise of our Pediatric Intensive Care Unit (PICU) and Upstate Golisano Children's Hospital to critically ill children at other hospitals.

### EDUCATIONAL PROGRAMS

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The division provides a variety of educational programs. We participate in the education of pediatric residents from the Department of Pediatrics. This activity begins with a yearly series of lectures to the residents and continues at the bedside during the 3 months that residents spend in the PICU. We have past pediatrics residents who have successfully training in fellowships for Pediatric Critical Care.

The division also provides training for residents from the Emergency Medicine Residency and fellows from the Pediatric Emergency Medicine Fellowship. Both spend time in the PICU as a part of their education.

The division provides medical student education via an "acting-internship" which allows students to take on many of the responsibilities of pediatric residents. This course exposes students to a broad range of illness and teaches a physiologically based, developmentally appropriate approach to caring for ill children. This course has been very successful despite being new to the medical school and has received significant praise from students. Additionally, Dr. Newmyer has been made co-director for the second-year medical student block covering renal, reproductive and endocrinology systems.

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<sup>1</sup> Dr. Seidberg also serves as Chief Medical Informatics Officer for Upstate Medical University

<sup>2</sup> Dr. Hannan also serves as a member of the Division of Pediatric Rheumatology

<sup>3</sup> Dr. Sachdeva also serves as Senior Vice President of Strategic Affairs for Upstate Medical University

The division also plays a role in educating nurses and other services such as respiratory therapy. We have begun a program using the simulation lab to provide advanced training to nurses and therapists that function as a part of our transport system. The division also oversees a mock code program to provide ongoing readiness training to residents and staff in the Children's Hospital.

## DIVISION HIGHLIGHTS

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Dr. Fahy has been expanding ICU quality programs. She achieved a skin certification and now leads skin rounds in the ICU to continue to support the low levels of skin lesions that develop in our ICU. She has also led the procurement of and agreement to join the Virtual PICU. This is a national data and quality system that facilitates benchmarking against other PICUs across the country. Over the coming year she will be leading the effort to begin the data collection for this system.

Dr. Newmyer continues to lead the transport team. This year the team has worked with IMT and created a computerized system for documenting patient care during the transport. This data, in turn, will help to improve transports by providing actionable data for the team.

Trauma care has continued to improve. The critical care division has worked with the trauma team to ensure the highest level of care for trauma patients in this area. This collaboration has culminated in the successful recertification of both pediatric and adult level one status.

## CLINICAL SNAPSHOT

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- In 2017 the ICU cared for 770 critical care patients (a 4 year record).
- Patients were admitted from the Emergency Department (28%), from the operating room (42%) and from outside of the institution (22%) and other locations.
- During this past year, 67% of patients had a medical diagnosis, 33% had a surgical diagnosis.
- Overall survival to discharge rate was 97.5%.
- Over the last 3 years patients from outside of the hospital have been referred by 40 different institutions.



## EDUCATION PROGRAMS IN PEDIATRICS

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### FACULTY

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#### Vice Chair for Educational Affairs

**Ann S. Botash, MD**, Professor of Pediatrics

#### Graduate Medical Education

**Gloria Kennedy, MD**, Assistant Professor of Pediatrics, Director of Residency Program

**Elizabeth Nelsen, MD**, Assistant Professor of Pediatrics, Associate Director of Residency

**Olamide Ajagbe, MD**, Assistant Professor of Pediatrics, Associate Director of Residency

**Residency Committee**, led by Dr. Kennedy, includes faculty, chief residents and resident representatives from each year

**Pediatric Residency Evaluations and Promotions (PREP) Advisor Committee**, led by Dr. Nelson, includes representative faculty and chiefs

#### Undergraduate Medical Education

**Ann S. Botash, MD**, Professor of Pediatrics, Clerkship Director, Syracuse Campus

**Leann Lesperance, MD, PhD**, Clinical Assistant Professor, Clerkship Site Director, Binghamton Campus

**Jennifer Nead, MD**, Assistant Professor of Pediatrics, Assistant Clerkship Director

**Gregory Scagnelli, MD**, Associate Site Director, Binghamton Campus

**Winter Berry, DO**, Assistant Professor of Pediatrics, University Pediatric and Adolescent Center

**Jaclyn Sisskind, MD**, Assistant Professor of Pediatrics, Upstate Pediatrics Office Site

#### Administrative

**James F. Peacock, MS**, Education Program Administrator

**Patricia Mondore, MA**, Residency Program Coordinator

**Carol Plumley**, Clerkship Assistant, Syracuse Campus

**Melissa Rowley**, Clerkship coordinator, Binghamton Campus

### OVERVIEW

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The education faculty represents a variety of pediatric specialists as well as general pediatricians. The team works closely with residents, chief residents, students and other faculty to ensure attention to the educational needs of our learners, who include students, residents, faculty and staff.

#### Graduate Medical Education

For seventy years, the Department of Pediatrics has maintained a 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. 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 curriculum has prepared residents for fellowship training in subspecialties and careers in primary care pediatrics across the country.

The residency program has a full five-year accreditation from the ACGME with no citations.

**The residency curriculum:**

The curriculum enables residents to become competent in all areas of general pediatrics. In addition, we offer **4 Career Focused Pathways** as choices for residents, allowing them to choose unique experiences for electives that will prepare each resident for their future careers. These pathways are chosen by the end of the intern year and include:

- International/Underserved Pathway
- Primary Care Pathway
- Subspecialty/Fellowship Pathway
- Critical Care/Hospitalist Pathway

Some highlights of the curriculum include:

- **Seminars** – The core curriculum offers an innovative approach to learning. The faculty 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 monitored. Residents participate in a case-based series of seminars for a blended learning experience, including online and in-person. The sessions reinforce and complement the on-line lectures and offer a relevant approach to learning through cases. Residents complete quiz materials online that can be used in preparation for the board examination.
- **Primary care** – Primary care training is based at the University Pediatric and Adolescent Center (UPAC). Residents also have the option of participating in a longitudinal outpatient clinical experience at the Onondaga Nation Clinic during their third year and may choose the Primary Care Pathway to enhance this experience.
- **Critical Care** – The Upstate Golisano Children’s Hospital PICU is the setting for training in Pediatric Critical Care Medicine. Residents provide direct patient care for the sickest children in Central New York, with a wide-range of medical and surgical conditions.
- **Emergency Medicine** – Residents are the front line for children up to 19 years of age who come with medical or surgical emergencies to the area’s only Pediatric Emergency Department. More than 30,000 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 Upstate 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. The program utilizes I-PASS for handoffs and continues to monitor quality of communication.
- **Subspecialties** – The curriculum provides comprehensive training in the pediatric subspecialties. Clinical instruction is available in all the major pediatric medical and surgical subspecialties. Residents are provided with 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. The Subspecialty/Fellowship Pathway provides a more in-depth approach to subspecialties based on resident (and their advisor) choices.
- **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 includes experiences in systems-based care which are embedded in **3 intern rotations as well as an intern-only conference series which provides education and experiences** for a wide range of advocacy skills and community related topics.

- **Teaching Skills for Housestaff** – This monthly seminar series has been offered for over 20 years 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. Residents also have an option of an elective in teaching skills.
- **Evidence Based Medicine/Journal Club** – The housestaff present and participate in a series of conferences designed to analyze recent literature and demonstrate possible effects on practice. These workshops are held once each month and utilize a curriculum in evidence based medicine.
- **Global Health** – Residents and students have the opportunity to participate in international health activities including Medical-Spanish immersion programs in Central America such as AMOS Health and Hope or the Enlace Project in Nicaragua and the Center for Global Health & Translational Science summer opportunities in Ecuador.
- **Research** – Many of our residents participate in active research with faculty. Residents are encouraged to write cases for publication and many manuscripts reported throughout this document were authored or co-authored by our residents and students. Residents and students have an opportunity to pursue international research through the Center for Global Health & Translational Science.
- **Quality Improvement** – All residents are required to complete a quality improvement project prior to graduation. All residents are also members of inpatient quality improvement teams. Most participate in the multidisciplinary Solutions for Patient Safety teams. There is a dedicated Quality Improvement conference series for residents throughout the year. An annual award is presented to the resident whose QI activity had the greatest impact.
- **Resident Teaching Awards** – Residents are honored by the department on an annual basis through student (clerkship) identification of exemplary resident teachers. These are awarded each year at the resident graduation ceremony.

## Undergraduate Medical Education

Our 5-week clerkship provides pediatric education to approximately 160 students every year. Students participate in inpatient (2.5 weeks) and out-patient (2.5 weeks) experiences. Students are assigned to the Syracuse or the Binghamton campus.

Medical students rotating through our pediatric clerkship are assigned to an outpatient program either on-site or in the community. At the Syracuse campus, they are also assigned to one of two teaching inpatient services. The hospitalists in our Inpatient Pediatrics Division oversee the inpatient curriculum.

The clerkship objectives include six domains – Patient Care, Medical Knowledge, Interpersonal Communication skills, Practice Based Learning, Systems Based Practice and Professionalism. Students actively participate in patient care, teaching rounds, evidence based medicine conferences, adolescent conferences and case-based learning. Students provide a reflective narrative regarding professionalism and systems based practice issues that are reviewed by faculty and the Chair and inform discussion. These narratives also form a basis for discovery of the hidden curriculum and cases for resident teaching skills and faculty development.

**Docs for Tots** – Students in the first and second year of medical school are invited to participate in a pediatric club offering seminars, mentoring, physical examination skills rounds and advocacy/fund raising events for children. This program has grown in recent years and generally includes 25-40 students.

**Pediatric Growing Pains Seminars (Peds GPS)** is a series of workshops provided by the education faculty to support fourth year students planning a career in pediatrics.

**Pediatric electives** are offered in all specialties, including “unique” electives and concurrent electives.

## Selected Continuing Medical Education and Scholarly Products

The department offers weekly **Pediatric Grand Rounds** provided to local pediatric healthcare practitioners in the Upstate Golisano Children's Hospital community. One Grand Rounds per month is dedicated to a senior resident morbidity and mortality case conference presentation. Yearly special events include funded visiting professorships provided by nationally recognized invited speakers are also provided.

**Part 2 ABP MOC:** *Evaluating Child Sexual Abuse*, an interactive educational activity for the practitioner about child sexual abuse examination and treatment, was developed by Dr. Ann Botash and provides 20 Part 2 MOC credits.

**Pediatric Hematology/Oncology:** Provides bi-monthly sessions for "Tumor Board" with CME.

**Evaluation Application:** Hi-Pass Student Evaluation Systems is an app for real-time feedback from preceptors to medical students, which is currently in Beta testing. Dr. Botash, author, creative copyright; Developer: AppHammer, Inc.

**Peds Points:** This weblog was developed to support Upstate's pediatric clerkship preceptors as a source for medical education materials and suggestions. The blog offers, "shared wisdom from Upstate's pediatric clerkship" through teaching tips, resources, news and announcements. Student feedback is featured regularly and the URL is [blogs.upstate.edu/pedspoints](http://blogs.upstate.edu/pedspoints).

## EDUCATIONAL OUTCOMES

Graduates of our residency program go on to careers in primary care practice and in academic medicine, in the subspecialties and in general pediatrics. In the past five years, the percentage of residents pursuing academic fellowships has ranged between 20- 60%. These have included all specialties. Our residents have joined primary care practices in the Syracuse area as well as various communities in New York State, around the country and the world. Many have joined academic faculties directly upon completion of the residency. We have recruited between 1-3 chief residents each year.

Our pass rate for the American Board of Pediatrics Certifying Examination (2017) on the first attempt is 83%.

On the NBME subject exam in pediatrics, the total test equated percent correct score mean was 77.2 for Syracuse and 75.7 for Binghamton students for first time test takers. This is in line with the national mean for those taking a 5 week rotation, which was 77.3. Both Syracuse and Binghamton students scored on average within one standard deviation of the national mean for all content areas.

## RESIDENT RESEARCH

Pediatric Residents have the opportunity to participate in research projects with faculty. In 2017, six residents presented posters at national meetings or SUNY Upstate's research events including Beyond the Doctorate Research Day. A list of scientific presentations can be found at the end of the report, organized by division. Residents names are denoted with an asterisk\*.

### Education Budget:

The departmental educational budget, including faculty, staff and other (non-personnel) expenses are just under \$1 million.

### Philanthropic Support:

Several funds are used to support the educational mission including: the Dr. Fredrick Roberts Fund and the Slater Award fund for honoring resident teachers.

## PEDIATRIC EMERGENCY MEDICINE

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### FACULTY

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**Richard M. Cantor, MD**, Professor of Emergency Medicine and Pediatrics, Section Head

**Leah Bennett, MD**, Assistant Professor of Emergency Medicine and Pediatrics

**Tyler Greenfield, DO**, Assistant Professor of Emergency Medicine and Pediatrics, Director of The Pediatric Emergency Department

**Erin Hanley, MD**, Assistant Professor of Emergency Medicine and Pediatrics

**Samantha Jones, MD**, Assistant Professor of Emergency Medicine and Pediatrics

**Alison McCrone, MD**, Assistant Professor of Emergency Medicine and Pediatrics

**Peter Sadowitz, MD**, Associate Professor of Emergency Medicine and Pediatrics

**Asalim Thabet, MD**, Assistant Professor of Emergency Medicine and Pediatrics

**Matthew Thornton, MD**, Assistant Professor of Emergency Medicine and Pediatrics

### FELLOWS

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**William Prince, MD**, Clinical Instructor

**Rhonda Diescher, MD**, Clinical Instructor

**Vincent Calleo, MD**, Clinical Instructor

**Kuldip Sunny Kainth, MD**, Clinical Instructor

### CLINICAL OVERVIEW

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The Division of Pediatric Emergency Medicine provides expertise in pediatric emergency care. This service is dedicated to the children and families of the entire CNY region. Practitioners are experts in the care of any and all acute complaints affecting infants and children, including major and minor trauma, poisonings, burns, psychiatric illnesses, and major medical issues as well.

