





# Department of Pediatrics

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# Introduction from the Chair



I am pleased to share our Department of Pediatrics biennial report for 2022 and 2023. This report highlights departmental activities in clinical care, education, and research, along with advocacy, leadership, recognition, and more.

Much of our previous biennial report reported on our COVID pandemic experience. The pandemic continued through 2022 and much of 2023. We also experienced a COVID / RSV / influenza "triple-demic" of viral illness in late 2022. During these challenging times, we continued to develop and implement new approaches to detecting, treating, and preventing COVID infections and more. Pediatric faculty members were trusted sources of vaccine, masking, and other public health information for patients and parents, other health professionals, and policy makers. We gained additional experience with flexible educational methods, virtual and hybrid meetings

and grand rounds, and remote patient visits. Research and structured quality improvement have helped us identify best methods for illness and injury prevention, education and patient care.

Meanwhile, the crisis in pediatric and adolescent mental health has continued. Pediatrics faculty members have continued to address the behavioral health needs of our community through ambulatory and inpatient clinical care, education, research, and advocacy. Our colleagues in Upstate leadership, in Psychiatry, and the Upstate Foundation have been wonderful partners. We have continued to grow programs addressing eating disorders, autism and related disorders, and more. We have worked with community social services partners to address the growing challenge of children and adolescents abandoned at Upstate Golisano Children's Hospital due to challenging behaviors at home.

Meanwhile, faculty members continue to beautifully address the many other missions of our department. Department members earned honors and produced scholarly work at an extraordinary pace; see the extensive listings of awards, grants, publications, and more in this report. Faculty continue to educate medical students at every step of medical school. Our Pediatrics residency, which I sometimes refer-to as "the glue of the Department" for the way it brings us together, continues to educate class after class of new pediatricians. We initiated a new, fully accredited, Pediatric Hospital Medicine fellowship program, along with our pre-existing fellowship programs in Pediatric Infectious Diseases and Child Abuse Pediatrics.

We appreciate our many collaborators and partners, including community physicians, staff colleagues at Upstate Golisano Children's Hospital and University Hospital, and our teaching colleagues at Upstate Community Hospital, Crouse Hospital, St. Joseph's Hospital, and at the Binghamton Clinical Campus. The Upstate Foundation and the Upstate Alumni Foundation provide wonderful philanthropic support.

We welcome and value your feedback. You can keep up with us through our departmental website at upstate.edu/pediatrics

Thank you!

Gregory P. Conners, MD, MPH, MBA, FAAP, FACEP Stanley A. August Professor and Chair of Pediatrics Executive Director, Upstate Golisano Children's Hospital

# **Department Leadership**

Our vice chairs have primary responsibilities for a variety of functions within the department. This group meets regularly with the Chair, and together acts as a deliberative body to set policy and direction. Each also makes independent decisions within his or her area of responsibility.



Ann Botash, MD (botasha@upstate.edu) is Vice Chair for Educational Affairs, with responsibility for all aspects of education in the department: undergraduate, graduate, and continuing. The impressive scope of our education services is outlined in this report. Ann has also served Upstate in several leadership roles, including previously as Interim Chair of Pediatrics, and currently as Senior Associate Dean and Distinguished Education Professor. She is also Director of our Division of Child Abuse Pediatrics.

Ann is a well-known national figure in pediatrics. 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, as Director of our Pediatric Nephrology Division.

In his Vice Chair role, Scott has responsibility for clinical activity in the department. He has played an important role in our growth in faculty and programs and leadership of ambulatory clinics. He also supports all Upstate physicians through his important leadership roles at Upstate University Medical Associates at Syracuse (UUMAS).



SUNY Distinguished Service Professor 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. Len has overall responsibility for our research programs, as is shown in our large number of publications and presentations. He is also the long-time Director of our Division of Pediatric Immunology and Infectious Disease.

The leadership team is supported by our outstanding office staff, led by assistant to

the chair

**Gina Romero Colombo** (romerog@upstate.edu), and business manager **Farrah McMahon** (McMahonF@upstate.edu).

# **Pediatrics by the Numbers**

A few pertinent metrics provide a summary of our child health care activity during 2022 and 2023. Many of these have significantly increased.

Measure	2022	2023
Inpatient admissions	4,758	4,457
Observation patients	2,228	2,390
Average length of stay, days (inpatient only)	4.5	4.7
Pediatric ED visits	31,721	30,497
Admissions from Pediatric ED	3,995 (12.6%)	3,882 (12.7%)
Observations from Pediatric ED	(84% of admissions) 1,736 (5.5%)	(87% of admissions) 1,862 (6.1%)
Pediatric outpatient visits	128,536	133,145
Pediatric OR procedures (age < 19)	5,707	6,833

Thirty-six life-sized fiberglass horses arrived in Syracuse on Dec. 18, 2001, as part of the High Falls Brewing Company's fund-raising community art project, "Horses On Parade." Only a few of the horses still stand in Syracuse today. This one is at the entrance of Upstate Golisano Children's Hospital.



# **Upstate Foundation**

The Department of Pediatrics and Upstate Golisano Children's Hospital are fortunate and grateful to have the support of the Upstate Foundation. The Upstate Foundation, along with many friends, colleagues, corporations, and the Children's Miracle Network Hospitals partners, generously raised more than \$5 million in 2022 & 2023 to support the needs of our patients, families, & faculty.

The mission of the Upstate Foundation is: impacting patient care, education research and community health and well-being through charitable giving. This mission is reflected in the support our Pediatrics department receives in funding.

The Upstate Foundation provides us with the funds necessary to create a pediatric patient / family friendly environment. With their support we are able to purchase appropriately sized equipment and continue to establish innovative programs that go beyond the limits of traditional hospital care in meeting the needs of sick and injured children.

The Upstate Foundation, along with community donations and Children's Miracle Network Hospitals' partners, provide nearly 100% of the needs of our Child Life programs. They are helping us grow our Critical Care Transport team as we travel to help children in our 22-county reach, and support numerous research projects and grants, such as the "Go Baby Go" grant that Dr. Nienke Dosa received from the John Ben Snow Foundation. The Upstate Foundation's current \$5.3 million focus campaign to support Child and Adolescent Mental Health needs in our community will strengthen our ability to care for these vulnerable children.

Many thanks to The Upstate Foundation, which supports us every step of the way!

(Right) A substantial amount of funds are provided to the Child Life Specialist Team from the Upstate Foundation.

(Below) Radiothon 2023 where \$171,327 was raised.



# **Diversity, Equity, and Inclusion**

The Department of Pediatrics has an active Diversity, Equity, and Inclusion (DEI) Committee focused on promoting a sense of belonging and respect for all faculty, residents, and staff. The committee is open to all, and is made of up 20 faculty members, 4 residents, and 2 nonphysician colleagues. Consistent with the vision of SUNY Upstate Medical University, we support a culture of openness, humility, and learning. We review recruitment policies, the departmental mission statement, and educational programs for faculty and residents to ensure that we support and foster a culture of respect for all, regardless of race, ethnicity, gender, sexual orientation, gender orientation, national origin, disability status, or socio-economic status. Our DEI committee, led by Drs. Ajagbe and Teelin, meets 6 times per year to plan educational initiatives, problem-solve, and support each other.

# Examples of DEI Initiatives within the Department Include: Educational DEI Initiatives:

- An institutional Foundations of Understanding Equity, Inclusion, and Bias in Academic Medicine microcredential for faculty development, created by Dr. Botash and offered through the Norton College of Medicine Office of Faculty Affairs and Development, with support from multiple institutional offices, beginning in the fall of 2023. This four-part series and follow-up debriefing discussions was presented by Diana Lautenberger, MA, Director of Gender Equity Initiatives from the AAMC. Topics included unconscious bias, confronting dominant culture and creating inclusive environments, allyship and bystander intervention and understanding gender equity. The microcredential required completion of reflections and a pre and post-test; it was offered to faculty and staff. Twenty-six Department of Pediatrics Faculty have already earned the microcredential.
- Twice yearly interactive workshops planned by the DEI committee and presented during protected didactic time for residents. Topics include allyship and bystander intervention. These are highly rated and each attended by 10-15 faculty members as well as nearly all residents.
- All Grand Rounds speakers are asked to include DEI as an aspect of their talk. At least one Grand Rounds per year is specifically focused on a DEI topic. Recent topics include a specific two-part DEI lecture series, a lecture on addressing name microaggressions, and a lecture on antiracism and belonging, and a lecture on allyship for female colleagues in medicine.
- Our resident DEI Committee members have organized a Resident Affinity Group with focus on recruitment, advocacy, and culture, supported by faculty on the DEI committee.
- A Community Pediatrics and Advocacy course for interns, led by Drs. Travis Hobart, Winter Berry, Steven Blatt, and Elizabeth Nelsen, as well as an advocacy interest group, led by Dr. Winter Berry, including a trip to the state capitol as part of the American Academy of Pediatrics' Advocacy Day.
- Third year pediatric residents have the unique opportunity to provide primary care to Native American children one morning per month at the Onondaga Nation Clinic.
- A global health pathway for the pediatric residents is led by Dr. Elizabeth Hobson. Dr. Andrea Shaw directs opportunities in global health elective with a partner medical university in Kisumu, Kenya. There, we have had a longstanding relationship with Maseno University School of Medicine. Our pediatric residents can enroll in a clinical/educational elective in their PGY3 year. Residents also can lead and participate in monthly case conferences bringing our pediatric residents and faculty together with pediatric MSIV/MSVI students and pediatric residents from Maseno University School of Medicine

(MUSOM) for case-based conferences. Dr. Walter Otieno (Department Chair of Paediatrics and Child Health at MUSOM) is also recognized as a voluntary faculty member in our Department of Pediatrics. Each year, the Institute for Global Health and the Dept of Pediatrics sponsors two graduated Kenyan medical students to come for a month long observership at Upstate.

- Significant faculty involvement in the undergraduate medical school courses focused on DEI topics in the Health Systems Science curriculum (new for 2023-24), co-led by Pediatrics Department faculty member Dr. Travis Hobart. Five other faculty members from the Pediatrics Department serve as small group leaders, including Dr. Amy Caruso Brown, who is heavily involved with management of the course as well (and previously was co-director).
- A bias checklist for use when developing educational materials, developed by faculty member Dr. Amy Caruso Brown.
- Dr Nienke Dosa is Co-Lead of Women in Medicine and Science at Upstate Medical University. She organized a Women in Medicine and Law Dinner and Panel Discussion on Child Mental Health Advocacy in October 2023
- Dr. Nienke Dosa, in collaboration with Arise Adaptive Design, is a clinical preceptor at the maker space of an regional independent living center, where they create assistive technologies for children with disabilities using low cost equipment (interdisciplinary learning opportunity for medical students, public health students and physical therapy students at Upstate Medical University) https://www.ariseinc.org/services/adaptive-design/.
- Multiple faculty members were part of Norton School of Medicine's 2023 task force for curricular renewal, including Advocacy, Ethics and the Law (Drs Dosa and Teelin), Humanity and the Arts (Dr. Dosa), and SUNY Upstate Disability Curriculum task force (Dr. Dosa, 2020-present)
- The Monthly Dept of Pediatrics Book Club (called PediaLit), started and led by Dr. Jaclyn Sisskind, focuses on young adult literature with themes such as LGBTQ, racism, poverty, immigration, and body size discrimination. The PediaLit book club is open to all pediatrics faculty, residents, and staff, and is well-attended.

#### Clinical DEI Initiatives:

- A Hair Equity subcommittee, led by Dr Christina Nicolais, meets to suggest improvements to our Children's Hospital hygiene selections for patients We aim to increase equitable access to hair care in the hospital by identifying and providing products that meet the needs of children with diverse hair types. We are also working to develop staff education to support this aim.
- A holiday décor letter from our DEI committee to all pediatrics clinics, requesting that if clinics chose to decorate for December holidays, they are sensitive to a range of religious and cultural beliefs and aim to make all patients, faculty, and staff feel seen, accepted, and welcome.
- A new Center for International Health has formed, jointly supported by the Departments of Pediatrics & Internal Medicine. Dr. Andrea Shaw directs the Center for International Health and has pediatrics support from Dr. Elizabeth Hobson and Dr. Michele Spring. There are currently ~2,500 patients followed by an integrated team to meet the complex social and health needs of this global population. Dr. Shaw leads a community-clinic partnership in formal collaboration with one of the local resettlement agencies, Catholic Charities of Onondaga County. Through this collaboration, residents can engage in home visits, health screenings, and health literacy teaching sessions with the

health promotion team. This outreach intentionally brings health professionals together with community members and youth who are interested in health careers, providing informal and formal mentoring and exposure for refugee children.

- Our adolescent gender clinic, led by Dr. Karen Teelin, serves over 450 transgender youth from throughout the state, providing specialized medical care in an affirming, developmentally appropriate setting. Dr Teelin has presented at regional and national meetings teaching primary care providers to care for transgender adolescents.
- At The Golisano Center for Special Needs, Dr. Nienke Dosa partners with community-based initiatives that are focused on adaptive technology, inclusive recreation, and adapted sports for children with developmental disabilities.
- Our largest General Pediatrics clinic, Upstate Pediatrics and Adolescent Center (UPAC) is a primary care practice providing care for diverse population. UPAC is one of the largest Medicaid Pediatric Primary Care Practices in NYS, and one of the largest utilizers of New York State's Vaccines for Children program, providing vaccines for youth who have Medicaid or are uninsured or underinsured. Several programs housed within the division of General Pediatrics specifically address the needs of underserved populations, including a clinic specialized for primary care for children in foster care, led by Dr. Steven Blatt and Dr. Jan Bach, as well as a diaper bank, led by Dr. Winter Berry.

# Grants, Publications, and other Scholarly Activity Related to DEI Include: Grants

Expanding the Testing of Novel Measures of Risk and Resilience in Pediatric Primary Care. Site Principal Investigator. Winter Berry, DO, December 2019 – present. Source: The JPB Research Network on Toxic Stress, A Project of the Center on the Developing Child, Harvard University. Total Award: \$30,000 plus in-kind coverage of supplies, technology, logistics costs.

Health and Human Services of Lesbian, Gay, Bisexual, and Transgender Individuals, Families and Communities Component A. NYS Department of Health AIDS Institute, \$133,000/year for 5 years. (2019-2024) Drs. L. Weiner and K. Teelin.

Go Baby Go/Building Mobility in Syracuse and Beyond! Interprofessional Education Project. John Ben Snow Foundation \$10,000 (2022-23) Principal Investigator: Nienke Dosa MD; Connor McGough, Lisa Neville OTR et. al.

Virtual First Mile Program and TRAID on the Trails Adaptive Cycling Fair at Inner Harbor, Onondaga Creekwalk: <a href="https://eriecanalway.org/explore/challenge/virtual?utm\_medium=email&utm\_source=govdelivery">https://eriecanalway.org/explore/challenge/virtual?utm\_medium=email&utm\_source=govdelivery</a> Erie Canal Corporation, \$2500 (August 2022-February 2023) Principal Investigators: Peyton Sefick, Mary Carney, Christine Pelis DPT, Nienke Dosa MD

Child Abuse Medical Provider (CHAMP) Education Initiative, Education and Network of NYS Physicians, Nurse Practitioners and Physician Assistants. NYS DOH, Rape Crisis Program (CHAMP). \$375,000 (July 2020- 2025) The CHAMP Program received additional grant funding (\$750,000) from NYS Office of Children and Family Services to expand the State's response to suspected child abuse by hosting a summit for Child Advocacy Center Medical Directors and Executive Directors, documenting best practices, and establishing a network for peer review of child abuse medical evaluations throughout the State (March 2023- September 2025).

#### **Textbook Chapters and Guidebooks**

Building Mobility in Syracuse and Beyond! Advocacy Guidebook for High School Students (Fitness Inclusion Network, 2023), Dosa NP.

Adaptive Cycling along the Erie Canal (2022): <a href="https://eriecanalway.org/application/files/4716/4641/4287/Adaptive-Cycling-Guide-2022-sm.pdf">https://eriecanalway.org/application/files/4716/4641/4287/Adaptive-Cycling-Guide-2022-sm.pdf</a>

Foley J, Dosa NP, Devine MA "Inclusive Fitness and Physical Activity" in *Inclusive Leisure: A Strengths-Based Approach, Mary Ann Devine and Lynn Anderson, editors.* Human Kinetics, 2022.

#### Regional and National Presentations

Shubkin C, O'Dea CLH, Osborn R, Teelin KL, Caruso-Brown A, "I Object! Conscientious Objection to Gender Affirming Care in Residency Training, Balancing Vulnerabilities." Association for Pediatric Program Directors National Meeting, Atlanta, GA, 2023

Shubkin C, Teelin KL, English A, Caruso-Brown AE, "Protecting Access to Care for Transgender Youth," Workshop, American Society for Bioethics and Humanities, National Meeting, Portland Oregon, October 2022

Teelin KL, Caruso-Brown AE, English A, Shubkin C, "Transgender Care, Medical Education, and Medical Ethics in 2022: Practical Approaches to Enhance Access for Vulnerable Youth while Balancing Professionalism, Empathy, and Standards of Care." Workshop, Society for Adolescent Health and Medicine National Meeting, San Diego CA (converted on online due to pandemic), March 2022

Malhotra A, Locastro M, Pelis C, Koutsouras G, Tovar-Spinoza Z, Potter D, Potter L, Shaw A, Ogutha L, Kutwa E, McGough C, Neville L, Fathers J, Carr D, Contepomi S, Dosa NP. *Local/global information sharing of assistive technology solutions developed by people with spina bifida.* Poster presentation, Spina Bifida World Congress, Tuscon Arizona, March 22-25, 2023.

Castillo J, Alriksson-Schmidt A, Contepomi S, Peny-Dahlstand M, Ahmed Y, Koning J, Koning M, O'Neill P, Overvelde A, Castillo H, Locastro M, Koutsouras G, Kutwa E, Ogutha L, Shaw A, Pelis C, Tovar-Spinoza Z, Dosa NP. *Spina Bifida Global Learning Collaborative*. Poster presentation, Spina Bifida World Congress, Tuscon Arizona, March 22-25, 2023.

Pica M, McFarlane S, Locastro M, Pelis C, Sefick P, MacDonald C, Foley J, Duff J, Kelley A, Dosa NP. Virtual "Peleton" Home Exercise Program to Promote Adaptive Cycling along the Erie Canal. Poster presentation, Spina Bifida World Congress, Tucson, Arizona, March 22-25, 2023.

# **Education Programs in Pediatrics: Medical Students** and Residents

# **Faculty**

#### Vice Chair for Educational Affairs

**Ann S. Botash, MD,** Professor of Pediatrics, SUNY Distinguished Teaching Professor, Senior Associate Dean for Faculty Affairs and Faculty Development, Norton College of Medicine

#### **Graduate Medical Education**

#### 2023-2024 Pediatrics Residency Leadership:

Olamide Ajagbe, MD, Assistant Professor of Pediatrics, Pediatric Residency Program Director Heather Wasik, MD, Assistant Professor of Pediatrics, Associate Program Director Manika Suryadevara, MD, Professor of Pediatrics, Associate Program Director

#### **Residency Committees:**

The Program Evaluation Committee (PEC), led by Dr. Suryadevara, includes faculty, chief residents, and resident representatives from each training year.