Specialists in Pediatric Emergency Medicine have completed fellowships in Pediatric Emergency Medicine with board certification under the auspice of both the American Board of Pediatrics and American Board of Emergency Medicine. In addition, the Pediatric Emergency Department maintains an active and ever-growing component of specialists in Pediatric Emergency Nursing, who have developed expertise in the care of ill and injured infants and children. We also provide child life specialist services during our busiest hours.

In August 2016, we moved to our newly designed Pediatric Emergency Department. It contains state-of-the-art Pediatric Emergency equipment, design, and environmental enhancements. Our capacity has increased dramatically (to 22 beds) along with the size of our nursing component.

### DIVISION HIGHLIGHTS

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Our division is ever expanding, actively recruiting other specialists in pediatric emergency care. Our fellowship program is filled for the better part of the next 2 cycles, offering training to candidates who have completed either Pediatric or Emergency Medicine Residency Programs nationwide. We have recently been approved for four fellows by the ACGME.

Dr. Cantor continues to maintain a strong national presence in the field of Pediatric Emergency Medicine. In 2016, he was appointed to national committees on Pediatric Emergency Medicine, Public Relations and Education by the American College of Emergency Physicians. In addition he was chosen as the 2016 NY ACEP Emergency Physician of the Year.

## EDUCATIONAL HIGHLIGHTS

The Division of Pediatric Emergency Medicine presents an Annual Pediatric Emergency Medicine Assembly, held in the early fall in Syracuse. Attendees range from 100 to 150 persons encompassing all levels of pediatric emergency care, including pre-hospital care providers, nurse practitioners, physician assistants, and physicians dedicated to the care of children in our region. This teaching day has been a tradition for 13 years.

In addition the Division of Pediatric Emergency Medicine is responsible for primary education within our field with didactic and simulation training provided to residents in Pediatrics, Emergency Medicine, and Family Medicine as well. We also maintain an active clinical training environment for these aforementioned specialty residents.

## RESEARCH HIGHLIGHTS

All fellows, assisted by Pediatric Emergency faculty, are required to produce original research during their Fellowship.

## GRANTS AND CONTRACTS

None to add

## CLINICAL SNAPSHOT

Total Pediatric ED Visits: . . . . .	30,825
Ambulances per day: . . . . .	18
Daily transfers for health care providers, Urgent Care Centers, and outside ED's: . . . . .	24
Percent of Upstate Golisano Children's Hospital Admissions from the Peds ED: . . . . .	65%

## PEDIATRIC ENDOCRINOLOGY, DIABETES & METABOLISM

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### FACULTY

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**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, Director, Newborn Screening Program for Congenital Hypothyroidism and Congenital Adrenal Hyperplasia

**Susan E. Stred, MD**, Professor of Pediatrics

**Angela Mojica Sanabria MD**, Assistant Professor of Pediatrics

**Aditi Khokhar MD**, Assistant Professor of Pediatrics

### CLINICAL OVERVIEW

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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 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 and physician assistants with a special interest in diabetes care, diabetes educators including diabetes pump educators, dietitians and an exercise physiologist. This multidisciplinary team provides care to children with type 1 and type 2 diabetes mellitus. On a consultative basis, we have support from adult and pediatric psychologists. In 2012 we received NCQA Recognition for Diabetes Care. This recognition underscores the superlative diabetes care we provide our patients.

We are able provide pediatric DXA scanning and consultations on patients at risk for osteoporosis.

Dr. Sue Stred has a special interest in the endocrinologic care of 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.

Dr. Lauren Lipeski is an experienced pediatric endocrinologist who directs our Endocrine Specialty Center for Congenital Hypothyroidism and Congenital Adrenal Hyperplasia. She has an interest in all aspects of pediatric endocrinology.

Drs. Angela Mojica is an expert in general pediatric endocrinology and diabetes and is participating in two clinical trials. She is creating a transition program for our 16-21 year old patients with type 1 diabetes to our adult practice at Joslin Diabetes Center.

### EDUCATIONAL PROGRAMS

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The pediatric endocrinology faculty are involved in a variety of educational activities. Our faculty provide several lectures to the pediatric housestaff each year. In addition, pediatric residents and medical students rotate through our outpatient clinical practice. We also provide educational opportunities to our residents in the adult endocrinology fellowship program.

## COMMUNITY CONTRIBUTIONS

Our staff has provided support to Camp Aspire, a camp for children with diabetes, each summer for one week as part of the medical staff and instructs medical students and residents who attend.

Each Fall we have a School Nurses' Diabetes Teaching Day directed to the school nurses in the 24 counties to which we provide care.

Our team also participates in the JDRF Walk each Fall.

## RESEARCH HIGHLIGHTS

Dr. Izquierdo's research interests lie in type 1 and 2 diabetes mellitus, thyroid nodular disease and thyroid cancer. Dr. Izquierdo was 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. He has conducted research and published in areas of thyroid nodular disease and thyroid cancer.

Dr. Mojica is also involved in clinical trials. She is the principal investigator for our site in TrialNet Protocol TN20 exploring immune effects of oral insulin in relatives at risk for type 1 diabetes mellitus. She is also participating in a trial studying the effect of continuous glucose monitoring in teens and young adults with type 1 diabetes.

## GRANTS AND CONTRACTS

2017: CITY Trial – Continuous glucose monitoring in teens and young adults with type 1 diabetes.

## CLINICAL SNAPSHOT

Children in the diabetes mellitus program: . . . . .	~ 1200
Children with new onset diabetes seen in 2017: . . . . .	>100
Children followed with congenital hypothyroidism: . . . . .	~ 200
Children with diagnosed congenital hypothyroidism in 2017: . . . . .	50
Children with congenital adrenal hyperplasia who are actively followed: . . . . .	~ 60
Children with septo-optic dysplasia who are actively followed: . . . . .	~ 60



# PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION

## FACULTY

**Prateek Wali, MD**, Associate Professor of Pediatrics, Division Chief

**Marcus Rivera, MD**, Associate Professor of Pediatrics

**Mirza Beg, MD**, Associate Professor of Pediatrics

**Manoochehr Karjoo, MD** Professor of Pediatrics, Director Emeritus

**Aamer Imdad, MD**, Assistant Professor of Pediatrics

## CLINICAL OVERVIEW

The division of pediatric gastroenterology, hepatology and nutrition is comprised of 5 board certified pediatric gastroenterologists, who provide comprehensive outpatient and inpatient care for children with disorders related to the gastrointestinal and hepato-biliary systems. Our team also includes dedicated nursing staff, working alongside a division-dedicated dietician to provide multidisciplinary care to a growing number of children. This expertise and teamwork allows us to provide our patients an exceptional level of personalized care and treatment.

Patients are seen in the outpatient GI offices located on the 5th floor of the Physician's Office Building. Inpatients are cared for both in the Upstate Golisano Children's Hospital and the Crouse Hospital Neonatal Intensive Care Unit. Endoscopic services are provided in the Center for Children's Surgery.

Examples of disorders that we treat include:

- Allergic Colitis
- Celiac Disease
- Constipation
- Diarrhea
- Encopresis
- Eosinophilic Esophagitis (EOE)
- Eosinophilic Gastrointestinal Disorders (EGIDs)
- Failure to Thrive (FTT)
- Food Allergy
- Gastroesophageal Reflux (GER)
- Helicobacter Pylori (H. Pylori) infection
- Hepatitis B Virus (HBV) and Hepatitis C (HCV) infection
- Hyperbilirubinemia and Jaundice
- Inflammatory Bowel Disease
  - Crohn's disease
  - Ulcerative colitis (UC)
- Irritable Bowel Syndrome (IBS)
- Stomach and Duodenal Ulcers
- Stomach Pains
- Short Bowel Syndrome (SBS)
- Total Parenteral Nutrition (TPN)

The division also operates an expanding Intestinal Failure/Short Bowel Syndrome (SBS) and TPN management program under the supervision of Dr. Rivera. Working with home care providers and outpatient pharmacies, we now provide comprehensive multidisciplinary gastrointestinal, nutrition, and surgical care to these complex patients.

Dr. Wali is the director of our pediatric inflammatory bowel disease program (IBD). Our division is also now an active participant in ImproveCareNow (ICN), a national collaborative effort focused on managing pediatric patients with IBD. As a burgeoning Center of Excellence and one of only 4 children's Hospitals in New York to participate in this effort, we are proud to offer our families of children with IBD a unique, comprehensive, state of the art approach to IBD care.

## EDUCATIONAL PROGRAMS

The gastroenterology faculty are involved in a variety of educational activities. The pediatric residency lecture series, provides the fundamental knowledge basis for recognizing and treating common GI diseases. In addition, faculty members provide residents and medical students pathways to understanding the pathophysiology, diagnosis and management of most gastrointestinal and liver diseases seen in pediatrics.

Medical students at the SUNY Upstate Medical University have the option for an elective rotation in the division, which has become a favorite among students and has historically excellent reviews. The faculty also serves as mentors and faculty advisors to those students who elect to rotate through the division.

Resident physicians from the Golisano Children's Hospital program participate in a required clinical rotation in our inpatient service, called the Karjoo Service. They may also opt to do a clinical elective in our outpatient office. For many, this month-long rotation inspires them to pursue this specialty as a career. There are also opportunities to participate in clinical academic projects and potential for publications in peer-reviewed journals and presentations at local and national meetings. We have increasing participation in IBD research as part of the ICN collaborative.

## RESEARCH HIGHLIGHTS

The division's clinical program for children with inflammatory bowel disease (IBD), under the supervision of Dr. Wali, has generated a number of research studies. The Protect Trial is an NIH-sponsored multicenter program examining the diagnosis and management of ulcerative colitis in children, which is now completed and published. Dr. Wali is also collaborating with Dr. Kerr studying the role of SHIP expression in children with IBD. Also, as above, our involvement in the ICN program has enabled us to actively participate in COMBINE, a multi-centered, double blind study to evaluate the use of Methotrexate v. placebo in children with IBD on biologic therapy. The division has been awarded a grant through the Children's Miracle Network to fund a parents' support group, which is an integral part of the care of our Inflammatory Bowel Disease patients. The Children's Miracle Network has also funded a pilot study by Dr. Wali on a novel fecal biomarker for management of children with IBD. We are also participating in two industry sponsored studies this year.

## CLINICAL SNAPSHOT

Outpatient Visits: . . . . .	7003
Inpatient Visits: . . . . .	953
Total Procedural Activity: . . . . .	1035

## GENERAL PEDIATRICS

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### FACULTY

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**Steven Blatt, MD**, Professor of Pediatrics, Director, General Pediatrics, Associate Professor, Syracuse University College of Law (courtesy appointment)

**John Andrade, MD**, Associate Professor of Pediatrics, Director, Pediatric Hospitalist Program

**Janice Bach, MD**, Assistant Professor of Pediatrics

**Winter Berry, DO**, Assistant Professor of Pediatrics

**Ann S. Botash, MD**, Distinguished Teaching Professor, Pediatrics, Vice Chair for Educational Affairs<sup>1</sup>

**John Friedman, MD**, Clinical Professor of Pediatrics and Psychiatry

**Robert Hingre, MD**, Assistant Professor of Pediatrics

**Travis Hobart, MD**, Assistant Professor of Pediatrics and Public Health

**Tobey Kressel, MD**, Assistant Professor of Pediatrics

**Megan Pinnamaneni, MD**, Assistant Professor of Pediatrics

**Elizabeth Nelsen, MD**, Assistant Professor of Pediatrics, Associate Director, Pediatric Residency

**Joseph Nimeh, MD**, Assistant Professor of Pediatrics

**Jenica O'Malley, DO**, Assistant Professor of Pediatrics

**Alicia Pekarsky, MD**, Assistant Professor of Pediatrics

**Ronald Saletsky, PhD**, Associate Professor of Psychiatry and Pediatrics

**Ellen Schurman, MD**, Assistant Professor of Pediatrics

**Andrea Shaw, MD**, Assistant Professor of Pediatrics

**Jaclyn Sisskind, MD**, Assistant Professor of Pediatrics

**Anne Sveen, MD**, Assistant Professor of Pediatrics

**Karen Teelin, MD**, Assistant Professor of Pediatrics

**Howard Weinberger, MD**, Professor Emeritus of Pediatrics

### CLINICAL OVERVIEW

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Clinical activities occur in the term newborn nursery at Crouse Hospital and General Pediatrics at Upstate Pediatrics, a busy four-pediatrician practice in Baldwinsville, NY, and at University Pediatric and Adolescent Center (UPAC) in Syracuse, a Level 3 NCQA Patient Centered Medical Home.

The Division provides a wide array of services to children, adolescents and families, including well child and adolescent care, and acute episodic and chronic disease care. Special programs include:

- ENHANCE Services for Children in Foster Care which provides primary and comprehensive health care services to children in Onondaga County DSS custody.
- The CARE (Child Abuse Referral and Evaluation) Program, through its offices at the McMahon Ryan Child Advocacy Center, provides medical evaluations for children who are suspected to be maltreated or abused.

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<sup>1</sup> Dr. Botash also serves as Senior Associate Dean, Faculty Affairs and Faculty Development

- The Adolescent Medicine Consultation and Primary Care Clinic offers primary and specialty care to patients 11 to 21 years of age. A-GEMS or Adolescent Gender Medical Services provides care to gender minority adolescents.
- The Syracuse Medical-Legal Partnership (SMLP) is a Medical-Legal Partnership between the University Pediatric and Adolescent Center (UPAC) of University Hospital, SUNY Upstate Medical University and the Children's Rights and Family Law Clinic (CRC) and Family Law and Social Policy Center (FLSPC), Syracuse University College of Law.
- The Pediatric International Health Clinic was started in July 2005 in order to focus on the needs of the more than 1000 new Americans arriving annually in Central New York.
- The Central /Eastern New York Lead Poisoning Resource Center is funded by the New York State Department of Health.
- Healthy Steps for Young Children: Enhanced Ambulatory Care was implemented in 2016. Focusing on decreasing the effects of adverse childhood experiences, this developmentally based model of care uses a dedicated Social Worker to work with parents and the care team to enhance child development activities.
- The Early Childhood Alliance of Onondaga County is an organization with the primary goal of improving school readiness in our county through a wide range of collaboration and programming, including Talking is Teaching campaign to encourage parents to talk, read and sing with their children from birth in efforts to "boost their children's early brain and vocabulary development through simple, everyday actions."