Clinical Competency Committee (CCC), led by Dr. Wasik, includes resident faculty advisors and chief residents.

#### 2022 - 2023 Pediatrics Residency Leadership:

Elizabeth Nelsen, MD, Associate Professor of Pediatrics, Pediatric Residency Program Director Olamide Ajagbe, MD, Assistant Professor of Pediatrics, Associate Program Director Heather Wasik, MD, Assistant Professor of Pediatrics, Associate Program Director

#### **Residency Committees:**

Pediatric Residency Education Committee, led by Dr. Nelsen, includes faculty, chief residents, and resident representatives from each training year.

Pediatric Residency Evaluations and Promotions (PREP) Committee, led by Dr. Wasik, includes resident faculty advisors and chief residents.

# **Undergraduate Medical Education**

# Pediatrics Clerkship Leadership:

**Jennifer Nead, MD**, Assistant Professor of Pediatrics, Pediatrics Clerkship Director, Syracuse Campus Site Director

**Leah Bennett, MD, MPH,** Assistant Professor of Emergency Medicine and Pediatrics, Associate Clerkship Director, Syracuse Campus

**Karolina Petro, MD,** Clinical Assistant Professor, Pediatrics Clerkship Binghamton Campus Site Director **Manish Kumar, MD\*,** Clinical Assistant Professor, Pediatrics Clerkship Binghamton Campus Associate Site Director

\*Note: Dr. Kumar was interim site director starting August 2023 while Dr. Petro was on maternity leave.

# Other Undergraduate Medical Education

**Leann Lesperance, MD, PhD,** Associate Professor of Pediatrics, Associate Dean for Undergraduate Medical Education

Winter Berry, DO, Associate Professor of Pediatrics, University Pediatric and Adolescent Center site director for the Pediatrics Clerkship

**Jaclyn Sisskind, MD,** Assistant Professor of Pediatrics, Upstate Pediatrics Office site director for the Pediatrics Clerkship

#### Career Advocate/Specialty Advisors:

Gloria Kennedy, MD, Assistant Professor of Pediatrics Matthew Mittiga, DO, Assistant Professor of Pediatrics

#### Docs for Tots Club Advisor:

Anjali Sura, MD, Assistant Professor of Pediatrics

#### Student Research Advisor:

Manika Suryadevara, MD, Professor of Pediatrics

#### **UGME Learning Community Advisors:**

Multiple pediatric faculty members serve as mentor/advisors for medical student learning communities.

#### **Administrative Staff**

Patricia Mondore, MA, Residency Program Coordinator

Aubrey Mariani, Associate Residency Program Coordinator & Hospitalist Fellowship Coordinator

Christine Kuenhle, Clerkship Coordinator, Syracuse Campus

Kelly Cortright, Clerkship Coordinator, Binghamton Campus

#### Overview

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

#### **Graduate Medical Education**

For over eighty-five years, the Department of Pediatrics has maintained a residency training program in general pediatrics that provides residents with a strong foundation in primary care pediatrics, acute care medicine, and all subspecialties. Our collegial environment allows a "hands-on" approach with a low faculty-to-resident ratio. Due to the large catchment area that the department serves, 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 received continued accreditation from the ACGME for 85 years. In April of 2023, the ACGME notified the program of a change in status to probationary. Faculty and resident teams have identified key areas for change and an action plan was implemented, addressing all citations. Probation was removed after a follow-up site visit in early 2024.

# The Residency Curriculum

The curriculum enables residents to become competent in all areas of Pediatrics. Some highlights of the curriculum include:

**Didactics:** The core didactic curriculum for residents offers an innovative approach to learning. The curriculum provides learning opportunities and activities for all domains represented in the American Board of Pediatrics content outline for the General Pediatrics Certification Exam. All residents are excused from their clinical responsibilities for their weekly academic half-day, which is when most of their didactics occur.

**Primary Care:** Training in outpatient general pediatrics is based at the Upstate Pediatric and Adolescent Center (UPAC). Residents can also participate in a longitudinal outpatient clinical experience at the Onondaga Nation Clinic during their third year. Residents also maintain their unique patient panels as part of the continuity clinic, which is also based at UPAC. In the third year, residents can seek out additional opportunities in private practices in the community to enhance their training and education.

**Critical Care:** Upstate Golisano Children's Hospital Pediatric Intensive Care Unit (PICU) is the setting for training in Pediatric Critical Care Medicine. Residents provide direct patient care for the sickest children in Central New York, who are admitted with a wide range of conditions.

**Emergency Medicine:** Residents serve on the front line to care for children up to 19 years of age who come to the area's only Pediatric Emergency Department with medical or surgical emergencies. The department conducts over 30,000 visits annually. Residents are supervised by board-certified Pediatric Emergency Medicine and Emergency Medicine faculty.

**Neonatology:** Residents care for the sickest newborns in Central New York at the Crouse Hospital Walter R. G. Baker Neonatal Intensive Care Unit, under the supervision of a team of board-certified neonatologists.

**Developmental Pediatrics:** This rotation takes advantage of the outstanding community resources in child development and those at our newly opened Golisano Center for Special Needs. The Center is home to services for children with developmental and behavioral problems, including autistic spectrum disorders, as well as those with complex medical conditions, such as spina bifida, cerebral palsy, and genetic disorders.

**Hospital Medicine:** Dedicated pediatric 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. Hospitalists also serve as educators for residents and medical students during inpatient rotations. Trainees participate in family-centered rounds with attendings, mid-level providers, nurses, and other staff.

**Subspecialties:** The training program provides comprehensive experiences in the pediatric subspecialties. Residents have elective time that allows them to explore different specialty areas to deepen their knowledge and consider opportunities for fellowships. Residents have one call-free block during residency that they can use for away rotations elsewhere in the United States or overseas with the Global Health program.

**Summer Advocacy Series:** This intern-only conference series was first implemented in 1994 through an AAP CATCH grant and has grown over the years, providing an introduction for new trainees to community pediatrics and advocacy in the context of our local setting. The summer sessions incorporate topics such as early childhood literacy, environmental health, and legislative advocacy and concludes with a narrated bus tour of the city.

**Teaching Skills for Residents:** This quarterly series has been offered for over 20 years and is designed to meet the needs of residents as teachers. The series addresses topics including delivering effective lectures, teaching at the bedside, providing feedback, evaluating students, and serving as a role model. Journal Club (resident-run journal club): Senior residents present interactive sessions designed to analyze recent literature and demonstrate potential effects on practice.

**Global Health:** Residents and students can participate in international health activities during their third year of training. Our partnership with Obama Children's Hospital in Kisumu, Kenya, allows our residents to interact with trainees and provide bedside and didactic teaching while they learn about providing care in resource-limited settings. Residents care for local refugee patients while serving patients during all clinical rotations.

**Research:** Many of our residents participate in active research with faculty. Residents are encouraged to submit clinical cases for publication, and many manuscripts reported throughout this document were authored or co-authored by our residents and students.

Advocacy rotation and career pathways: All interns rotate through an Advocacy rotation as the first of the six career pathway rotations. It is a rotation designed for interns to gain new knowledge and skills in advocacy, global health, and research. It combines both in-person and virtual learning experiences to serve this goal. At the end of the intern year, residents select from one of three career pathways designed to give them more time to practice and enhance skills in advocacy, global health, and research. Residents meet with a pathway advisor to determine which rotations best fit their career goals.

**Quality Improvement:** Residents receive four hours of patient safety/quality improvement didactics annually. Residents obtain a Basic Certificate in Quality and Safety from the IHI Open School during their intern year. All residents complete a quality improvement project before graduation. Residents receive mentorship from dedicated quality improvement faculty to help with their projects, most complete projects of their own design in teams. Some go on to present their projects at national conferences. The American Board of Pediatrics awards eligible projects Part 4 Maintenance of Certification (MOC) credit.

**Morbidity and Mortality (M&M):** All third-year residents prepare and present an event review for M&M at Pediatric Grand Rounds. Residents create a timeline for their case analysis using quality and safety tools. They benefit from expert faculty mentorship and interdisciplinary collaboration. Presentations include a description of recommendations to improve processes and positively impact systems.

**Resident Teaching Awards:** Residents are recognized by the department annually through clerkship student identification of exemplary resident teachers. These awards are presented each year at the end-of-year resident graduation ceremony.

# **Undergraduate Medical Education**

Pediatrics Clerkship: Our 5-week clerkship provides pediatric education to approximately 170 third year medical students every year. Students are assigned to either the Syracuse or Binghamton clinical campus. At both locations, students participate in outpatient and inpatient direct patient care experiences. In Syracuse, medical students rotate on inpatient medicine service teams and work closely with pediatric residents and hospital medicine attendings. Students rotate at general pediatric outpatient offices either at the Upstate main campus or in the community. Some students also have pediatric outpatient subspecialty experiences built into their schedules. All students participate in newborn medicine clinical experiences at Upstate or other hospitals in our community.

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 direct patient care, teaching rounds/discussions about patients, and interactive small and large group learning sessions (examples include adolescent medicine case discussions and pediatric history and physical examination skill sessions). Students give evidence- based medicine (EBM) presentations on focused clinical questions that arise during their care of patients. Faculty and fellows within the Department of Pediatrics serve as EBM small group discussion facilitators evaluating student presentations. Students write reflective narratives regarding professionalism and systems-based practice issues (topics include systemic/institutional bias and health equity). Faculty members, including the Chair of Pediatrics and Vice Chair for Educational Affairs, review and select narratives for discussion. Students from both clinical campuses subsequently join each other to participate in small group discussions.

We thank the following voluntary faculty community physicians for bringing Pediatrics clerkship students into their practices:

#### **Brighton Hill Pediatrics**

Barbara Anne Morisseau, MD

#### Lyndon Pediatrics

Priyanka Kaul, MD (prior to moving to our UPAC, 6/23)

Kate Robinson, MD

#### Madison Irving Pediatrics

Megan Campbell, DO

Tamora Gallagher, DO

Kristina Hingre, MD

#### Pulaski's ConnextCare

Megan Pecha, MD

#### **River View Pediatrics**

Sarah Finocchiaro, MD

Christopher Delaney, MD

Carla Overton, MD

#### Summerwood Pediatrics

Robert Dracker, MD

#### **Binghamton Clinical Campus:**

Arianne Borda, MD

David C. Carter, MD

Michelle Drilon, MD

Nilima Jawale, MD

Santosh Mukka, MD

Victoria R. Nakimbugwe, MD

Runak Patel, MD

Avinash Purohit, MD

Sreya Singh, MD

**Docs for Tots:** Students in the first and second year of medical school participate in a pediatric club offering seminars, mentoring, physical examination skills rounds, and advocacy/fundraising events for children. This program generally includes 25-40 students.

Pediatric electives are offered in all specialties, including "unique" and concurrent electives.

**MS4 Advising:** Students planning additional education and/or careers in pediatrics have many opportunities for electives, research and scholarship, and acting internships. Dr. Matthew Mittiga and Dr. Gloria Kennedy work closely with students to provide individual specialty guidance and support.

# Recognition/Awards Faculty

2022-23 Exceptional Teacher Recognition, for their contributions to student teaching:

Drs. Janice Bach, Winter Berry, Megan Campbell, Ian Gallegos Dargon, Jennifer Nead, and Jennifer

Myszewski.

Exceptional Moments in Teaching recognition awarded by the Dean of the Medical School (2022): Dr. Joshua Bonville

Certificate of Special Recognition for Contributions in Pediatric Education by the American Academy of Pediatrics July 2022 (one of 2 nationally recognized awardees): Dr. Ann Botash

#### 2023 UGCH Patient Experience Awards (PEA):

Dr. Elizabeth Nelsen, 2023 Pediatrics Patient Experience Awards (PEA) Committee, Department of Pediatrics

#### **Pediatrics Residents:**

2022 Humanism and Excellence in Teaching Award, as selected by Upstate fourth-year medical students: Dr. Andrew Brooks

2023 Upstate GME Award for Teaching: Dr. Holly Stacey

Exceptional Moments in Teaching recognition awarded by the Dean of the Medical School: Drs. Aly Soliman, Andrew Smith, Dayna Ukwuoma, Mhd Khalil Tamr Agha, Andrew Brooks, Michael Kennedy Yoon, Adil Siddiqui, Holly Stacy, and Sarah Hendrix.

# 2023 UGCH Patient Experience Awards (PEA):

Dr. Akilah Evans (Best Listener, Outpatient, Best Communicator, Inpatient), Sarah Hendrix (Outstanding Resident, Inpatient)

Clara El Nakib (Outstanding Resident, Outpatient)

# Selected Continuing Medical Education and Scholarly Products

The department offers weekly **Pediatric Grand Rounds** provided to the Upstate Golisano Children's Hospital community. One Grand Rounds per month is dedicated to a morbidity and mortality case, presented by third-year residents. Yearly special events include funded, visiting professorships supported with named lectureships and invited nationally recognized speakers.

**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. Other Pediatric MOC includes a teaching skills monthly series, "The Community of Preceptors."

American Board of Pediatrics MOC Portfolio Program: A committee of faculty is entrusted with evaluating quality improvement projects on behalf of the American Board of Pediatrics for MOC Part 4 credit.

**Pediatric Hematology/Oncology:** Provides weekly sessions which consist of a multidisciplinary Pediatric Tumor Board, Hematology Case Conference, and a Vascular Anomalies Tumor Board with CME credit available.

#### **Educational Outcomes**

Graduates of our residency program go on to careers in primary care, academic medicine, subspecialties, and general pediatrics. Roughly half of our residents pursue subspecialty training in various clinical domains. Our residents have joined outpatient primary care practices or academic departments in the Syracuse area and various communities in New York State, across the United States, and internationally. We recruit 1-3 chief residents annually from the graduating class and other programs.

Our pass rate for the American Board of Pediatrics General Pediatrics Certifying Examination for first-time test takers is over 70% for the last five years.

On the NBME subject exam in Pediatrics, taken by medical students completing their Pediatrics clerkship experience, students scored comparable to the national mean.

#### Resident Research

All pediatric residents participate in one or more research/quality improvement projects with faculty before graduation. Residents benefit from mentorship from a variety of areas to complete their projects. In addition to their quality improvement work, residents undertake other research projects, ranging from case reports to education. From 2020 to 2021, 16 resident abstracts were selected for presentation as posters or platform presentations at regional and national meetings.

From 2022 to 2023, 15 residents were selected for presentations as poster or platform presentations at national meetings.

Pediatrics residents Dr. Richard Johnson and Dr. Abeir Mohamed were selected for the AMSPDC 2022 and 2023 Frontiers in Science Symposium, respectively. Dr. Precious Sanni Adeniyi and Dr. Ghina Fakhri were selected for the AMSPDC 2024 Frontiers in Science Symposium.

#### Student Research

Students have many opportunities to participate in research in the Department of Pediatrics. Our student research advisor, Dr. Manika Suryadevara, works with students to help identify appropriate research mentors in the Department of Pediatrics. Financial support is available.

# **Education Budget**

The departmental educational budget, including faculty, staff, and other expenses, is 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. We have several visiting professorship programs, including the Oski Visiting Professorship, the Silverman Lecture, and the Hartenstein Lecture.

# **Grant Funding**

Child Abuse Medical Provider (CHAMP) Extension Grant, OCFS, awarded in March 2023- July 2025; Ann Botash, MD, Alicia Pekarsky, MD, JoAnne Race, MSc, Dana Kaplan, MD (Northwell Health) & Trish Booth, \$750,000. This grant was awarded for the development of CME, MOC and other educational programs to support child abuse educational initiatives for medical providers in New York State.

# Regional and National Abstracts/Posters/Workshops

Nelsen E, Mills D, Goodrich N, Orlov N, Li S. How do programs identify, support, and track resident remediation? Pediatric Academic Societies, Washington, DC, April 30, 2023.

Nelsen E, Mills D, Goodrich N, Orlov N, Li S. How do programs identify, support, and track resident remediation? Association for Pediatric Program Directors, Atlanta, GA, March 30, 2023.

Orlov N, Goodrich N, Mills D, Nelsen E, Li S. Building a remediation plan for your trainees: a national qualitative study of pediatric residency program directors. Association for Pediatric Program Directors, Atlanta, GA, March 30, 2023.

Dr. Elizabeth Nelsen presenter: DEI Faculty Bootcamp. Pre-conference workshop presented with the APPD Confronting Racism Action Team (Michelle Barnes, Michael Weisgerber, Olanrewaju Falusi, Su-Ting Li, Jo-Anne Nesiama, Kimberly Montez, Andria Tatem, Margarita Ramos, Mollie Grow, Ana Clara Mauro, Sarah Gustafson, Stacey Laurent, David Turner, Chandra Smith, Eyad Hanna, Robert Trevino). APPD Spring Meeting, Atlanta, GA. March 28, 2023.

Cleary LM, Darko W, Rokicki R, Botash AS, Vaughn J, Phelan L. Microcredentials to Advance Flexible, Individualized Learning in Academic Medical Centers. November 2023. AAMC Poster, Seattle, WA.

Rice MA, Race J, Conners G, Botash AS. Examining Annual Academic Expectations in a Pediatrics Department. Pediatric Academic Societies Poster 2022, Denver, CO. Upstate Student Research Poster Award at Upstate's Student Research Day, April 2022.



2022 Pediatric residents in front of Upstate Golisano Children's Hospital.

# **Child Abuse Pediatrics**

## **Faculty**

**Ann S. Botash, MD**, SUNY Distinguished Teaching Professor of Pediatrics, Vice Chair for Education, Division Director in Child Abuse Pediatrics, Co-Medical Director of the McMahon Ryan Child Advocacy Center; Norton College of Medicine Senior Associate Dean for Academic Affairs; Associate Fellowship Director

Alicia Pekarsky, MD, Associate Professor of Pediatrics; Fellowship Program Director;

Co-Medical Director of the McMahon Ryan Child Advocacy Center; Medical Director of the Inpatient CAP Consult Service

Heather Ross, MD, Assistant Professor of Pediatrics (beginning 2023)

#### **Fellows**

Heather Ross, MD (2020-2023) Elizabeth Simmerman, MD (anticipated 2023-2026)

#### **Administrative Staff**

**JoAnne Race, MSc,** Child Abuse Fellowship Coordinator; Clinical Instructor, Pediatrics, and Principal Education Specialist

#### Staff

Kristin Razawich, PNP, Clinical Instructor, Pediatrics Anne Galloway, RN Michelle Case, LMSW Temika McClarin, Administrative Assistant

#### Clinical Overview

Founded in 1990, the Child Abuse Referral and Evaluation (CARE) Program, through its offices at the McMahon Ryan Child Advocacy Center (CAC), provides medical evaluations for children who are suspected to be maltreated or abused. The CARE team consists of American Board of Pediatrics-certified Child Abuse Pediatricians, a specially trained nurse practitioner, nurse, and social worker, who work together in evaluating suspected child and adolescent victims of maltreatment. Medical care and treatment are provided for children 21 years of age or younger in a sensitive, supportive, and reassuring environment. In 2020, the Child Abuse Pediatrics consult service was expanded to include an inpatient service to better serve inpatient needs. This has been a highly successful service in terms of ensuring appropriate medical evaluations, communication with investigative agencies and creation of safety plans.