## GRANTS AND CONTRACTS

**Botash, AS** (PI) Child Abuse Medical Provider (CHAMP) Education Initiative, Education and Network of NYS Physicians, Nurse Practitioners and Physician Assistants. Rape Crisis Program (CHAMP). NYS DOH. July 2015-2020.

Botash AS with Pekarsky, AR Contract with McMahon/Ryan Child Advocacy Center for medical direction, October 1, 2017 to September 30, 2018.

**Berry, W** (PI), **Blatt SD** (Co-PI). Healthy Steps for Young Children. Enhanced Ambulatory Care grant via NY State OMH. September 2016- August 2019.

Glatt SJ (PI), Faraone SV (PI), **Blatt SD** (site investigator) Longitudinal Family/Molecular Genetic Study to Validate Research Domain Criteria.

Polhemus, M., **Shaw, AS**, Asiago-Reddy, E, Lupone, C., et al. SUNY Performance Improvement Fund -- Virtual Applied Learning: SUNY in Kenya / Project 291. Planning Grant. January 1, 2018 - December 31, 2019.

O'Malley, JO. American Academy of Pediatrics, Project I-SCRN (Improving Screening, Connections with families and Referral Networks) to improve developmental screening practices and referral tracking.

**Shaw, AS** and Stewart, T (Co-PIs). SUNY Performance Improvement Fund -- Refugee Health in Our Community - A Local Service Learning Experience in Global Health/ Project 290. January 1, 2018 - December 31, 2019.

**Weinberger HL, Hobart TR** NY State Dept of Health for the Central / Eastern Lead Poisoning Resource Center. January 2017-2022.

## CLINICAL SNAPSHOT

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<b>General Pediatrics</b> Outpatient visits: . . . . .	27,381
<b>Adolescent</b> Outpatient visits: . . . . .	1,200
<b>CARE</b> Outpatient visits: . . . . .	185
<b>Enhance</b> Outpatient visits: . . . . .	713
<b>Upstate Pediatrics</b> Outpatient visits: . . . . .	15,575

## PEDIATRIC CLINICAL GENETICS

### FACULTY

**Robert Roger Lebel, MD**, Professor of Pediatrics, Obstetrics/Gynecology, Internal Medicine and Pathology, Section Chief of Genetics, Lecturer in Bioethics and Humanities

**Joan Pellegrino, MD**, Associate Professor of Pediatrics

### CLINICAL OVERVIEW

The Division of Clinical Genetics is comprised of two specialty programs which include medical genetics, providing genetic evaluations and counseling for adults and young children, and the metabolic program.

The Inherited Metabolic Diseases Specialty Center provides consultation and management of individuals with inborn errors of metabolism. We are a New York State Newborn Screening Referral Center providing evaluation of infants with abnormal newborn metabolic screens in our catchment area. The center also has a lysosomal storage program for evaluation of individuals and management of enzyme replacement therapies.

Patients are seen in the Center for Development, Behavior, and Genetics which is housed on the lower level of the Physician's Office Building.

### EDUCATIONAL HIGHLIGHTS

Dr. Robert Roger Lebel lectures regularly to groups outside the department, including: Medical Technology students (ethical issues in genetics) and Speech Therapy students at Syracuse University (genetic underpinnings of syndromes). He teaches as a group discussion leader for the MSI course in medical ethics and has 1-3 rising MS2 students for summer research each year. Dr. Lebel lectures on syndrome recognition to the MS3 students in their pediatrics clerkship and has 1 or 2 MS2 students under his tutelage for an elective course each of the 12 periods of the academic year. He participates in the genetics and development rotation for the PLI residents.

Dr. Joan Pellegrino teaches first year medical school courses including, Practice of Medicine and Foundation of Reasoning in Medicine. She also instructs third and fourth year students as they rotate through genetics. Dr. Pellegrino is involved in teaching pediatric residents during rotations in genetics and is on the Pediatric Residency Evaluation and Promotion committee. The Metabolic Center also sponsors 1-2 educational programs per year for the families of patients with Phenylketonuria.

### GRANTS AND CONTRACTS

#### **Pellegrino J**

Lysosomal Storage Disease Registry Program. Sponsor: Genzyme Therapeutics. PI. 2009-present.

Hunter Syndrome Disease Registry Program. Sponsor: Shire. PI. 2013-present.

#### **Lebel RR**

New York State Department of Health. New York State Clinical Geneticists and Genetic Counselor. The Genetics Program of Central New York. PI. 2014-2019.

### CLINICAL SNAPSHOT

Outpatient visits: . . . . .	1226
Children followed in metabolic disease program: . . . . .	235

## PEDIATRIC HEMATOLOGY/ONCOLOGY

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### FACULTY

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**Melanie Comito, MD**, Professor of Pediatrics, Division Director, Pediatric Hematology/Oncology Division

**Amy Caruso Brown, MD, MSc, MSCS**, Assistant Professor of Pediatrics, Bioethics and Humanities

**Irene Cherrick, MD**, Associate Professor of Pediatrics; Medical Director, C.H.O.I.C.E.S Pediatric Palliative Care Program

**Andrea Dvorak, MD**, Assistant Professor of Pediatrics; Director, Pediatric Comprehensive Hemophilia Center

**Gloria Kennedy, MD**, Assistant Professor of Pediatrics; Director, Pediatric Dubowy Brain Tumor Center; Program Director, Pediatric Residency Program

**William G. Kerr, PhD**, Professor of Pediatrics and Microbiology & Immunology; Murphy Family Professor of Children's Oncology Research

**Philip Monteleone, MD**, Assistant Professor of Pediatrics; Principal Investigator, Children's Oncology Group Activities

**Kathryn Scott, MD**, Assistant Professor of Pediatrics, Director, Pediatric Sickle Cell Comprehensive Care Center

**Jody Sima, MD**, Assistant Professor of Pediatrics; Director, Survivor Wellness Center

### CLINICAL OVERVIEW

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The Division of Pediatric Hematology and Oncology provides care for children, adolescents and young adults with oncologic and hematologic disorders as well as childhood cancer survivors. In addition to serving the greater Syracuse area, we also provide care to the 17 surrounding counties in Central New York. Our program is the regional sickle cell center as well as the regional hemophilia and bleeding disorders treatment center. Consultative services are available immediately for primary care physicians.

Outpatient care is provided in the Waters Center for Children's Cancer and Blood Disorders located in the Upstate Cancer Center which opened in 2014. The clinic is located on the third floor in a designated space designed for children. The Outpatient Infusion Center is also located in this facility and services all pediatric subspecialty patients. The physicians of the division are ready available to care for any infusion-related reactions for all children in the Center. A pediatric nurse practitioner is onsite and helps in the supervision of the care of the other subspecialty infusion patients.

Inpatient care is provided in a dedicated unit in the Upstate Golisano Children's Hospital. This dedicated unit and nursing staff provides care for children receiving care for cancer and blood disorders. We also provide care for children undergoing autologous stem cell transplants, immunotherapy, and other biotherapy treatments. Consultative services are available throughout Upstate Golisano Children's Hospital and is also available to the infants in the Neonatal Intensive Care Unit of Crouse Hospital.

The Center for Children's Cancer and Blood Disorders is an active member of the **Children's Oncology Group (COG)**. COG is an international clinical trials group supported by the National Cancer Institute and is the world's largest organization devoted exclusively to pediatric cancer research. This allows us to provide the most current therapy while keeping the children and their parents close to the support of family and friends at home. These trials include frontline treatment for many types of childhood cancers, studies aimed at determining the underlying biology of these diseases, and trials involving new and emerging treatments, supportive care, and survivorship. Our participation in the COG also allows us to contribute to the steady improvement in therapies that is now allowing nearly 80% of children diagnosed with cancer to survive.

Our pediatric hematology/oncology program is committed to quality which is measured by our commitment to best practices, outcomes, and our ability to prevent infections. A formal chemotherapy safety program has been implemented to aid in the establishment of standardized procedures and event tracking. We hold multidisciplinary pediatric tumor boards that meet twice monthly to discuss our patients in active treatment. A separate multidisciplinary neuro-oncology tumor board is held on a monthly basis. Ongoing quality projects include measurement of time to antibiotics for patients with febrile neutropenia, tracking of seasonal influenza vaccination rates for our active chemotherapy and sickle cell patients and working with our Children's Hospital Safety team on the tracking of our CLABSI rates in the pediatric oncology/SCT population.

The **Dubowy Brain Tumor Center** is a multidisciplinary neuro-oncology program. The center is directed by Dr. Gloria Kennedy. The focus of the center is a dedicated clinic that is focused on the pediatric brain tumor survivor with support from the educational specialist, family therapy, and social worker. There is additional support for patients from close collaborations with pediatric neurology, pediatric neurosurgery, radiation oncology and pediatric endocrinology. The visits focus not only on the medical care and management of long term complications but also on the psychosocial and educational needs of these unique and rapidly growing group of patients. It has been well recognized that the management of children with pediatric brain and spinal cord tumors is complex and requires a special multidisciplinary team. With the addition of Dr. Melanie Comito, who brings 16 years of experience in pediatric neuro-oncology, the mission has been expanded to treat all pediatric neuro-oncology patients in the context of a specialized program.

Our **Comprehensive Sickle Cell Treatment Program** is a state-designated center providing care to children and adolescents with sickle cell disease. The program staff is responsible for the care of all infants identified in our region by New York State's newborn screening program. Throughout the continuum of care of childhood, the care is focused on the prevention and treatment of complications. Under the guidance of Dr. Kathryn Scott, a multidisciplinary clinic is held with involvement by a dedicated nurse coordinator, educational specialist and social work support.

Our **Survivor Wellness Center** provides comprehensive follow-up care, into adulthood, for all children, adolescents and young adults who have successfully completed their cancer therapy. Great advances in the detection and treatment of childhood cancers are helping thousands of children live longer and become long term survivors, however treatments such as radiation or chemotherapy that were used to cure the cancer have impacted the lives of survivors in many ways including physically, socially, cognitively, vocationally, spiritually, and financially. The Survivor Wellness Program educates patients about their disease and its treatment, promotes preventive medicine and provides ongoing consultation with the patients' primary care providers. We also strive to improve treatment of childhood cancers as well as management of long-term complications of therapy through clinical and laboratory research. As part of the national Children's Oncology Group, the staff networks with similar programs around the world. We are able to provide information gained from the most recent clinical studies, and also contribute to scientific knowledge by performing original research.

## EDUCATIONAL PROGRAMS

The clinical faculty are involved in a variety of educational activities including teaching medical students in their third year pediatric clerkship as well as offering popular acting internships for fourth year medical students interested in a career in pediatrics. There is also an outpatient elective available to fourth year medical students.

The pediatric residents rotate on the inpatient clinical service during their second year. Electives in outpatient are available for pediatric residents as well. The clinical faculty regularly participate in providing lectures to the residents as well as participate in Pediatric Resident Journal Club on topics within the field. We have had a number of residents continue their education with fellowships in Pediatric Hematology & Oncology.

Dr. Brown teaches a number of undergraduate medical student courses in bioethics. She also provides Case-Based Professionalism Education for Internal Medicine Residents and Fellows. She is the co-director of a course called Foundations of Reasoning in Medicine. Drs. Scott and Monteleone both serve as facilitators for this course.



## RESEARCH HIGHLIGHTS

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All of the pediatric oncologists participate in clinical trials with the Children's Oncology Group and regularly enroll patients in these international clinical trials.

Dr. Brown's interest include decision making, provider-family communication, use of social media in healthcare, bioethics education, access to pediatric oncology and pediatric palliative care in resource-limited settings.

Dr. Cherrick's interests include supportive care in Pediatric Oncology patients and Palliative care in Oncology patients.

Dr. Melanie Comito brings expertise in pediatric neuro-oncology, pediatric stem cell transplant therapies, as well as work in post-graduate education in pediatric hematology/oncology. She is the institutional primary investigator for the NEXT consortium protocols for young children with aggressive brain tumors. She has participated in collaborative efforts in innovative therapies for infants with malignant brain tumors as well as studies in diffuse intrinsic pontine gliomas. Along with Dr. Amy Brown, she has a research protocol on vaccine retention after treatment for childhood cancer.

Dr. Dvorak is involved in the CDC's Public Health Surveillance for Bleeding Disorders project and the My Life, Our Future project, both of which are studying a population of children with bleeding disorders. Additional interests are in quality improvement, with a special focus on central line associated infections and hospital acquired thrombosis.

Dr. Kennedy has interest in brain tumors including those occurring in children with NF-1 and Tuberous Sclerosis. In her dual role as the Pediatric Residency director, she is also currently looking at validity of outcomes measures (board pass rates) as assessment of residency programs.

Dr. William Kerr has a distinguished research program related to the role of SHIP expression in a variety of biologic functions. This work has significant impact for pediatric cancers.

Dr. Monteleone is interested in clinical Pediatric Oncology research. One of his first goals is to improve access to clinical trials. In his previous job, he helped develop an Adolescent and Young Adult cancer program and looks forward to beginning the process here.

Dr. Scott's interests are in pediatric hematology. This includes the treatment of children with various hemoglobinopathies including the directorship of the Comprehensive Sickle Cell Center. Her interests in Thalassemia care has led to participation in the Mid-Atlantic Regional Thalassemia Group.