# **Educational Highlights**

Since 2018, the Division of Child Abuse Pediatrics has supported an ACGME accredited Child Abuse Pediatrics Fellowship, which is a collaboration between Upstate Golisano Children's Hospital at SUNY Upstate Medical University and the McMahon Ryan Child Advocacy Center (CAC). This unique training program provides opportunities for a broad clinical experience as well as robust opportunities for research and scholarly activities. Fellows are part of the CAC's multidisciplinary team as well as two other CACs in the hospital's catchment area. The CAC integrates prevention, investigation, prosecution, treatment, and advocacy services for cases involving all aspects of physical abuse, sexual abuse,

human trafficking, and other forms of child maltreatment. The CAC coordinates Onondaga County's Child Fatality Review Team. Fellows have had the opportunity to provide culturally sensitive general pediatric care in a longitudinal experience at the Onondaga Nation Health Center, an outpatient health care clinic on the Onondaga Nation, and at University Pediatric and Adolescent Center (UPAC). Educational content is covered through a variety of conferences and didactics, including quarterly journal clubs, lunch and learns, educational webcasts, weekly case rounds, and several annual conferences. Fellows also earn a Certificate in Advanced Study in Public Health.

The Division manages the Child Abuse Medical Provider Program (CHAMP, http://champprogram.com), funded through the New York State Department of Health. CHAMP's mission is to improve New York State's medical response to child abuse and was founded by Dr. Botash, who continues to be the principal investigator on the grant. Additional consultants have supported the work, including a long-time consultant, Trish Booth, MA, and child abuse pediatricians from across New York State. Weekly case conferences with NYS CAPs, educational webcasts, on-line courses and practice recommendations are produced through this program to support medical providers in the field. In 2023 the CHAMP Program was awarded a \$750,000 grant (March 2023- September 2025) from NYS Office of Children and Family Services to expand its services. Drs. Botash and Pekarsky along with Ms. Race and others engaged the Center for Research and Evaluation at Upstate to develop and design a questionnaire intended to document the current CAP medical services that are offered across the 62 counties in NYS. The data were presented at the first NYS OCFS/CHAMP Child Abuse Medical Summit on September 19, 2023. A white paper will outline several consensus statements that were developed at this summit. Further programming includes expansion of the network and development of new online resources and educational modules.

The Division offers electives for medical students, pediatric and family practice residents, and fellows from other specialties (including Emergency Medicine and Child & Adolescent Psychiatry). Our elective is highly sought after.

Drs. Ann Botash and Alicia Pekarsky are Upstate Medical University Learning Community clinical advisors for all four years of medical students.

Dr. Ross provided primary and acute care during all three years of her fellowship for a local indigenous population from birth through young adults with weekly continuity clinics (2019-23).

# Research Highlights

This past year, the Division participated in a research pilot study on saliva microRNA signatures in children with moderate-to-severe brain injury in collaboration with investigators from Pennsylvania State University, the Upstate Pediatric Intensive Care Unit, and the Upstate Departments of Surgery and Neurosurgery. This was selected for a poster presentation: Ciancaglini RR, Gallo M, Botash AS, Armijo-Garcia V, Hymel KP, Thomas NJ, Hicks SD. Saliva microRNA signatures in children with moderate-to-severe traumatic brain injury. Poster Presentation, 2022 Pediatric Academic Societies, Denver, CO.

Dr. Ross is studying factors impacting the length of hospital stay in abused children and has undertaken a retrospective review. This was selected for an oral presentation in the spring of 2023: Ross H, Botash AS. Characteristics of Prolonged Length of Stay in Children Admitted with Non-Accidental Trauma. Eastern Society for Pediatric Research (ESPR) Annual Meeting. This project was also selected for presentation at Upstate's Beyond the Doctorate Day, 2023.

Dr. Ross is also leading an innovative quality improvement program: Improving Investigations for Child

Maltreatment through Community Partnership. In addition to distribution of toolkits containing a flashlight, tape measure, Forensic Odontology No. 2 ruler, and thermometers, workshops are offered to local and district Child Protective Services workers. By using surveys and chart review, the goal of the project is to improve knowledge and communication between frontline workers in child maltreatment and enhance efficiency of scene investigations. Mentor: Alicia Pekarsky, MD. This project was awarded an Advocates for Upstate Grant (see below).

Dr. Pekarsky was the site Principal Investigator for a research network, *Examining Siblings to Recognize Abuse (Extra) investigators*, that continues to publish manuscripts. She was a contributor for two peer-reviewed articles. Dr. Pekarsky was also the Site PI for the APPD Subspecialty Pediatrics Investigator Network's study "Longitudinal Evaluation of the Required Level of Supervision for Pediatric Fellows" from February 2021 through January 2023. Study designed by Richard Mink, MD, MACM.

Dr. Botash is developing new CHAMP material to address racism and bias in child abuse investigations, management and treatment and co-authored a *Pediatrics* publication on this topic.

# **Division Highlights**

The Division of Child Abuse Pediatrics was officially formed in 2020. In the Fall of 2020, Dr. Pekarsky relaunched the Inpatient Child Abuse Pediatrics consult service after a 10-year hiatus. As Director of this service, Dr. Pekarsky worked with hospital medical services and community agencies to assess their specific needs, developed a service to meet those needs, and addressed staffing/scheduling issues. During the first 12 months of the service, the team evaluated approximately 150 hospitalized children who were suspected to have been abused. Due to this demand, we recruited Kristin Razawich, PNP as a full-time team member of our team.

Dr. Botash submitted the application for the Upstate CAP Fellowship and implemented the new fellowship as the CAP Fellowship inaugural Program Director. In 2020, Dr. Pekarsky assumed this role. Dr. Botash continues to support the fellowship as associate program director and director of the scholarship oversight committee. Dr. Ashraf graduated in 2021 and is now a board-certified child abuse pediatrician, developing a program in Buffalo, NY. Dr. Ross graduated in September 2023 and joined the faculty at Upstate in October 2023. She is the first new CAP attending to join our faculty since Dr. Pekarsky in 2009.

Dr. Pekarsky has continued in her role as the pediatrician representative to the NYS Children's Justice Task Force (sponsored by NYS Office of Children and Family Services), following Dr. Botash, who served from 1993-2015. In 2020, Dr. Pekarsky was also selected to participate in NY State's newly formed Child Fatality Review Team. She was also asked to be the lead author for the revision of the AAP's Policy Statement on Child Abuse, Confidentiality, and the Health Insurance Portability and Accountability Act which began in July 2023. Dr. Pekarsky is also one of three Child Abuse Pediatricians in the US who was selected by the Academy of Pediatric Program Directors to work on a Multispecialty Fellowship Flipped Classroom National Curriculum.

Dr. Botash, in her college and institutional role as senior associate dean for faculty affairs and faculty development, supports the Norton College of Medicine Diversity, Equity and Inclusion Department Advocates and, in the fall of 2023, her office launched the first Upstate microcredential for faculty and staff to support DEI education.

#### **Grants and Contracts**

The CARE program has contracts to support the multidisciplinary child abuse teams in Onondaga County through the McMahon Ryan Child Advocacy Center and the surrounding counties, including Oswego, and Cayuga counties.

Dr. Heather Ross was awarded an Advocates for Upstate Medical University grant for \$3,618 to implement her project "Improving Investigations for Child Maltreatment through Community Partnership": June 2022-May 2023.

#### CHAMP Program:

The CHAMP Education Initiative, Education and Network of NYS Physicians, Nurse Practitioners and Physician Assistants, New York State Department of Health, Rape Crisis Program. PI, Ann S. Botash, MD. 2020-2025. \$375,000.

The CHAMP program has been supported by grant funding from the New York State Department of Health (DOH) since 1997, administered by the Research Foundation of SUNY for the Child Abuse Referral and Evaluation Program. Key components of CHAMP education include in-person mentoring by American Board of Pediatrics certified child abuse pediatricians, "live" virtual webinars offered six times per year, weekly CHAMP rounds for and with experts in the field, and online asynchronous coursework. The CHAMP Mentors are NYS child abuse pediatricians who provide free training to medical students, interns, fellows and pediatric medical providers through CHAMP webcasts and in-person education at their clinics.

The CHAMP program was awarded an extension grant by the Office of Children and Family Service to further expand the resources for New York State providers, including the two websites and the programming for education, multiple practice recommendations, and new educational modules. Funds for March 2023- June 2025 equal \$750,000.

For the 2022-2023 grant year, the <u>CHAMPprogram.com</u> website drew over 319,00 visitors. In addition to viewing web pages, visitors downloaded a significant number of resources. Tracking the number of downloads from the top 150 resources offered on the website, there were over 37,000 downloads. That total includes over 3,800 Practice Recommendations related to Triage, Testing and Treatment, Skeletal Survey, Photographic Documentation and Writing an Impact Statement; and over 1,700 Guidelines related to Evaluation of Physical Abuse, Evaluation of Sexual Abuse and Trauma-Informed Care. The 24 questions and answers of Test Your Knowledge were visited over 51,000 times and the individual questions and answers of What Would You Do? regarding nine child trafficking cases were visited 3,000 times. The CHAMP website is at <a href="http://www.CHAMPProgram.com">http://www.CHAMPProgram.com</a>.