Dr. Sima has expertise in pediatric solid tumor multidisciplinary management. As director of the Survivor Wellness Clinic, her interests include cancer survivorship and long term complications of cancer treatment including infertility.

## GRANTS AND CONTRACTS

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### **Comito, MA**

St Baldrick's Foundation: Infrastructure Grant 2017/2018, Principle Investigator.

Novartis VEGII673I: A Phase II Trial of Pazopanib NSC#737754 in Children with Refractory Solid Tumors, Principle Investigator, SUNY Upstate Medical University

Incyte INCB I8424-269: A Phase 2 Study of the JAK1/JAK2 Inhibitor Ruxolitinib with Chemotherapy in Children with *De Novo* High-Risk CRLF2-Rearranged and/or JAK Pathway-Mutant Acute Lymphoblastic Leukemia, Principle Investigator, SUNY Upstate Medical University

Sponsor: NACHO – North American Consortium for Histiocytosis, St. Jude's Children's Research Hospital: LCH-IV – International Collaborative Treatment Protocol for Children and Adolescents with Langerhans Cell Histiocytosis, Principle Investigator, SUNY Upstate Medical University

Sponsor: NEXT Consortium, Nationwide Children's Hospital: Head Start 4: Newly Diagnosed Children (Less than 10 Years Old) With Medulloblastoma and Other Central Nervous System Embryonal Tumors. Clinical and Molecular Risk-Tailored Intensive and Compressed Induction Chemotherapy Followed by Consolidation with Randomization to either Single-Cycle or to Three Sequential Cycles of Marrow-Ablative Chemotherapy with Autologous Hematopoietic Progenitor Cell Rescue, Principle Investigator, SUNY Upstate Medical University

**Dvorak, A**

Mount Sinai School of Medicine: Hemophilia Treatment Centers.

Mount Sinai School of Medicine: Community Counts: Public Health Surveillance for the Bleeding Disorders.

**Monteleone P**

Several Subawards and Work Orders/contracts with Children's Oncology Group. Principle Investigator.

## CLINICAL SNAPSHOT

Outpatient visits: . . . . .	6433
Inpatient encounters: . . . . .	3430
Infusion center encounters: . . . . .	2162
New Oncology Patients: . . . . .	69
Autologous stem cell transplants: . . . . .	7

## PEDIATRIC HOSPITAL MEDICINE

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### FACULTY

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**John S. Andrade, MD**, Associate Professor of Pediatrics, Division Director

**Olamide A. Ajagbe, MD**, Assistant Professor of Pediatrics

**Matthew Mittiga, DO**, Assistant Professor of Pediatrics

**Jennifer A. Nead, MD**, Assistant Professor of Pediatrics

**Heidi Ochs, DO**, Assistant Professor of Pediatrics

**Melissa Schafer, MD**, Associate Professor of Pediatrics

**Manika Suryadevara, MD**, Associate Professor of Pediatrics

**Thomas R. Welch, MD**, Professor and Chair of Pediatrics

### CLINICAL OVERVIEW

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The Division of Pediatric Hospital Medicine provides comprehensive care for children from newborns to young adults up to age 20 requiring inpatient medical care. The division provides care for a variety of disorders, acute and chronic, with general and subspecialty needs. Common conditions on the inpatient service include: acute and chronic respiratory illnesses, gastrointestinal disorders, infectious diseases, rheumatologic and cardiac conditions, neurological and psychological concerns. The faculty provides direct care and coordination of care for medically complex patients while they are inpatients. The division also provides consultative care for patients on surgical and medical subspecialty services.

Our inpatients are cared for in the General Pediatric Units of the Upstate Golisano Children's Hospital by teams that include Pediatric Hospitalists, residents, medical students and nurse practitioners. The care is enhanced with the assistance of dedicated pediatric case managers, social workers, pharmacists, child life specialists, and art and music therapists.

### EDUCATIONAL HIGHLIGHTS

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Hospital Medicine faculty are involved in a variety of educational activities. The division is responsible for all the inpatient educational activities for the students on the pediatric clerkship. Medical students are an integral part of the inpatient teams. Dr. Nead serves as the Clerkship Director and oversees all educational aspects, and in addition has developed a project involving peer assessments of oral presentations.

The faculty is also responsible for teaching the fourth year medical students, on their Inpatient Pediatric Acting Internship, a rotation for most medical students who go on to pursue pediatric residencies and some with interests in Family Medicine.

All three years of Pediatric residents have required rotations on the Inpatient Service. Dr. Ajagbe serves as an Associate Program Director for the Residency Program. The faculty provides the inpatient education and evaluation of each of the residents. Residents have also opted to take additional Hospital Medicine electives to hone their skills in the care of pediatric inpatients.

The division is responsible for handoff education. This has more recently been developed through "PRACTICE". **PRACTICE** stands for **Provider Resilience And Communication Training In Clinical Environments**. Our mission statement is to "empower providers to be effective clinician leaders through practice of communication, quality improvement, and resilience skills." The PRACTICE Committee is organized into three domains: *Patient Handoffs/Teamwork, Communication (includes challenging clinical encounters/inclusion and diversity)*, and *Resilience*. Four pediatric faculty members (representing inpatient (**Mide Ajagbe** and **Jennifer Nead**), outpatient, and intensive care divisions) and eight pediatric

residents serve as committee members. All members are dedicated to improving pediatric patient care through provider educational sessions (e.g. workshops and lectures) and scholarly activity projects (e.g. QI and medical education research).

This past year, PRACTICE put on 3 workshops: March into Residency workshop for fourth year medical students on I-PASS Handoffs and Peer Feedback (March 2017), Pediatric Intern Orientation workshop on I-PASS Handoffs (June 2017) and Pediatric Residency Workshop on Medical Disclosures (September 2018).

Division faculty regularly participate in the Monthly Morbidity and Mortality Conferences.

Dr. Nead was selected to join the AAP APEX (Advancing Pediatric Educator eXcellence) Teaching Program: 2017-2018 Educator Class

## RESEARCH HIGHLIGHTS

Members of the division have participated in research projects in student education that have been presented locally and regionally. In addition, Dr. Nead has collaborated with other institutions on antibiotic use in skin and soft tissue infections and in Staph scalded skin syndrome.

Others have presented case presentations at Pediatric Hospital Medicine National Conferences.

We have also participated in projects involving pediatric sepsis and blood culture positivity. The faculty are members of the Pediatric Research in Inpatient Settings (PRIS) Network and the Quality Improvement and Innovation Network (QuIIN).

## DIVISION HIGHLIGHTS

The division has been actively involved in patient safety. Each member of the Division leads a team, which focus on eliminating patient harm. We participate in the Children's Hospitals' Solutions for Patient Safety Children's Network, which is a network of Children's Hospitals across the US and Canada. This collaborative addresses catheter associated UTIs, injuries from falls and immobility, pressure injuries, catheter associated blood stream infections, Peripheral IV infiltration and extravasations, ventilator-associated events, venous thromboembolism, and adverse drug events. In addition, Dr. Schafer has serves as the department's Quality and Safety Officer. She leads a group that oversees Pediatric Sepsis and Septic Shock. She has worked on this at the local and state level. She was chosen to serve on the Children's Hospital Association expert advisory panel for Improving Pediatric Sepsis Outcomes and was invited to join the Association's Quality and Safety Leader's Forum.

Dr. Nead is a faculty member of the Golisano Children's Hospital Family Advisory Council. Dr. Nead has been named a member of the 2018 cohort of the American Academy of Pediatrics "Advancing Pediatric Educator Excellence Teaching Program". This is a national recognition for one of our top educators. It will provide Jennifer with even more experience and mentoring in pediatric education.

## CLINICAL SNAPSHOT

Inpatient visits: ..... 11,565

## PEDIATRIC INFECTIOUS DISEASES

### FACULTY

**Leonard B. Weiner, MD**, Professor of Pediatrics, Pathology and Family Medicine, Division Director, Pediatric Infectious Diseases, Pediatric Infectious Disease Fellowship Program Director

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

**Jana Shaw, MD, MPH**, Associate Professor of Pediatrics and Public Health

**Manika Suryadevara, MD**, Associate Professor of Pediatrics

### CLINICAL OVERVIEW

The Division of Infectious Diseases provides care for infants, children and adolescents with severe or unusual infections and immune deficiency syndromes, including HIV. 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/Adolescent HIV Center of Excellence, we provide medical care for children, adolescents and young adult 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 setting located in the Golisano Children's Hospital. Patients referred by their primary care physicians for infectious disease and immunologic diagnostic evaluations or who need intravenous antibiotics and immunoglobulin infusions are cared for in this Center. Follow-up evaluations on recently hospitalized infectious disease patients also take place in this setting. Additionally, as a NYSDOH designated Newborn Referral Center for SCIDS screening, we provide immediate evaluations for those newborns with positive screens.

Hospitalized patients are evaluated upon the request of their physicians at Golisano Children's Hospital and the Crouse NICU. Our infectious disease specialists work closely with primary care pediatricians, 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 New York State Department of Health Pediatric Designated AIDS Center/Specialty Care Center in the region. This program has also received a Center of Excellence designation and is funded by the New York State Department of Health. The Division of Infectious Disease is also a NYSDOH-designated newborn screening center for evaluation of T-cell lymphopenia disorders/SCIDS and has received a Center of Excellence designation.

The Pediatric Infectious Disease Division has oversight responsibilities for the Infection Control and Antimicrobial Stewardship Programs at Upstate Golisano Children's Hospital and for the Infection Control activities at the Crouse NICU.

The Pediatric Infectious Disease Division has an accredited fellowship program that accommodates one postgraduate resident a year. The focus of this sub-specialty education is research and clinical care. The fellowship has a full five-year accreditation from the ACGME with no citations.

### RESEARCH HIGHLIGHTS

A major effort of the infectious disease physicians is direction and participation in multi-centered, national and international clinical trials to evaluate the safety and efficacy of new pharmacologic agents and vaccines for children and adolescents. Specifically, Dr. Weiner currently supervises protocols to evaluate novel anti-infective therapies and multiple clinical vaccine trials. Studies involving newer meningococcal, pneumococcal, influenza, DTAP/Hib/IPV and MMRV vaccines are currently underway. Vaccine trials take place at The University Pediatric and Adolescent Center and other primary care sites.

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. Laboratory studies are ongoing to identify anti-RSV compounds of promise to move in to human clinical trials. Dr. Domachowske's clinical and epidemiologic trials include Respiratory syncytial virus (RSV) related protocols on disease pathogenesis, RSV vaccines and a series of trials aimed at the development of a maternal immunization research program. Ongoing clinical trials are addressing the potential benefit of giving RSV vaccines during pregnancy in an effort to protect the newborn, and on the evaluation of the safety and effectiveness of several different extended half-life RSV neutralizing monoclonal antibodies when given as a single dose. Additionally, Dr. Domachowske directs the Maternal-Child and Pediatric Health Program for the institution's Center for Global Health and Translational Sciences. He is currently overseeing an NIH-sponsored Zika vaccine trial in Machala, Ecuador while also studying the effects of tropical climate and air quality on pediatric respiratory viral infections, including RSV.

Dr. Shaw's clinical research interests focus on epidemiology of vaccine hesitancy in the US and novel approaches to improving vaccination coverage among children and young teens. She has been leading the state HPV coalition focusing on educating the public about the importance of HPV vaccination in order to enhance HPV vaccination coverage among teens. Dr. Shaw's additional clinical research focuses on the current molecular epidemiology of pediatric invasive *S. aureus* isolates and the association between colonization and disease-associated strains, genetic relatedness between invasive isolates and colonization strains.

Dr. Suryadevara's research interests include the study of vaccine preventable diseases, increasing vaccination rates by both improving access to vaccine and understanding and intervening with parental and provider vaccine hesitancy. She is involved in clinical vaccine trials and trials to develop intervention targets for the treatment and prevention of RSV infections. She is also a fellow in the Health Leadership Fellows Program, through the Health Foundation of Western and Central New York.

## GRANTS AND CONTRACTS

### Weiner LB

Pediatric Designated AIDS Center/Specialty Care Center (PDAC). New York State Department of Health AIDS Institute. PI. 1990-2021.

Pre-Exposure Prophylaxis (PrEP) Services in General and Primary Care Settings. New York State Department of Health AIDS Institute. Co-PI. 2016-2021.

A phase IIIA, randomized, observer-blind, controlled, multinational study to evaluate the safety and immunogenicity of GSK Biologicals' MMR vaccine (209762) (Priorix<sup>®</sup>) compared to Merck & Co., Inc.'s MMR vaccine (M-M-R<sup>®</sup>II or VaxPro), as a first dose, both co-administered with Varivax, Havrix and Prevnar 13 in healthy children 12 to 15 months of age. (MMR-162) PI: 2016-2017.

A Phase I-II, Randomized, Double-Blind, Study to Evaluate the Safety, Tolerability, and Immunogenicity of Different Formulations of VII4 in Healthy Adults and Infants. Sponsor: Merck. PI. 2015-2018.

Merck Sharp and Dohme Corp. A Phase II, Double-Blind, Randomized, Multicenter Study to Evaluate the Safety, Tolerability, and Immunogenicity of VII4 Compared to Prevnar12 in Healthy Infants. PI. 2017-2018.

### Domachowske JB

A Phase I/II Randomized, Observer -blind, Controlled Multi-country Study to Assess the Safety, Reactogenicity and Immunogenicity of a Single Intramuscular Dose of GSK Biologicals' Investigational RSV Vaccine (GSK 300389IA), in Healthy Pregnant Women Aged 18 to 40 Years and Infants Born to Vaccinated Mothers 2017-2018.

A phase II/IIb randomized trial to evaluate the safety, immunogenicity, and efficacy of a Zika virus DNA vaccine in healthy adults and adolescents. Sponsor: National Institutes of Health. Role: PI, location Machala Ecuador. 2017-present.

A prospective multicenter study to investigate the pharmacokinetics, safety, and efficacy of cadazolid versus vancomycin in pediatric subjects with *Clostridium difficile*-associated diarrhea. Sponsor: Actelion. Role: PI. 2017-present.

An assessment of the PRESORS rating system and clinical endpoints in neonates, infants and children hospitalized with RSV infection. Sponsor: Janssen. Role: Sub-I. 2017-present.

Immunogenicity, reactogenicity and safety of Pediarix, Hiberix and Prevnar 13 co-administered with two different formulations of GSK Biologicals' HRV vaccine in healthy infants 6-12 weeks of age. Sponsor: Glaxo Smith Kline. Role: PI. 2017-present.

Clinical performance of the Diassess influenza A and B test. Sponsor: Diassess. Role: PI. 2016-present.

Assessment of the therapeutic potential of EE724382 alone or in combination with Ribavirin in a model of acute respiratory infection from pneumonia virus of mice (PVM). Sponsor: Glaxo Smith Kline. Role: PI. 2016-2017.

A phase IIb randomised, double-blind, placebo-controlled study to evaluate the safety and efficacy of MEDI8897, a monoclonal antibody with an extended half-life against respiratory syncytial virus, in healthy preterm infants. Sponsor: Astra Zeneca. Role: PI. 2016-present.

An observer-blind study to assess the immunogenicity and safety of a RSV vaccine in healthy third-trimester pregnant women and infants born to vaccinated mothers. Sponsor: Novavax. Role: PI. 2016-present.

A phase III randomized, double-blind, placebo-controlled study evaluating the efficacy and safety of a human monoclonal antibody REGN2222 for the prevention of medically attended RSV infection in preterm infants. Sponsor: Regeneron. Role: PI. 2015-2017.

The SENTINEL I Study: An observational study in the United States to characterize respiratory syncytial virus hospitalizations among infants born at 29 to 35 weeks gestational age not receiving immunoprophylaxis. Sponsor: AstraZeneca. PI. 2014-2017.

A prospective epidemiological study to assess the disease burden of respiratory syncytial virus associated lower respiratory tract infections in newborns from birth up to 2 years of age. Sponsor: GlaxoSmithKline. PI. 2014-2017.

An epidemiologic study of pregnant women and their newborn infants to describe immune statuses and respiratory syncytial virus and cytomegalovirus infection rates. Sponsor: Pfizer. PI. 2015-2017.

### **Suryadevara M**

Introduction of the cancer prevention platform to improve statewide adolescent HPV vaccination rates. New York State Department of Health. Role: Physician Lead – 2017-2018.

Neutrophil activation in infants hospitalized with severe respiratory viral infection. Clark Endowment for Pediatric Research. Role: Physician Lead – 2017-2018.

District Hub and Spoke Initiative Focused on Improving HPV Vaccination Rates. American Academy of Pediatrics. Role: Physician Lead – 2016 – 2017.

## **CLINICAL SNAPSHOT**

Outpatient visits . . . . .	854
Inpatient encounters . . . . .	570

# PEDIATRIC NEPHROLOGY

## FACULTY

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

**Dongmei Huang, MD**, Assistant Professor of Pediatrics

**Thomas Welch, MD**, Professor of Pediatrics, Chair, Department of Pediatrics

## 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 (GCH). Outpatient dialysis care, both peritoneal dialysis and hemodialysis, has long been provided at the University Dialysis Center in Syracuse. However, all outpatient dialysis care, including patient/family training will be moving to a new GCH facility as of 2018. Other outpatient services are provided in our offices at 725 Irving Ave, Suite 805, directly across the street from GCH.

The section evaluates and treats infants, children, and adolescents with the full spectrum of disorders of the urinary tract. This activity includes basic 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. We work closely with our section of pediatric urology, including a monthly combined case review.

## RESEARCH HIGHLIGHTS

### Role of Local Complement Synthesis in the Kidney

Dr. Welch has a long-standing interest in the role of locally synthesized complement components in the progression of glomerulonephritis to end stage kidney disease. He has developed an animal model of immune glomerulonephritis, and has demonstrated the importance of tubular synthesis of several complement proteins to the clinical and histologic progression of the disorder. This corresponds with similar observations he previously made in human material.

Research in Dr. Welch's laboratory includes development of a murine model of diarrhea-associated hemolytic uremic syndrome (HUS). Using mice injected with purified Shiga toxin, he has been able to very closely reproduce the histologic appearance of HUS. Once the time course of this model is defined more precisely, a variety of therapeutic interventions will be employed to see if the course of the disease can be modified.

### Scope Collaborative

The Pediatric Nephrology Center at GCH participates in the Standardizing Care to Improve Outcomes in Pediatric ESRD (SCOPE) Collaborative. A Quality Transformation Network, the SCOPE Collaborative has focused on catheter-related infection prevention by implementing evidence-based catheter care bundles. SCOPE is a large scale QI project involving 29 pediatric nephrology centers through the US. The collaborative has achieved substantial improvement in prevention of catheter related infection and hospitalization.



## GRANTS AND CONTRACTS

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### Huang D

An Open-Label, Randomized, Parallel Group Study to Assess the Safety and Efficacy of Hectorol® (doxercalciferol capsules) in Pediatric Patients with Chronic Kidney Disease Stages 3 and 4 with Secondary Hyperparathyroidism Not Yet on Dialysis. Sponsor: Sanofi Pasteur. PI. 2017-present.

## CLINICAL SNAPSHOT

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Outpatient visits . . . . .	2195
Inpatient encounters . . . . .	638
Kidney transplants . . . . .	5

# NEURODEVELOPMENTAL PEDIATRICS

## FACULTY

**Henry S. Roane, Ph.D.**, Division Director, Gregory S. Liptak Professor of Child Development

**Nicole DeRosa, Psy.D.**, Assistant Professor of Pediatrics

**Anne Reagan, Psy.D.**, Assistant Professor of Pediatrics

**Nienke Dosa, MD, MPH**, Upstate Foundation Professor of Child Health Policy

**Louis Pellegrino, MD**, Associate Professor of Pediatrics

## CLINICAL OVERVIEW

The Division of Neurodevelopmental Pediatrics is a collaboration of programs aimed at providing comprehensive, innovative family-centered health care to children with various types of disabilities, developmental and behavioral issues. Faculty and staff advocate for and support patients and their families by promoting independence, and community collaboration.

The division is comprised of several specialty programs which include Autism and Child Development, providing diagnosis and ongoing medical care for children who have autism and other developmental disabilities; Applied Behavior Analysis, providing behaviorally oriented assessment and treatment services for children with autism and related developmental disabilities who display destructive behavior such as self-injurious behavior, aggression, property destruction, food refusal, elopement, and pica; Physical Disabilities, providing diagnosis and ongoing care, including tone management (botox injections) and assistance with accessing assistive technology for children who have physical disabilities such as cerebral palsy and spina bifida. An affiliate of the CDC's National Spina Bifida Patent Registry providing comprehensive specialty care for children, adolescents and young adults with spina bifida.

Pediatric Psychology Inpatient Consultation service offers diagnostic and clinical intervention to inpatients who have either developed psychological or behavioral health concerns related to their hospitalization and medical diagnosis, or for patients who previously had mental health concerns that are negatively impacting their treatment and recovery. Pediatric Behavioral Health Clinic provides outpatient psychological services to diagnose and treat the psychological impact of a chronic medical condition and to manage previous existing psychological and behavioral health concerns exacerbated by a chronic medical condition or acute illness.

Patients are seen in the Center for Development, Behavior, and Genetics which is housed on the lower level of the Physician's Office Building or in the Family Behavior Analysis Program which is housed in the Presidential Plaza Medical Building.

## EDUCATIONAL PROGRAMS

- Dr. Pellegrino supervises the educational experience of first year pediatric residents who have a required one-month rotation with the division, which includes clinical and didactic activities as well as a required written project and oral presentations.
- Dr. Pellegrino has developed an online platform of education materials, which includes required quizzes emphasizing questions similar to those found on the pediatric board examinations.
- In addition Dr. Pellegrino has developed and maintains a series of video lectures on topics related to developmental disabilities, including those housed on the Upstate Blackboard site, and he organizes the yearly child development conference series for pediatric residents and 3rd year medical students.
- Dr. Reagan was approached by the APA-accredited internship program at Syracuse University to be supervisor of practicum site starting Fall 2018. This includes providing clinical supervision and experiences, as well as developing educational materials and curriculum related to Pediatric Psychology.

- Dr. DeRosa serves as the director of an undergraduate practicum site for Syracuse University students.
- Drs. DeRosa and Roane supervise a Ph.D. student externship from the School Psychology program at Syracuse University.
- Dr. Roane has been the clinical supervisor for post-doctoral fellows from the University of Nebraska Medical Center and Syracuse University.
- Drs. Roane and DeRosa have developed an application for a new Masters training program in Behavior Analysis that is currently under review by the New York State Department of Education.

## RESEARCH HIGHLIGHTS

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- Dr. Roane continues to receive clinical funding from the NYS Office for Persons with Developmental Disabilities for his work in severe behavior disorders.
- Dr. Roane and his Syracuse University co-investigator have completed their first cohort of families with funding received from the Nappi Family Research Awards. This project will complete in 2018.
- Dr. DeRosa submitted an RO3 application to the NIMH.

## DIVISION HIGHLIGHTS

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- Dr. Pellegrino is a co-editor Children With Disabilities (the 8<sup>th</sup> edition is being produced is due for publication in 2018), a comprehensive text on developmental disabilities for medical and non-medical professionals who work with children with disabilities, and is writing two new chapters for the volume on normal child development and on vision and hearing.
- Dr. Roane is a co-editor for the 2<sup>nd</sup> edition of the Handbook of Applied Behavior Analysis (2018).
- Dr. Roane was appointed Treasurer of the Society for the Experimental Analysis of Behavior.
- Dr. Roane began his term as Editor of Behavioral Development, a multidisciplinary journal published by the American Psychological Association.
- Dr. DeRosa was appointed to the Board of Editors of the Journal of Behavioral Education.
- Dr. DeRosa was elected to serve as President for the New York State Association for Behavior Analysis.
- Dr. Dosa conducted a workshop at the American Academy of Cerebral Palsy and Developmental Medicine in Montreal Canada.
- Dr. Reagan was elected to the American Psychological Association's Division of Pediatric Psychology as Co-Chair of Research Dissemination.
- Dr. Reagan was selected by New York State Psychological Association for their Leadership Institute program.
- Dr. Reagan developed new collaborations with Department of Psychiatry including the supervision of Child and Adolescent Psychiatry fellows on inpatient Pediatric Psychology Consults.
- Dr. Roane was recognized as a recipient of the 2017 President's Award for Excellence in Faculty Service from Upstate Medical University.
- Dr. Roane was named as a Fellow in the Association for Behavior Analysis International.
- Dr. Roane completed the Leadership Development for Physicians in Academic Health Centers from the Harvard University T. H. Chan School of Public Health.

- Dr. Dosa was an invited panelist for the President’s Symposium on Society and Health at Upstate Medical University.
- Dr. Dosa presented an invited lecture on Health, Wellness and Transition at the Weinberg Cerebral Palsy Center at Columbia University.
- Dr. Roane delivered the keynote address at the 2017 annual meeting of the New Jersey Association for Behavior Analysis.
- Dr. Reagan led continued growth and development of Pediatric Behavioral Health outpatient clinic and Pediatric Psychology inpatient service offering psychological and behavioral health consultation, clinical diagnosis and treatment addressing the negative impact of medical conditions, illness, and hospitalizations on mental health.
- The division continues to advance its efforts toward combining clinical services for individuals with developmental disabilities and the development of an inpatient program for individuals with dual diagnoses.
- The division became a continuing education provider for behavior analysts as recognized by the Behavior Analyst Certification Board.
- The development of new programs has led to an active recruitment process for a new psychologist/researcher and a new medical provider in 2018.

## GRANTS AND CONTRACTS

**Developing a Behavioral Parent Training Program Specific to High Frequency Maladaptive Behaviors in Autism Spectrum Disorders;** funded by the Inaugural Nappy Family Research Awards: Driving Inspiration and Innovation Through Collaboration. Roane: Co-PI, 7/1/16 to 6/30/18.

Dosa: Green Family Foundation, Adaptive Design Group Visits: Cardboard Equipment Solutions for Children with Spina Bifida, 2017-2018.

Dosa: Ploeff-DeBoer Grant: Adaptive Design for Children who are Blind or Deaf-Blind: A Curriculum for High School Students, 2017-2018.

## CLINICAL SNAPSHOT

Outpatient visits – NeuroDevelopmental Pediatrics: . . . . . 1781

Outpatient visits – Family Behavior Analysis Program: . . . . . 2655

## PEDIATRIC NEUROLOGY

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

### FACULTY

**Nancy Havernick, MD**, Assistant Professor of Neurology, Pediatrics and Psychiatry

**Melissa Ko, MD**, Assistant Professor of Neurology and Ophthalmology

**Steven Rothman, MD**, Professor of Neurology and Pediatrics

**Ai Sakonju, MD**, Assistant Professor of Neurology and Pediatrics

**Guojun Zhang, MD, PhD**, Assistant Professor of Neurology and Pediatrics

### CLINICAL OVERVIEW

The division of pediatric neurology provides comprehensive services and compassionate care by physicians trained to evaluate infants, children, and adolescents with common and rare disorders of the nervous system. These include diseases affecting the brain, spinal cord, nerves, neuromuscular junction, and muscles. These physicians are active educators teaching future physicians and the community. They also understand the importance of providing excellent leading edge diagnostic evaluations and treatments by research and collaboration with experts to provide the best care appropriate for each patient. Being flexible in meeting the needs of the community are paramount and reflected in the ongoing creation and continuation of specialty clinics below.