# UPSTATE GOLISANO CHILDREN'S HOSPITAL MCMAHON RYAN CHILD ADVOCACY CENTER

- Program provides comprehensive medical evaluations for children suspected to have been abused
- Division created in 2020
  - Inpatient consult service relaunched the same year after a 10-year hiatus
    - ~150 inpatient visits per year
    - Assisted the Pediatric Trauma Surgery team with reverification of Level 1
       Trauma Center status in 2023
  - Outpatient consult service with MOUs for medical direction for Onondaga, Oswego and Cayuga county CACs
    - ~400 outpatient visits per year
    - Assisted McMahon Ryan CAC in becoming one of two CACs in the US to be accredited by the National Children's Alliance in all 10 of the new standards

- Faculty includes 3 CAP attendings, 1 NP and a Principal Education Specialist
- Management of the Child Abuse Medical Provider Program, funded by NYS DOH and Office of Children and Families
- CAP Fellowship approved by the ACGME in 2017
  - First graduate in 2021, second in 2023, third anticipated in 2026
- Faculty lead various local, State and national committees; participate in numerous scholarly activities including extramural grant funded research
- All three CAP attendings completed the AAMC Foundations of Understanding Equity, Inclusion, and Bias in Academic Medicine microcredential



Child Abuse Pediatrics Fellowship Team



# **Pediatric Critical Care**

# **Faculty**

**Angela Wratney, MD, MHSc,** Division Director, Assistant Professor of Pediatrics, Director of Pediatric Transport, Pediatric Director of Respiratory Care, College of Medicine Director of Interprofessional Education

Rachel Clarke, MD, Assistant Professor of Pediatrics, Bioethics Faculty and Consultant Gregory Goldstein, MD, Assistant Professor of Pediatrics, PICU Wellness Officer William Hannan, MD, Associate Professor of Pediatrics

Sarah Harding, MD, Assistant Professor of Pediatrics, PICU Quality Representative Kimberly Rush, MD, Assistant Professor of Pediatrics, PICU liberation, Pediatric ECLS Champion Neal Seidberg, MD, Associate Professor of Pediatrics, Medical Director Clinical Informatics, Upstate University Hospital

**Jennifer Zuccaro, MD,** Assistant Professor of Pediatrics, Pediatric in situ simulation, Pediatric ECLS champion

#### **Clinical Overview**

The Division of Pediatric Critical Care provides expertise in critical care for children in Central New York at the only regional Level I pediatric trauma and American Burn Association (ABA)-verified pediatric burn center. We serve 21 counties and over 750 pediatric intensive care unit (PICU) admissions each year. Our PICU is a 15-bed multidisciplinary unit staffed by board certified pediatric intensivists and critical care trained registered nurses (RN) and respiratory therapists (RT). Pediatric Critical Care intensivists are Board Certified in a 3-year General Pediatrics and a 3-year Pediatric Critical Care fellowship training. All PICU attendings are also American Burn Association ABLS certified.

The critical care team provides comprehensive care for children with post-operative recovery, post-renal transplant care, life-threatening illness or organ dysfunction, cardiopulmonary resuscitation, traumatic brain injury requiring neurocritical care and rehabilitation, pre- and post-surgical management for congenital heart disease, critical asthma, diabetic ketoacidosis, septic shock, mechanical ventilation for respiratory failure, and multi-organ system support. The team is expertly trained in pediatric brain death and post circulatory death evaluation and support for organ donors. Pediatric Critical Care co-manages patients with Pediatric Trauma and Surgery colleagues, collaborates with all subspecialty teams, palliative care and with the CNY Finger Lakes Donor Regional Network. Our team also provides care throughout the hospital through rapid resuscitation and code response teams. Our Pediatric Critical Care transport team is comprised of experienced transport RNs and RTs.

# **Educational Highlights**

Residency Training: Pediatric critical care physicians participate in all areas of Pediatric Residency program training, such as the Pediatric residency education committee, residency morbidity and mortality grand rounds, as core faculty and mentors, in simulation-based education, didactic education, leadership mentoring, and as quality improvement scholarship mentors. Critical care faculty have helped co-author several resident presentations at national, regional, and local meetings. Critical care faculty lead in-situ simulation scenarios every week for the residents.

In the PICU, resident education and fostering an academic approach to inquiry and critical care is strongly emphasized. Pediatrics residents, Emergency Medicine residents, Pediatric Emergency Medicine fellows, and Anesthesiology residents are integrally involved in patient care and multidisciplinary team

management of all PICU patients. Residents consistently rank this educational environment and training as one of the strongest and formative experiences in their training. We are proud that, in the prior 5 years, we have supported 7 excellent Pediatrics residents into competitive spots in Pediatric Critical Care fellowship training and contributed foundational training for all resident trainees graduating to primary care or subspecialty careers.

**Fellowship Training:** We do not have a PICU Fellowship training program. We do have rotations in our PICU for fellows from Upstate programs in Pediatric Emergency Medicine, Child Abuse, and Pediatric Hospitalist Medicine.

**College of Medicine:** Pediatric critical care faculty serve as facilitators for evidence-based medicine instruction, ethics and professionalism, Patients to Populations, Practice of Medicine, and Transitions to Residency courses. The PICU Acting Internship rotation for MS III and IV students is highly sought after and receives excellent feedback on the training environment and preparation for residency.

Core Faculty on the Upstate Interprofessional Education (IPE) Team: Co-developed the "Giving Bad News" interprofessional simulation experience for the Transitions to Residency program, facilitate simulation-based education, skills labs at the Simulation Center and in the cadaver lab. IPE supports the college curriculum committee and mission for student education. We conduct large group facilitation combining attendance from four colleges at Upstate annually. Lead facilitator training for the BEST course and for the Academy of Upstate Educators, Faculty Development and Education seminars, and for the Leadership Course "LEAD" for Upstate Faculty development.

**SUNY Upstate and Le Moyne Physician Assistant Programs:** We support the Physician Assistant (PA) training programs affiliated with Upstate to help train selective PA students in our PICU.

**Observers:** We support observers from the Upstate Pediatrics observership application process. Some become our future residents!

# Research Highlights

Pediatric critical care team members are integrated into research, quality, and safety advances at Upstate. These include presentations at local, regional, and national meetings in simulation-based education, residency skills development, multi-modal analgesia for pediatric burn patients, improving the rapid response team, prevention of unintended extubations, and multicenter research publications.

We are active members of Children's Hospital Association multicenter groups for Improving Pediatric Sepsis Group Outcomes (IPSO) and the Solutions for Patient Safety (SPS) quality bundles. We focus on quality and improving in all aspects of critical care metrics such as reducing central lineassociated blood infections, catheter associated urinary tract infections, pressure injuries, unintended extubations, and improving quality of interhospital pediatric transports.

Pediatric critical care team members are leading quality improvement initiatives: (1) Finger Lakes Donor Regional Network-PICU Collaborative to achieve targeted quality metrics and improve patient-centric end-of-life care; (2) improving the pediatric rapid response team performance; (3) Pediatric ICU Liberation initiative to improve awareness, education, and implementation of a pediatric early mobility program, withdrawal assessment and delirium screening, and (4) the creation of EPIC-templates for the liberation components and extubation practices.

# Division Highlights (Past 5 Years):

#### Additional Certifications, Awards & Service to Upstate and Community:

**Dr. Rachel Clarke:** Bioethics, medical education, tracheostomy decision-making; Bioethics faculty; Bioethics consultant; HSS facilitator; Clinical Bioethics clerkship facilitator; Pediatric Residency Probation Response Workgroup Leader; Residents as Teachers Curriculum Faculty Lead; Clinical Competency committee; Pediatric Residency Core ACGME Program Faculty; Pediatrics Faculty Star Award June 2023; Pediatric Residency Faculty of the Year 2023.

**Dr. Gregory Goldstein:** Stress & Burn-out; Post-Intensive Care Syndrome-Family; PICU Transport team member; Resident Simulation Education; RRT Simulation design and implementation; Practice of Medicine Course Preceptor; ACLS Instructor; PALS Instructor; American Burn Life Support certified; Transition to Residency Preceptor; Just-in-Time resident education re: neonatal intubation and lumbar punctures.

**Dr. Sarah Harding:** PICU Quality representative; QI Scholars program participant; trauma PI alternate; Practice of Medicine Course Preceptor; 2017 Robert C. Coddington resident award for research excellence; 2017 Resident Quality Improvement and Patient Safety award.

**Dr. William Hannan:** Critical care and Pediatric Rheumatology; 2023 Gold Standard award recipient; 2019 Best Doctors in America Pediatric Rheumatology.

**Dr. Kimberly Rush:** PICU Liberation QI; delirium and withdrawal; Pharmacy P+T committee; Pediatric ECLS; Clinical Pharmacology; Resident and Medical Student Education; 2023 Gold standard award nominee; 2022 American Federation for Medical Research Scholar Award for abstract.

**Dr. Neal Seidberg:** Medical Director of Medical records; Medical Director, Clinical Informatics; Chair of the Upstate forms committee and order set committee; member Air Upstate drone team; member robotics team; member clinical pathways team.

**Dr. Angela Wratney:** Safety; communication; respiratory; resuscitation; InterProfessional Education (IPE); Division director; College of Medicine IPE director and core IPE team member; Director, Pediatrics respiratory care; Finger Lakes Regional Donor Council Advisory Board representative for Pediatric Critical Care; Masters of Clinical Research (MHS) Duke Clinical Research Institute; Certified Health Simulation Educator (CHSE, Society of Simulation in Healthcare); PALS Instructor; ACLS Instructor; Simulation Advisory Board member; SUNY SAIL Clinical Leadership certificate; TEAMSTEPPS Master Trainer; iSIM Wiser Simulation training certificate; PICU AI Course Director; Pediatric residency core ACGME program faculty; Trauma PI and Burn PI representative; 2023 Gold Standard nominee; 2022 Avers-Meguid endowed award for excellence in shared governance nominee; 2022 medical staff service award nominee; 2019 Presidential Campus Team of the Year for IPE and 2019 Upstate Compassionate and Connected Caregiver award; 2019-21 ABP Subspecialty Board Review Writing Committee.