### SUBSPECIALTY CLINICS

**Epilepsy:** Children with epilepsy have access to services of the Department of Neurology's epilepsy team 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. Inpatient epilepsy monitoring is at the Upstate Golisano Children's Hospital and includes working with the Department of Neurosurgery for surgical evaluation of refractory epilepsy. In addition, a new onset seizure/spells clinic is available for rapid and thorough evaluation of children with unexplained events or concern for seizures.

**Neuromuscular:** Children with muscular dystrophies and hereditary neuropathies 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. Evaluation of new and ongoing pediatric neuromuscular patients can also be done by certified faculty trained in the evaluation and management of these disorders. Testing may include muscle biopsy and/or nerve conduction and electromyogram testing useful in determining disorders of the nerves and muscles as well as neuromuscular junction. Patients with both hereditary and acquired or autoimmune neuromuscular disorders may be seen by faculty with specific expertise.

**Tumors:** In collaboration with Dr. Gloria Kennedy, children with brain tumors and other tumors of the central nervous system are cared for at the monthly neuro-oncology clinic at Golisano Children's Hospital.

**Headaches:** All types of headaches seen in children and teens, including both common and refractory headaches, are evaluated and treated by several faculty members. Patients may be seen in both the concussion and neurology clinics for comprehensive care.

**Neuro-ophthalmology:** This is a unique service with faculty trained to perform the evaluation of visual pathways in infants to adolescents. Diagnoses can include pseudotumor cerebri, optic neuritis, nystagmus, and other disorders. Specialized diagnostic tests including visual evoked responses, ocular imaging, and visual fields are also available.

**Movement disorders:** Children with balance problems, intrusive movements such as tics, dystonia, neurotransmitter disorders, and problems with walking or hand use are seen for evaluation and treatment in the neurology clinic. Some patients with spasticity may be seen in coordination with the Physical Medicine and Rehabilitation and Developmental Pediatrics subspecialty groups for comprehensive management.

## PEDIATRIC PULMONOLOGY

### FACULTY

Zafer Soultan, MD, Associate Professor of Pediatrics, Division Director

Aiasha Baig, MD, Assistant Professor of pediatrics

Chris Fortner, MD, PhD, Assistant Professor of Pediatrics, CF Center Director

Robert V. Hingre, MD, Assistant Professor of Pediatrics

Ramesh Sachdeva, MD, Professor of Pediatrics

### CLINICAL OVERVIEW

The Division of Pulmonology provides care for children and adolescents with lung and airway diseases. Major clinical activities of the Division include care of patients with asthma, cystic fibrosis (within a Cystic Fibrosis Foundation accredited center), bronchopulmonary dysplasia, congenital airway and lung anomalies, respiratory disorders in children with neuromuscular anomalies, sleep disorders including children treated via Positive Airway Pressure Therapy, and children dependent on technology, such as patients with tracheostomies, some of whom are dependent on invasive, or non-invasive ventilator support. We are a major contributor to the Children Home Ventilator Program in the area; we partner with home care nursing and home care providers.

The Sleep Center offers a comprehensive multidisciplinary approach to sleep disorders in childhood- collaborating with respiratory therapists, nurse care specialists and sleep specialists and serving infants to young adults.

The Division provides a flexible bronchoscopy program, state-of-the-art pulmonary function testing, accredited sleep laboratory and comprehensive cardio-pulmonary stress testing.

Outpatient care is provided at the Pediatric Multi-specialties Center at Golisano Children's Hospital. Inpatients are cared for both in the Upstate Golisano Children's Hospital and the Crouse Hospital Neonatal Intensive Care Unit.

### EDUCATIONAL PROGRAMS

Pediatric Pulmonology faculty are involved in a variety of educational activities for students, residents, and staff including 3 nurse practitioners. Teaching is provided to students and residents at the bed side, and at the Center. The clerkship orientation lectures are shared by Faculty. Third and fourth year medical students have the option of an elective in the division. Pediatric residents can undertake specialty electives with Pediatric Pulmonology.

### RESEARCH HIGHLIGHTS

Drs. Fortner and Soultan participate in CF clinical trials through the Cystic Fibrosis Therapeutics Development Network (TDN).

The Division and the CF Center work continuously on quality improvement projects

Research interest in sleep medicine includes Positive Airway Pressure adherence and effectiveness of Tonsillectomy and Adenoidectomy in treating obstructive sleep apnea.

### GRANTS AND CONTRACTS

Robert C. Schwartz Cystic Fibrosis Pediatric Pulmonary Center: 2017-2018

Therapeutics Development Center: 2017

Award for Physical Therapist: 2016-2017

Pharm Award: 2016-2017

Mental Health Coordinator Award: 2017

Additional Coordinator Award: 2017

## CLINICAL STATISTICS

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Outpatient visits . . . . .	9545
Inpatient encounters . . . . .	539
Sleep studies . . . . .	697
Pulmonary function tests . . . . .	5186
Cardiopulmonary stress test . . . . .	51
Bronchoscopy . . . . .	71

# PEDIATRIC RHEUMATOLOGY AND INTEGRATIVE MEDICINE

## FACULTY

**Caitlin Sgarlat, DO, MSc**, Assistant Professor of Pediatrics, Division Director

**William P. Hannan, MD**, Associate Professor of Pediatrics

## CLINICAL OVERVIEW

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

All patients referred to the Pediatric Arthritis Center are seen and evaluated by one of the pediatric rheumatologists. There is also a nurse dedicated to the program who is available for teaching families and children. Other ancillary services include pediatric physical and occupational therapy, social work, and child life. There are now over 200 children with chronic rheumatologic disease followed by the division.

Integrative care is offered in our Division of Pediatric Rheumatology and Integrative Medicine. Dr. Sgarlat's goal is to enhance their health and well being, as well as prevent and treat disease. Integrative methods of medicine are utilized in combination with conventional practices in a welcoming environment. A comprehensive integrative approach is used which is anchored in lifestyle medicine combined with a nurturing intrinsic healing for the whole patient- mind, body and spirit. Integrative treatment can include any of the following modalities (treatment or referrals): Dietary recommendations (supplements, botanicals), mind/body medicine (guided imagery, yoga, breathing techniques), manual medicine (massage therapy, chiropractics, physical therapy), and whole medicinal systems (naturopathy, Ayurveda, Traditional Chinese Medicinal therapies such as acupuncture or acupressure, and aromatherapy).

## CLINICAL STATISTICS

### Total Pediatric Rheumatology Center visits:

Outpatient . . . . . 1249

Inpatient . . . . . 29

### Total Integrative Medicine visits:

Outpatient . . . . . 104

Inpatient . . . . . 5



## PEDIATRIC SURGICAL SPECIALTIES

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### PEDIATRIC ANESTHESIOLOGY

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#### FACULTY

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##### **Full-Time:**

**Bettina Smallman, MD**, Professor of Anesthesiology and Pediatrics, Director of Pediatric Anesthesiology

**Jadwiga Bednarczyk, MD**, Assistant Professor of Anesthesiology

**Rahila Bilal, MD**, Assistant Professor of Anesthesiology

**Jessica Latzman, MD**, Assistant Professor of Anesthesiology

**Lu'Ay Nubani, MD**, Assistant Professor of Anesthesiology

**Joseph Resti, MD**, Assistant Professor of Anesthesiology

**Jan Wong, MD**, Assistant Professor of Anesthesiology

##### **Part-Time:**

**Richard Beers, MD**, Professor of Anesthesiology

**Tracy Buckingham, MD**, Assistant Professor of Anesthesiology

**Robert Calimlim, MD**, Associate Professor of Anesthesiology

**Elizabeth Demers-Lavelle, MD**, Assistant Professor of Anesthesiology

**Chiagozie Fawole, MD**, Assistant Professor of Anesthesiology

**Fenghua Li, MD**, Associate Professor of Anesthesiology

**David Romano, MD**, Associate Professor of Anesthesiology

#### CLINICAL OVERVIEW

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The Division of Pediatric Anesthesia in the Department of Anesthesiology has been experiencing significant growth. Surgeons from all specialties provide care for children requiring surgery in the Center for Children's Surgery. In addition, the demand for procedures conducted outside the operating room environment (CT, MRI, Interventional Radiology, Radiation Therapy and Nuclear Medicine) continues to grow steadily.

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 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 our process, making it safe and efficient to accommodate an ever-increasing demand.

The section of pediatric Anesthesia participates actively in anesthesia coverage at the Upstate Ambulatory Surgical Center. With the arrival of new pediatric surgeons and pediatric urologists many pediatric patients are cared for in the outpatient setting.

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 Center for Children's Surgery.

## PEDIATRIC CARDIOVASCULAR-THORACIC SURGERY

### FACULTY

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

### CLINICAL OVERVIEW

For a city of its size, Syracuse is very fortunate to have a high quality, nationally known program in congenital cardiac surgery. Part of the reason this program has been successful is the innovative arrangement Dr. 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 at either center alone.

## PEDIATRIC SURGERY

### FACULTY

**Andreas H. Meier, MD, MEd**, Michael and Rissa Ratner Professor of Surgery and Pediatrics, Division Director of Pediatric Surgery, Medical Director, The Olivia Louise Pietrafesa Center for Children's Surgery, General Surgery Residency Program Director and Vice Chair for Education, Department of Surgery

**Tamer A. Ahmed, MD**, Assistant Professor of Surgery and Pediatrics, Liaison Surgeon for the Children's Oncology Group

**Jennifer D. Stanger, MD MSc**, Assistant Professor of Surgery and Pediatrics, Pediatric NSQIP champion surgeon, Chief Quality Officer for Pediatric Surgical Care

**Kim G. Wallenstein, MD, PhD**, Assistant Professor of Surgery and Pediatrics, Director Pediatric Trauma Program

### CLINICAL OVERVIEW

Members of the Division of Pediatric Surgery provide care to children at the Golisano Children's Hospital as well as the Neonatal Intensive Care Unit at Crouse Hospital. Our neonatal patients demonstrate a wide range of congenital anomalies as well as those conditions acquired in the very early days of infancy. Close rapport with our neonatal colleagues has been the hallmark of our neonatal effort for many years. At the Golisano Children's Hospital, our patients comprise the full range of surgical problems of infancy and childhood and the division performs close to 2,000 operations per year. A close working relationship with the Division of General Pediatrics as well as all pediatric medical subspecialties affords the close collaboration that patients with these complex issues deserve. In addition, excellent relationships with all pediatric surgical subspecialties exists leading to a wide array of treatments necessary for the care of the children of Central New York. We have developed a very close working relationship with our colleagues in the section of pediatric gastroenterology with specific focus on intestinal failure and inflammatory bowel disease.

Both inpatient and outpatient procedures are performed at the Pietrafesa Center for Children's Surgery, a separate operating suite for children in University Hospital. Our outpatient clinic is located at 725 Irving Ave. with many other pediatric subspecialty programs.

Since 2014 the Pediatric Trauma program has been accredited by the American College of Surgeons as a pediatric level I trauma center. Golisano was actually the first pediatric hospital in the state of New York to receive this accreditation and there are currently only four such programs in the state. Under the leadership of Dr. Wallenstein, we were recertified in February 2017.

Dr. Jennifer Stanger, who joined us in the fall of 2014 has already established a busy clinical practice and gained the respect of all her colleagues and staff. She has focused her scholarly activity on quality improvement efforts for surgical care within the Golisano Children's Hospital. In this role she has taken on the responsibilities of champion surgeon for the pediatric National Surgical Quality Improvement Program (NSQIP) that is now up and running. She chairs the pediatric surgery quality improvement committee and will play a major role in 2018 when we will apply for certification as a level I center of pediatric surgical excellence, an accreditation process that is sponsored by both the American College of Surgeons and the American Pediatric Surgical Association.

Dr. Ahmed has taken on the role of Children's Oncology Group liaison surgeon, resulting in close collaboration with our colleagues in pediatric hematology/oncology. We have seen a significant increase of pediatric cancer patients over the last year, many of whom require surgical intervention at some point during their management.

Our educational efforts focus on teaching third and fourth year medical students as well as our junior and senior level general surgery residents. We are also pleased to be able to participate in the educational efforts of the pediatric residency program where second year residents from this program join us for a month for exposure to our inpatient and outpatient activities. Overall, we are pleased that our educational efforts are valued highly by all of these learners. We have had a long history of successful matches into pediatric surgery fellowships which are considered extremely competitive. Since October 2014 Dr. Meier has taken on the leadership of the General Surgery Residency as its program director. In this role he has participated in many research projects on surgical education and co-authored multiple publications.

## **PEDIATRIC NEUROSURGERY**

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### **FACULTY**

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**Zulma Tovar-Spinoza MD**, Associate Professor of Neurosurgery and Pediatrics, Director of Pediatric Neurosurgery

**Satish Krishnamurthy MD, MCh**, Professor of Neurosurgery, Director Minimally Invasive Surgery

### **CLINICAL OVERVIEW**

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The Pediatric Neurosurgery division provides care for children with structural disorders of the brain and spinal cord. Our patients are from the regional community but also include referrals from other states and other countries. We enjoy collaborating with expert pediatric neurologists, neuroradiologists, neonatologists and intensivists. We participate regularly with the Pediatric Epilepsy Center, Spina Bifida Program, Cranio-facial Center, Centers for Development, Trauma, Behavior and Genetics and the Physical Medicine and Rehabilitation Programs.

The division has expertise in the treatment of brain and spine tumors, congenital and developmental malformations, epilepsy, hydrocephalus, nervous system vascular lesions, pediatric brain trauma, and spasticity.

Neurosurgeons in the division provide a complete array of pediatric services including:

- 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]

Dr. Zulma Tovar-Spinoza has also established the only center in Upstate New York to offer MRI Guided laser ablation surgery as an option for patients with brain tumors and epilepsy. The use of other new technologies are incorporated to improve the endoscopic and minimally invasive treatment of brain tumors, including lesions seen in tuberous sclerosis complex.