**Dr. Jennifer Zuccaro:** in situ simulation and resuscitation; sepsis; board certified Pediatric Cardiology; Certificate Harvard Medical Simulation Program; iSIM Wiser Simulation training certificate; President of the American Heart Association for the Greater Utica Area.

# **Developmental, Behavior & Genetics**

## **Faculty**

Henry S. Roane, PhD, Professor of Pediatrics and Psychiatry and Behavioral Sciences, GS Liptak Professor of Child Development, Division Director

# Golisano Center for Special Needs:

Christina Alaimo, PhD, Clinical Instructor of Pediatrics Andrew Craig, PhD, Assistant Professor of Pediatrics

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

Courtney Mauzy, PhD, Clinical Instructor of Pediatrics

Diane Montgomery, MD, Clinical Instructor of Pediatrics

Louis Pellegrino, MD, Associate Professor of Pediatrics

Anne Reagan, PsyD, Clinical Associate Professor of Pediatrics; Section Chief, Psychology

Sean Smith, PhD, Clinical Instructor of Pediatrics

William Sullivan, PhD, Assistant Professor of Pediatrics

Jason Zeleny, MS, Clinical Instructor of Pediatrics

#### Clinical Overview

The Division of Development, Behavior, and Genetics 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 organized as the Golisano Center for Special Needs (GCSN), which provides diagnosis and ongoing care for children who have autism and other developmental disabilities. In-home treatment services are provided by a multidisciplinary team after a

child has been diagnosed. Within the GCSN, there are programs that provide behaviorally oriented 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. The GCSN also includes programs related to child development and physical disabilities, providing diagnosis and ongoing medical care, including medication management, developmental monitoring, tone management (botox injections) and assistance with accessing assistive technology for children who have physical disabilities such as cerebral palsy and spina bifida.



Dr. Henry Roane, Eileen Pezzi, Dr. Gregory Conners, Dr. Louis Pellegrino, and Dr. Nienke Dosa – Check being presented for Golisano Center for Special Needs Campaign

The Division also houses a Pediatric Psychology Inpatient Consultation service and section of Pediatric Psychology, which offers diagnostic and clinical intervention to inpatients who have either developed psychological or behavioral health concerns related to their hospitalization, or for patients who previously had mental health concerns that are negatively impacting their treatment and recovery. Related to this, the Pediatric Behavioral Health Clinic provides outpatient psychological services to diagnose and treat the psychological impact of a chronic medical conditions and to manage previous existing psychological and behavioral health concerns exacerbated by a chronic medical condition or acute illness. Within the section of Pediatric Psychology there are three full time pediatric health psychologists with plans to expand services to additional outpatient clinics.

Patients are seen in one of three offices: the Physician's Office Building, where most of the care of physical disabilities occurs, the Madison Irving Medical Building, where the autism and developmental disabilities services primarily occur, and the 5th floor of Upstate University Hospital, in the Pediatric Behavioral Health Clinic.

# **Educational Highlights**

Dr. Pellegrino supervises the educational experience of first-year Pediatrics 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 on 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 Pediatrics residents and third-year medical students. Dr. Craig chairs Upstate's master's degree program in Behavior Analysis Studies in Upstate's College of Health Professions. This program includes faculty from the division. Students receive their didactic instruction at the Institute for Human Performance. The majority of the Division's faculty teach in this program. All faculty participate in medical student and resident teaching. In addition, Division faculty are regularly invited to serve as lecturers and panelists in the areas of autism spectrum disorder, adaptive design, treatment of problem behavior, pediatric mobility, translational research, and inclusive fitness.

# Research Highlights

Drs. Roane and Sullivan have long-standing interest in developing novel behavioral interventions for children with co-morbid autism spectrum disorders and behavior problems. Dr. Roane is part of a multi-center program sponsored by Autism Speaks developing randomized clinical trials for treatment of challenging behavior among individuals with autism spectrum disorders. Dr. Sullivan also receives industry funding to conduct research on neuromodulation to address core symptoms of autism spectrum disorder. Dr. Dosa has an interest in the development and evaluation of community-based models for developmental disability care. She has established many community partners and relationships with private funders to support this work. Dr. Smith is in the final year of a university-funded project examining the role of behavior therapy on modulation of cortisol levels in children with autism spectrum disorder. Drs. Roane, Sullivan, and Craig serve on various editorial boards and scientific review panels including NIH divisions, the *Journal of Pediatrics*, and the *Journal of the Experimental Analysis of Behavior*.

#### **Division Highlights**

A new inpatient service, the Biobehavioral Health Unit, is under development and scheduled to open in the summer of 2024. This program will be one of only a few programs in the United States to offer psychological and behavioral health consultation for children with co-morbid developmental disabilities and psychiatric conditions. This program will be jointly operated by the NYS Office of Mental Health and SUNY Upstate, with Dr. Roane serving as the Director and Dr. Smith as the Clinical Provider. The Biobehavioral Health Unit will be accompanied by the opening of (a) a Step-Down outpatient program to ensure patients' successful transition home and (b) an Acute Care program for patients who present in the emergency department. Dr. Dosa and her colleagues in Physical Therapy have developed the UGrAD program, a new line of early diagnosis for babies at risk for cerebral palsy that supports families through early identification, understanding their baby's needs, and ensuring that the child's therapy and equipment needs are met. Dr. Alaimo and Mr. Zeleny initiated a novel clinical program for helping young children with autism develop adaptive skills like eating and toileting. With support from the Upstate Foundation, the Division sponsored a three-day training for clinicians to learn implementation of the Autism Diagnostic Observation Scale, which is considered the gold-standard approach for diagnosing autism. Lastly, a team of clinicians worked to develop a "fast track" triage process designed to decrease wait times to initial diagnostic evaluations for children who were suspected of having autism. Initial results indicated that the triage process more than doubled the number of children who were scheduled for an autism diagnostic appointment.

In terms of accolades, Dr. Roane was selected for the 2022 Nathan Azrin award from the American Psychological Association for career contributions to the field of Applied Behavior Analysis. Dr. Craig also won the 2022 Joseph Brady award from the American Psychological Association for having the most impactful journal article in that year for his work on randomization tests. Dr. Craig was appointed as an Associate Editor for the *Journal of the Experimental Analysis of Behavior*. With their colleagues, Drs. Roane and Craig published a new textbook titled *Behavior Analysis: Translational Perspectives and Clinical Practice* (Guilford Press), and Drs. Roane and Sullivan signed a contract with Elsevier for an updated text on clinical applications of applied behavior analysis.

#### **Grants and Contracts**

#### Craig A

Laboratory analyses of relapse following voluntary abstinence. Francis Hendricks Endowment Fund Seed Grant. Pl. 2024.

#### Dosa N

Go Baby Go/Building Mobility in Syracuse and Beyond! Interprofessional Education Project. John Ben Snow Foundation. PI (with C. McGough & L. Neville). 2022-2023.

Virtual First Mile Program and TRAID on the Trails Adaptive Cycling Fair at Inner Harbor, Onondaga. Erie Canal Corporation. PI (with P. Sefick, M. Carney, & C. Pelis). 2022- 2023.

#### Roane H

Enhanced Intensive Behavioral Services. New York State Office for People with Developmental Disabilities (OPWDD). Pl. 2012-2024.

Community and School-based Services for Children with Autism. Family Support Services. New York State Office of Mental Retardation and Developmental Disabilities (OMRDD). Pl. 2013-2024.

Developing an RCT for assessing and treating significant challenging behavior in persons with autism. Autism Speaks Research Planning Grant. Co-investigator. 2022-2024.

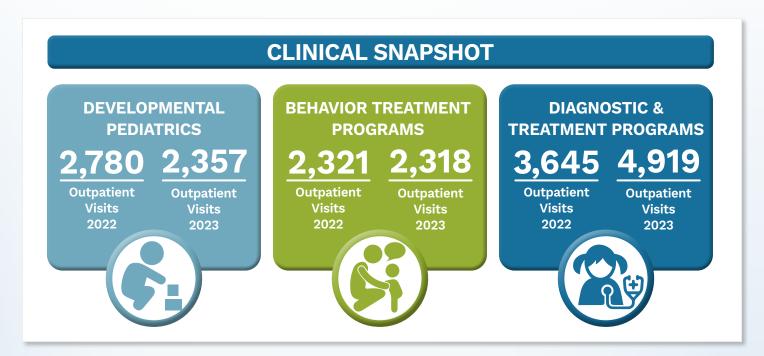
#### Smith S

Investigation of Salivary Cortisol and Alpha-Amylase as Biomarkers for Stress in the Assessment and Treatment of Challenging Behavior. Upstate College of Health Professions Intramural Grant. Pl. 2023-2024.

Translational Evaluation of Alternative Reinforcer Magnitude and Resurgence. SABA Doctoral Dissertation Grant. Co-investigator. 2023-2024.

#### Sullivan W

Integrated Platform for Measuring and Reducing Symptoms of Autism Spectrum Disorder; FUZEHUB Jeff Lawrence Innovation Fund. Pl. 2023-2024.