The Spina Bifida program has been consolidated with a multidisciplinary team lead by Dr. Nienke Dosa. The team includes Dr. Danielle Katz (pediatric orthopedics), Dr. Jonathan Riddell (pediatric urology), and Dr. Tovar-Spinoza. The faculty has participated in educational sessions with patients and families and created a network of communication to keep the care of these complex patients up-to-date.

The division has established a continuous and active prenatal consultation for the parents of individuals identified with central nervous system lesions. This allows for appropriate preparation of families as well as discussion of possible immediate surgical procedures.

Faculty provide surgical solutions for patients with craniosynostosis, as well as treating patients with plagiocephaly. In conjunction with Dr. Sherard Tatum (Otolaryngology), we provide a multidisciplinary approach to these patients.

The faculty are active colleagues in the operation of the pediatric trauma program.

Endoscopic surgery for simple and complex hydrocephalus continues to be the preferred approach in our division. However, when this is not an option and shunts are needed optimization methods for these devices are utilized. Dr. Krishnamurthy is continuing his research on using a sensor to determine if a shunt has a normal or dysfunctional flow.

The faculty have reviewed the St. Louis Children's and the Vancouver protocols for patients with spastic diplegia and developed improved protocols. The division opened a Tone Management Program in conjunction with Drs. Turk and Kanter from the Department of Physical Medicine and Rehabilitation, and offers a comprehensive plan for the treatment of these patients.

## PEDIATRIC OPHTHALMOLOGY

### FACULTY

**Stephen W. Merriam, MD**, Assistant Professor of Ophthalmology and Pediatrics, Section Chief

**Melissa Ko, MD**, Associate Professor of Neurology and Ophthalmology

**Walter W. Merriam, MD**, Associate Professor of Ophthalmology and Pediatrics

**Marc J. Safran, MD**, Assistant Professor of Ophthalmology and Pediatrics

**Robert D. Fechtner, MD**, Professor and Chair of Ophthalmology

### CLINICAL OVERVIEW

The pediatric ophthalmology service is involved in a wide spectrum of infant and child ocular disorders, including simple errors of refraction, strabismus, amblyopia, and significant developmental anomalies. The service also has expertise with congenital cataracts and the use of intraocular lens placement in infants as well as the treatment of congenital glaucoma.

## PEDIATRIC ORTHOPEDIC SURGERY

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### FACULTY

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**Stephen A. Albanese, MD**, Professor of Orthopedic Surgery and Pediatrics;  
Chair, Department of Orthopedic Surgery

**Timothy Damron, MD**, Professor of Orthopedic Surgery

**Brian Harley, MD**, Associate Professor of Orthopedic Surgery and Pediatrics

**Danielle A. Katz, MD**, Associate Professor of Orthopedic Surgery and Pediatrics

**William Lavelle, MD**, Associate Professor of Orthopedic Surgery and Pediatrics

**Kathryn E. Palomino, MD**, Assistant Professor of Orthopedic Surgery and Pediatrics

### CLINICAL OVERVIEW

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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 referral area, the group provides advanced care for complex disorders such as scoliosis and vertebral anomalies for an extensive referral area. The group has an evening walk in urgent care program and is also available daily to handle acute musculoskeletal conditions during regular office hours.

Several orthopedic surgeons within the Department of Orthopedic Surgery play major roles in the care of children. Drs. Albanese, Katz and Palomino are fellowship trained pediatric orthopedic surgeons and manage patients with a wide variety of acute and chronic conditions. Dr. Timothy Damron is trained in orthopedic oncology and is an expert in the management of benign and malignant skeletal conditions. He works closely with the pediatric hematology-oncology service. Dr. Brian Harley completed a pediatric hand and upper extremity fellowship. His expertise includes hand surgery, microsurgery and the management of congenital and traumatic conditions. Dr. William Lavelle completed a spine fellowship and along with the pediatric orthopedists in the Department, provides care for patients with spine deformities and other spinal conditions.

### GRANTS

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#### **Damron TA**

Page Industries SUNY Research Foundation Grant, "Pediatric Sarcoma Research." PI, Oest ME, Co-PI. December 2014-2019.

National Institutes of Health (NIAMS) RO1-AR065419, "Biochemical and Biomechanical Changes to Bone Following Radiotherapy," PI, Mann KA, Oest ME, Co-PIs. (Sept 2014-Aug 2019).

Jim and Juli Boeheim Foundation, "Pediatric Sarcoma Research" PI, Oest M, Margulies B, Co-PIs. December 2014-2019.

Prophylactic antibiotic regimens in tumour surgery (PARITY): Multicentre randomized controlled study. Michelle Ghert, Benjamin Dehesi, Ginger Holt,...Timothy Damron. Beginning 2015 locally.

National Institutes of Health (NIAMS) "Etiology and Prevention of Loss of Fixation in Cemented Knee Replacements" Mann, KA (PI), Oest, ME, Horton, JA, Damron, TA, Co-PIs Aug 2017- July 2022.

National Institutes of Health (NIAMS) "Reducing Post-Radiotherapy Bone Fragility Through Orchestrated Cell Survival" Oest, ME (PI), Horton, JA, Mann, HA, Damron, TA, Co-PIs, Aug 2017- July 2022.

## PEDIATRIC OTOLARYNGOLOGY

### FACULTY

**Haidy Marzouk, MD**, Assistant Professor of Otolaryngology

**Anthony Mortelliti, MD**, Associate Professor of Otolaryngology and Pediatrics

**Sherard Tatum, MD**, Professor of Otolaryngology and Pediatrics

### CLINICAL OVERVIEW

The Division of Pediatric Otolaryngology provides state-of-the-art management for children with ear, nose and throat disorders, as well as craniofacial anomalies and airway problems. The department provides care for a broad spectrum of patients with face, head, neck and aerodigestive related problems, utilizing a multidisciplinary approach to evaluation and treatment. This program is dedicated to excellence in clinical care as well as research and teaching.

## PEDIATRIC UROLOGY

### FACULTY

**Jonathan Riddell, MD**, Assistant Professor of Urology and Pediatrics, Section Chief

**Matthew D. Mason, MD**, Assistant Professor of Urology and Pediatrics

### CLINICAL OVERVIEW

The Division of Pediatric Urology providers utilize the most recent diagnostic and therapeutic technology, including minimally invasive surgeries for quicker recoveries. A strong focus on family centered care is an important element in our practice. As a member of Upstate's Urology Team, the pediatric urologists have academic and clinical appointments with involvement in research projects, which promotes a high level of clinical knowledge and skill.

## AFFILIATED FACULTY

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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

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### FACULTY

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**Nader H. Atallah, MD**, Clinical Associate Professor of Pediatrics

**Craig J. Byrum, MD**, Clinical Professor of Pediatrics and Medicine

**Matthew J. Egan, MD**, Clinical Assistant Professor of Pediatrics

**Daniel A. Kveselis, MD**, Clinical Associate Professor of Pediatrics

**Frank C. Smith, MD**, Clinical Professor of Pediatrics

### CLINICAL OVERVIEW

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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: CROUSE HOSPITAL

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### FACULTY

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**Rebecca Barnett, DO**, Clinical Assistant Professor

**Ellen Bifano, MD**, Clinical Professor of Pediatrics

**Boura'a Bou Aram, MD**, Clinical Assistant Professor of Pediatrics

**Thomas Curran, MD**, Clinical Assistant Professor of Pediatrics

**Steven Gross, MD**, Clinical Professor of Pediatrics

**Bonnie Marr, MD**, Clinical Assistant Professor of Pediatrics

**Swati Murthy, MD**, Clinical Assistant Professor of Pediatrics

**Melissa Nelson, MD**, Clinical Assistant Professor of Pediatrics

**Beverly Roy, MD**, Clinical Assistant Professor of Pediatrics

### CLINICAL OVERVIEW

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These neonatologists staff the 60 bed neonatal intensive care unit (NICU) at Crouse Hospital. In addition to the clinical activity in this busy unit, pediatric residents complete a three and a half month neonatology rotation in the NICU.

## AWARDS AND PEER REVIEW HONORS

### Stephen Albanese, MD

Elected Vice President of the Pediatric Orthopaedic Society of North America (POSNA)

### John S. Andrade, MD

President's Award for Excellence in Teaching, 2017

### Ann S. Botash, MD

SUNY Distinguished Teaching Professor Award, 2017

### Amy E Caruso Brown, MD, MSc, MSDS

Andrew Markus Visiting Scholarship at the Ethox Centre and Green Templeton College, University of Oxford, 2017.

### Timothy Damron, MD

Chancellor's Award for Excellence in Scholarship and Creative Activities, 2017

### William Kerr, MD

Fulbright Scholar, National Scholar (France) – 2016-2017

Yamagiwa-Yoshida Fellowship, Union for International Cancer Control (Italy) - 2017

### Henry S. Roane, PhD

President's Award for Excellence in Faculty Service, 2017

Association for Behavior Analysis International, Henry Roane, PhD, Fellow

### Manika Suryadevara, MD

40 Under Forty Award, 2017

### Leonard B. Weiner, MD

SUNY Distinguished Service Professor Award, 2017

## HONORARY MEMBERSHIPS

### American Pediatric Society

Ann S. Botash, MD, Active Member

Joseph B. Domachowske, MD, Active Member

Leonard B. Weiner, MD, Active Member

Thomas R. Welch, MD, Active Member

### Society for Pediatric Research

Ann S. Botash, MD, Senior Member

Joseph B. Domachowske, MD, Active Member

Ramesh Sachdeva, MD, Active Member

Thomas R. Welch, MD, Emeritus Member

### Sigma Xi

William G. Kerr, PhD, Full Member



## EDITORIAL SERVICE

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<b>Nicole DeRosa, PsyD</b>	Editorial Board, Journal of Behavioral Education
<b>William G. Kerr, PhD</b>	Section Editor, Journal of Immunology Editor, Frontiers in Immunology
<b>Henry S. Roane, PhD</b>	Editor-in-Chief, Behavioral Development Associate Editor, Journal of Developmental and Physical Disabilities
<b>Thomas R. Welch, MD</b>	Associate Editor, Journal of Pediatrics



Stephen A. Albanese	William P. Hannan	Bettina Smallman
John S. Andrade	Melissa W. Ko	Frank C. Smith
Nader H. Atallah-Yunes	Satish Krishnamurthy	Zafer Soultan
Mirza Beg	Daniel A. Kveselis	Anne R Sveen
Steven D. Blatt	Ellen McHugh	Sherard (Scott) Tatum III
Ann Sutera Botash	Walter W. Merriam	Margaret Turk
Craig Byrum	Elizabeth K. Nelsen	Leonard B. Weiner
Irene Cherrick	Scott J. Schurman	Thomas R. Welch
Joseph B. Domachowske	Jana Shaw	

## PRESENTATIONS AT SCIENTIFIC MEETINGS

### PEDIATRIC CARDIOLOGY

Naimi I\*, Bounds R, Wang H, Atallah N, Smith F, Byrum C, Kveselis D, Leonard G, Devanagondi R, Egan M. Long Term (25 years) Efficacy of Percutaneous Balloon Pulmonary Valvuloplasty in Pediatric Patients: A Multi-Center Study. *Pediatric Academic Societies (PAS)*. San Francisco, CA. May 2017.

Bounds R, Naimi I\*, Wang H, Atallah N, Smith F, Byrum C, Kveselis D, Leonard G, Egan M, Devanagondi R. Increased incidence of severe pulmonary valve insufficiency up to 25 years after balloon pulmonary valvuloplasty: A multicenter study. *The Society for Cardiovascular Angiography and Interventions (SCAI)*. New Orleans, LA. May 2017.

### PEDIATRICS ENDOCRINOLOGY

Ashraf S, Nadkarni P, **Izquierdo R**, Bansal N. Dilemma in managing thyroglossal duct cyst carcinoma. *Glob J Rare Dis* 2016; 1(1) :001-003. Accessed 3/3/2017. [www.peertechz.com/journals/global-journal-of-rare-diseases/articles/volume-1](http://www.peertechz.com/journals/global-journal-of-rare-diseases/articles/volume-1).

Dillon A, Manocha D, Kahlon A, **Izquierdo R**, Bansal N. Post Coronary Artery Bypass Graft (CABG) Surgery Thyroid Storm: A Near Miss. *American Journal of Hospital Medicine* 2017; 1(1) Jan-March. Accessed 3/3/2017. <http://medicine.missouri.edu/jahm/wp-content/uploads/2017/Thyroid-storm.pdf>.

Bollineni M, Dhaliwal R, **Khokhar A**. *A case of precocious puberty and McCune-Albright syndrome treated with Letrozole.* **Poster presentation at the annual Endocrine Society meeting**, Orlando, Florida, April 2017.

Agarwal S, **Khokhar A**, Castells S, Hagerty D, Dunkley L, Cooper J, Chin VL, Umpaichitra V, Perez-Colon S. *Role of Social Factors in Glycemic Control among Minority Children and Adolescents with Type 1 Diabetes.* **Poster presentation** at International Meeting of Pediatric Endocrinology, Washington DC, September 2017.

Kochummen E, **Khokhar A**, Perez-Colon S, Ch'ng TW, Umpaichitra V, Chin VL. *Growth Failure due to Multiple Pituitary Hormone Deficiency in a Child with Glycogen Disease Type 9.* **Poster presentation** at International Meeting of Pediatric Endocrinology, Washington DC, September 2017.

**Khokhar A**, Chin V, Perez-Colon S, Farook T, Bansal S, Kochummen E, Umpaichitra V. *Differences between Metabolically Healthy vs Unhealthy Obese Children and Adolescents.* *Journal of the National Medical Association* 2017 Autumn;109(3):203-210. PMID: 28987250.

**Khokhar A**, Nagarajan S, Ravichandran Y, Perez-Colon S. *Pubertal Assessment: Targeted Educational Intervention for Pediatric Trainees.* *International Journal of Adolescent Medicine and Health.* 2017 Aug 18. PMID: 28820733.

**Khokhar A**, Yagnaram R, Stefanov D, Perez-Colon S. *Pubertal Assessment: A National Survey of Attitudes, Knowledge and Practices of the US Pediatric Trainees.* *International Journal of Adolescent Medicine and Health.* 2017 July. PMID: 28682782.

### PEDIATRIC GASTROENTEROLOGY, HEPATOLOGY AND NUTRITION

Jeffrey S Hyams, Sonia Davis, ..... **Prateek Wali**, et al.: *Factors associated with early outcomes following standardised therapy in children with ulcerative colitis (PROTECT): a multicentre inception cohort study.* *The Lancet Gastroenterology & Hepatology* 09/2017; 2(12), DOI:10.1016/S2468-1253(17)30252-2

Joel R. Rosh, Zhu Wang, .....**Prateek Wali**, et al: *54 High Frequency of Non-Classical Endoscopic Findings in Children and Adolescents Diagnosed With Ulcerativ E.Coli Tis. The Protect Study.* *Gastrointestinal Endoscopy* 05/2017; 85(5):AB46., DOI:10.1016/j.gie.2017.03.035

Jeffrey S. Hyams, Sonia Davis, ..... **Prateek Wali**, et al.: *Suboptimal Early Outcomes following Standardized Induction Therapy in Children Newly Diagnosed with Ulcerative Colitis: The Protect Study.* *Gastroenterology* 04/2017; 152(5):S201., DOI:10.1016/S0016-5085(17)30979-4

Melanie Schirmer, Hera Vlamakis, ..... **Prateek Wali**, et al.: *Microbial Dysbiosis Associated with Disease Severity in Treatment Naive Pediatric Patients with New-Onset Ulcerative Colitis*. *Gastroenterology* 04/2017; 152(5):S172-S173., DOI:10.1016/S0016-5085(17)30894-6

Jarod Prince, Suresh Venkateswaran, ..... **Prateek Wali** et al.: *Greater Contribution of HLA to Risk for Pediatric-Onset Ulcerative Colitis Can be Narrowed to 3 Independent Classic HLA Variants and Corresponding Amino Acid Changes*. *Gastroenterology* 04/2017; 152(5):S954. DOI:10.1016/S0016-5085(17)33244-4

Peter Townsend, Sonia Davis, .....**Prateek Wali**, et al.: *Is Mesalamine Monotherapy Equally Effective in Inducing Remission in Mild Versus Moderate Pediatric Ulcerative Colitis at Diagnosis?*. *Gastroenterology* 04/2017; 152(5):S953., DOI:10.1016/S0016-5085(17)33242-0

**Wajiha Maan\***, QurratulAnn Warsi, **Avideh Rashed\***, Manoochehr Karjoo. Unexplained High Activity of Aspartate Aminotransferase in an Asymptomatic Pediatric Patient. *Int J Pediatr*, Vol.5, N.10, Serial No.46, Oct. 2017

## GENERAL PEDIATRICS

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**Berry WS**, Odom S, **Blatt S**. *Healthy Steps: Innovative Implementation in a Culturally Diverse, Resident Based Pediatric Primary Care Setting*. – Poster presentation at the American Academy of Pediatrics National Conference and Exhibition 2017.

Cifra, N, Morley C, Kreipe R, **Teelin KL**, Stewart T. “Perspectives of the Treatment Community by Parents of Children with Eating Disorders: A Qualitative Study,” *Society for Adolescent Health and Medicine*, New Orleans, LA, 2017.

Ditchek, L, and **Teelin KL**. “Gender Dysphoria in Adolescents: Support for the Efficacy of Parental Support in Mitigating Psychiatric Co-Morbidities,” *Society for Adolescent Health and Medicine*, New Orleans, LA, March 2017.

**Pekarsky, AR**. Sentinel Injuries: When You Have to Sweat the Small Stuff. New York State Children’s Alliance Annual Meeting, Saratoga Springs, NY, October 3, 2017.

Sadiq M, Wojtowycz M, Beg M, **Nelsen E**. Prevalence of malnutrition amongst students in inner city Lahore, Pakistan. Pediatric Grand Rounds Research Platform and Poster Session, Syracuse, NY, April 26, 2017.

Stowers, P and **Teelin KL**. “Appointment Outcomes Among Adolescent Patients Referred for Obstetrics & Gynecologic Services.” ACOG Regional Meeting, Syracuse NY, 2017.

Stowers, P, and **Teelin KL**. “Documentation of Menstrual History for Adolescent Patients in the Inpatient Setting,” *North American Society for Pediatric and Adolescent Gynecology*, Chicago, Ill, April 2017.

Desilva R, Dietrich JE, Young A, Editors. 2014. **Teelin KL**, Conner L, Wheeler C. “Breast Mass in an Adolescent.” [www.naspag.org](http://www.naspag.org) PAGWEBED E learning center, 2017.

## PEDIATRIC CLINICAL GENETICS

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Lucrezia S, Byler M, Chikarmane R, Baskin B, Juusola J, Fuchs W. **Lebel RR**. Genomic instability discovered on a diagnostic exome analysis. Am Coll Med Genet annual meeting, 2017.

Faulkham K, Byler M, Rivera M, Ahmed T, Stein C, **Lebel RR**. Biliary atresia in a patient with tetrasomy 22q syndrome. Am Coll Med Genet annual meeting, 2017.

Faulkham K, Byler M, Eng CM, Bi W, Yang Y, Lagoe EC, **Lebel RR**. Pathologic GABRB2 mutation in a patient with known CHAMPI mutation. Am Coll Med Genet annual meeting, 2017.

Sroka H, Henderson LB, O’Connor B, Innis JW, Byler M, **Lebel RR**, Humberson JB, McClellan R, Vernon H, Mirzaa G, Castro D, Grysko B, Seaver LH, Al-Musafri F, Ben-Omran T, Juusola J. Expansion of the molecular and phenotypic spectrum of CAMTA1-related neurological disorders. NSGC Annual Meeting, 2017.

## PEDIATRIC HEMATOLOGY/ONCOLOGY

**Caruso-Brown A.** “Moral distress in the quest for health equity in the U.S.” Green Templeton College, University of Oxford, Oxford, England, September 6, 2017.

**Caruso-Brown A.** “Do moral foundations matter in bioethics?” Ethox Centre, Nuffield Department of Population Health, University of Oxford, Oxford, England, September 6, 2017.

**Caruso Brown AE, Garden R.** From silence into language: Questioning the power of physician illness narratives. *AMA Journal of Ethics* 2017; 19(5): 501-07. (invited)

**Caruso Brown AE.** Should clinicians intervene if they suspect that a caregiver whose child has cancer is at risk of psychological harm? *AMA Journal of Ethics* 2017; 19(5): 493-500. (invited)

## PEDIATRIC HOSPITAL MEDICINE

**\*Rashed A, Andrade J.** Disseminated Neisseria Gonorrhoea imitating Lupus in an 18 year old female. *Pediatric Hospital Medicine*; Nashville, TN, July 22, 2017.

**Schafer M.** Discharge Process Improvement for Inpatient Pediatrics, Annual Meeting of Pediatric Hospital Medicine, Nashville TN, July 22, 2017.

**Nead J, Parus J, Beck Dallaghan G, Mastropolo R, Botash A.** An oral presentation tool for pediatric clerkship student peer assessment. Poster presentation at COMSEP Annual Meeting. Portland, OR, March 2017.

Markham J, Hall M, Queen MA, Aronson P, Wallace S, Foradori D, Hester G, **Nead J**, Lopez M, Cruz A, McCulloh R. Variation in antibiotic use and clinical outcomes in infants < 60 days hospitalized with skin and soft tissue infection (SSTI). Poster presentation at Pediatric Academic Societies Annual Conference. San Francisco, CA, April 2017.

**Nead J, Parus J, Beck-Dallaghan G, Mastropolo R, Botash A.** An oral presentation tool for pediatric clerkship student peer assessment. Oral presentation at AAP Pediatric Hospital Medicine Annual Conference. Nashville, TN, July 2017.

Markham J, Hall M, Queen MA, Aronson P, Wallace S, Foradori D, Hester G, **Nead J**, Lopez M, Cruz A, McCulloh R. Variation in antibiotic use and clinical outcomes in infants < 60 days hospitalized with skin and soft tissue infection (SSTI). Poster presentation at AAP Pediatric Hospital Medicine Annual Conference. Nashville, TN, July 2017.

Neubauer H, Hall M, Wallace S, Cruz A, Queen MA, Foradori D, Arososon P, Markham J, **Nead J**, Hester G, McCulloh R, Lopez M. Variation in care and outcomes of hospitalized children with Staphylococcal scalded skin syndrome. Poster presentation at AAP pediatric Hospital Medicine Annual Conference. Nashville, TN, July 2017.

**Abraham E\*.** Minimizing Vocera Interruptions During Patient-Centered Rounds. Poster presented for the National Patient Safety Week poster session 3/14-17.

**Thaver D; Nikki Christopher.** Silent Hospitals Help Healing: A Quality Improvement Initiative. Department of Pediatrics, SUNY Upstate Medical University. Presented at Pediatric Research Day, April 26, 2017.

**Krieger E\*.** When You Look a gift horse in the mouth. Beyond the Doctorate Day, Research Poster Presentation, March 1, 2017.

**Moradi J\* -** Pruritis, Ptosis and Pheochromocytoma Beyond the Doctorate Day, Research Poster Presentation, March 1, 2017.

## PEDIATRIC INFECTIOUS DISEASES

**Domachowske JB**, Khan AA, Esset MT, Jensen K, Takas T, Villafana T, Dubofsky F, Griffin P. A single dose monoclonal antibody immunoprophylaxis strategy to prevent respiratory syncytial virus disease in all infants: Results of 1<sup>st</sup> in infants study with MEDI8897. ID Week 2017. San Diego, CA.

Anderson EJ, Simões EAF, Forbes ML, Checchia PA, **Domachowske JB**, Krilov LR, Halasa N, DeVincenzo JP, Rizzo CP, McLaurin KK, Ambrose CS. Respiratory syncytial virus (RSV) hospitalizations of US preterm infants born at 29–35 weeks gestational age: proportions by chronologic age and birth month. ID Week 2017. San Diego, CA.

**Suryadevara M**, Bonville CA, **Domachowske JB**. Cancer prevention bundle improves HPV vaccination rates. Pediatric Academic Societies 2017. San Francisco, CA.

Anderon EJ, Devincenzo JP, Checchia PA, Forbes ML, Halasa N, Krilov LR, Pannaraj PS, Simões EA, **Domachowske JB**, et al. Ongoing multicenter observational study of respiratory syncytial virus hospitalizations among US infants born at 29–35 weeks' gestational age not receiving immunoprophylaxis in 2014–2016. Pediatric Academic Societies 2017. San Francisco, CA.

## NEURODEVELOPMENTAL PEDIATRICS

DeBartelo J, Sullivan W, Saini V, **Roane H**, **DeRosa N**, & Paluch P, & Khatun M. Resurgence and Response Class Variability. Poster presented at the annual convention of the New York State Association of Behavior Analysis, Albany, NY, October 2017.

**DeRosa N**, Sullivan W, & **Roane H**. Modification of Reinforcement Schedules to Increase Mand Variability During Functional Communication Training. Presented at the annual convention of the Association of Behavior Analysis International, Denver, CO, May 2017.

**Dosa N**. & Davis T. Sensational Inspirational Movement Seminar. Fifth Annual Fit-In Conference, Cortland NY, October 2017.

**Dosa N**. & Evensky J. Global Health Becomes Local: Developing Locally Sourced Prostheses. New England Global Health Conference for Trainees, Harvard Medical University, Boston MA, February 2017.

Kadey H, **DeRosa N**, & **Roane H**. The effects of a backward chaining procedure on self-drinking in a children with autism. Poster presented at the international convention of the Association for Behavior Analysis International, Paris France, November 2017.

Owen T, Fisher W, **Roane H**, Akers J, & Sullivan W. The Boss Hat: Treating Destructive Behavior Reinforced by Increased Caregiver Compliance with the Child's Mands. Presented at the annual convention of the Association for Behavior Analysis International, Denver, CO, May 2017.

Paulch P, Sullivan W, **Roane H**, **DeRosa N**, & Garza I. The Influence of Unit Price on Self-Controlled Responding. Poster presented at the annual convention of the New York State Association for Behavior Analysis, Albany, NY, October 2017.

Saini V, Sullivan W, **DeRosa N**, & **Roane H**. Resurgence and Response Variability During Challenges to Treatment. Presented at the annual convention of the Association for Behavior Analysis International, Denver, CO, May 2017.

Sloane L, Sullivan W, **DeRosa N**, **Roane H**, Finley A, & Pulis A. Incorporating DRO into a Multiple Schedule to Facilitate Schedule Thinning. Poster presented at the annual convention of the New York State Association for Behavior Analysis, Albany, NY, October 2017.

Sullivan W, Martens B, **DeRosa N**, & **Roane H**. Descriptive Assessment of Transition-Related Problem Behavior. Presented at the annual convention of the Association for Behavior Analysis International, Denver, CO, May 2017.

Sullivan W, Saini V, **DeRosa N**, Ringdahl J, & **Roane H**. Examination of Resurgence and Response Variability

During Challenges to Treatment. Presented at the international convention of the Association for Behavior Analysis International, Paris France, November 2017.

Sullivan W, Saini V, **DeRosa N**, & **Roane H**. Applied and Translations Investigations of Operant Renewal. Presented at the annual convention of the Association for Behavior Analysis International, Denver, CO, May 2017.

## PEDIATRIC PULMONOLOGY

**Cary JL**, Garver KM, Grabowski LA, **Fortner CN**. Supporting Well Siblings Of Children With Cf. Pediatric Pulmonology, 2017, 52 (Sup 47) 705.

**Soultan ZN**, Rinn A, Seguin JM, Talarico B. Decreasing The Length Of Visit At A Pediatric CF Center. Pediatric Pulmonology, 2017, 52 (Sup 47) 547.

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