The multi-sensory room in Upstate's Golisano Center for Special Needs



# **Pediatric Clinical Genetics**

#### **Faculty**

Joan Pellegrino, MD, Associate Professor of Pediatrics, Section Chief Ria Garg, MBBS, Assistant Professor of Pediatrics Robert Roger Lebel, MD, MS, MA, M Div, STM, Professor of Pediatrics

#### Clinical Overview

The Division of Clinical Genetics is comprised of two specialty programs: Medical Genetics and the Metabolic program. The Medical Genetics program provides comprehensive diagnostic evaluation and genetic counseling for children and adolescents. Patients are seen by both a clinical geneticist and a genetic counselor. Individuals with developmental delays, intellectual disabilities, multiple congenital anomalies, multiorgan system involvement, and failure to thrive with unusual features are often referred to this program for diagnostic evaluation and testing. Our providers also participate in the Upstate Cleft and CranioFacial Center and in the Robert C. Schwartz Cystic Fibrosis Program and the monthly Perinatal Case Conference.

The Inherited Metabolic Diseases Specialty Center provides consultation and management of children and adults with inborn errors of metabolism. We are a referral center for the New York State Newborn Screening Referral Program and provide evaluation for infants with abnormal newborn metabolic screens in our catchment area. The center also has a lysosomal storage disease program for evaluation and management of individuals including treatment with 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). He teaches as a group discussion leader for the first-year medical school course in medical ethics and public health. He has 1-2 rising second-year medical school students for summer research each year. Dr. Lebel has 1 or 2 fourth-year medical school students under his tutelage for an elective course each of the 12 periods of the academic year. His work with medical students results in many student poster presentations at the annual genetic conferences (American College of Medical Genetics and American Society of Human Genetics). He serves on the Hospital Ethics Committee and represents Upstate as a board member of the Food Bank of Central New York.

Dr. Pellegrino is on the Pediatric Residency Evaluation and Promotion Committee. She is a resident advisor and works with third year medical students during their pediatric rotation. Dr. Pellegrino is also the faculty advisor for the newly formed Medical Genetics Interest club at the medical school.

All faculty provide lectures to the Pediatrics residents on a variety of Genetic topics including board reviews. They also instruct medical students and pediatric residents as they rotate through our clinical programs.

# Research Highlights

Dr. Pellegrino is the director of the Inherited Metabolic Diseases Specialty Center and is involved in several disease registries that look at the long-term outcome of individuals with metabolic disorders. She also participates in the NYS Newborn Screening Long Term Follow-up Study and is on a work group for data collection elements. Dr. Pellegrino is a Co-PI on a multistate study that is evaluating new screening biomarkers to improve the detection rate on newborn screening. She has published articles relating to inborn errors of metabolism.

Dr. Lebel has published many articles describing new genetic disorders and expanding the phenotype of known disorders. He has also contributed book chapters on related materials. He has had dozens of poster presentation at national meetings as well.

#### **Grants and Contracts**

#### Pellegrino J

Lysosomal Storage Disease Registry Program. Sponsor: Sanofi Genzyme Therapeutics. Pl. 2009-present. Hunter Syndrome Disease Registry Program. Sponsor: Takeda/ Shire. Pl. 2013-2022.

Newborn Screening Long Term Follow-up and Patient Registry. Pl. NYS DOH Contract. 2019-present Enhancement of Newborn Screening Diagnostic Paradigms to Improve the Efficacy of Treatment for Krabbe Disease, Pompe Disease and Mucopolysaccharidosis Type 1. Co-PI Sponsor: NIH through agreement with the University of Buffalo

# **Division Highlights**

We were very pleased to welcome Dr. Garg to the division in the Fall of 2023. She is predominately seeing general genetic patients but also has an interest in metabolic diseases and skeletal disorders.

The division has been working hard to increase access to genetic services. We have significantly reduced our waiting list and time to next available appointment thanks to our recruitment of the new geneticist.

Dr. Pellegrino was appointed to the New York State Rare Disease Workgroup in 2022 by the Commissioner of Health.

# Pediatric Endocrinology, Diabetes & Metabolism

## **Faculty**

Roberto Izquierdo, MD, Professor of Medicine and Pediatrics, Division Director David Hansen, MD, Assistant Professor of Pediatrics

Angela Mojica Sanabria, MD, Assistant Professor of Pediatrics

Nisha Patel, MD, Assistant Professor of Pediatrics

#### Clinical Overview

The Division of Pediatric Endocrinology, Diabetes, and Metabolism provides care for children and adolescents with the full spectrum of disorders of the endocrine system. Faculty endocrinologists and advanced practice providers (NPs and PAs) 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 are recognized as an Endocrine Specialty Center for Congenital Hypothyroidism, Congenital Adrenal Hyperplasia, and Diabetes by the New York State Department of Health.

Diabetes mellitus is treated by a comprehensive group of professionals using the team model, under the direction of Dr. Roberto Izquierdo at the Joslin Diabetes Center. The team includes advanced practice providers, diabetes care and education specialists, dieticians, child life specialist, a social worker, and a child psychologist. This multidisciplinary team provides care to more than 1400 children with type 1 and type 2 diabetes mellitus in 28 counties in Central New York. In 2012, we received NCQA Recognition for Diabetes Care. This recognition underscores the superlative diabetes care we provide our patients.

Dr. Izquierdo directs the pediatric endocrine and diabetes division and has an interest in the management of diabetes mellitus, thyroid cancer and thyroid nodules in children and adults.

Dr. David Hansen is a pediatric endocrinologist with an interest in the management of diabetes mellitus and other endocrinologic disorders. He also participates with our pediatric oncology colleagues to treat children diagnosed with a malignancy who develop endocrine dysfunction as result of their treatment or the cancer. He is involved in clinical diabetes research and leads a program to prevent DKA admissions.

Dr. Angela Mojica is a pediatric endocrinologist with interest in the transition of children and adolescents with diabetes to young adulthood. She leads our transition program in diabetes. She also treats children with other endocrine disorders.

Dr. Nisha Patel has an interest in the transition of adolescents with endocrine disorders to adulthood and is associate director of the transition program. She also has an interest in general endocrinology.

# **Educational Highlights**

The pediatric endocrinology faculty group provides lectures to the pediatric house staff each year. In addition, pediatric residents, family practice residents, and medical students rotate through our outpatient clinical practice.

Drs. Hansen, Mojica, and Patel participate in the clinical education of first- and second-year medical students.

Our endocrine attending staff participates in Project ECHO to provide educational case conferences to pediatricians and pediatric advanced practice providers.

# **Community Contributions**

Our staff provides 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 also attend.

Each fall we have a School Nurses' Diabetes Teaching Day directed to the school nurses in the 28 counties we serve.

Several members of our group are members of the Lions Club, which contributed to our new children's waiting room at the Nappi Wellness Institute.

# Research Highlights

Dr. Izquierdo's research interests lie in type 1 and 2 diabetes mellitus, thyroid nodular disease and thyroid cancer. Dr. Hansen has conducted clinical trials that involve automated insulin pump systems. Dr. Mojica participates in a study to identify siblings of patients with type 1 diabetes who are at risk for developing type 1 diabetes.

We are participants in the T1D Exchange Collaborative and participate in numerous QI projects to improve the care of children with type 1 diabetes and decrease medical disparities between different racial and ethnic groups.

# **Division Highlights**

Establishment of a Transition Program for adolescents with type 1 diabetes mellitus

Establishment of the DREAMS Program to prevent diabetic ketoacidosis (DKA) in youth with type 1 diabetes at risk for DKA.

Participation in a national quality improvement program: T1D Exchange Collaborative.

#### **Grants and Contracts**

#### Izquierdo R

T1D Exchange Collaborative. PI for our site

#### Hansen D

Omnipod 5 Clinical Trial. PI for our site.

DINAMO Trial: a trial for adolescents with type 2 diabetes mellitus. Site PI.

#### Mojica Sanabria AM:

TrialNet Protocol TN20. National Institute of Diabetes and Digestive and Kidney Diseases. Co-PI for our site.

# CHILDREN IN THE DIABETES MELLITUS PROGRAM >1400 CHILDREN WITH NEW ONSET DIABETES SEEN IN 2022 >1400

# JOSLIN DIABETES PEDIATRIC PROGRAM

- Established in 2001
- Management encompasses a team approach between MD, APPs, diabetes educators, endo RNs, dietitians, LPNs psychologist, SW, child life, pharmacist
- We serve >22 counties in CNY: Primary and only referral source for children with diabetes disorders in Central NY
- We take care of >1500 children, adolescents, and young adults with type 1 & type 2 diabetes (age<21)</li>
  - In FY: 7823 provider visits
- Newly diagnosed children with type 1 are seen within 24 hours (approximately 120-140 per year), children with type 2 are seen in <1 week if clinically stable
  - · Half are admitted to GCH and half are seen at Joslin as outpatient
- NCQA Recognition 2014
- Past and present clinical studies in Type 1 (T1D) and Type 2 diabetes (T2D) including diabetes prevention and diabetes clinical care
- Publications in NEJM, JAMA, Journal Pediatrics, Diabetes Care, and Clinical Diabetes
- Participation in a national QI program (T1D Exchange)
- Special Programs:
  - DREAMS to prevent DKA in high-risk patients
  - Transition program to adult care
  - Annual Diabetes Education for School Staff
  - Annual "Preparing for College" class
  - Insulin pump & continuous glucose monitor (CGM) orientation classes
  - Classes for advanced insulin pump management
  - Available consultations with embedded behavioral healthcare, social work, pharmacy, and child life

# QI Dashboard Highlights:

- 97% of our patients are on CGM
- 75% on pumps
- 89% screened for depression
- 94% for screened for food insecurity and other SDOH
- <0.1% DKA admissions</li>
- Median A1c 8.2 % (national average 8.7%)





# Pediatric Gastroenterology, Hepatology and Nutrition

# **Faculty**

Prateek Wali, MD, Associate Professor of Pediatrics, Division Director Christopher Justinich, MD, Professor of Pediatrics Marcus Rivera, MD, Associate Professor of Pediatrics Rheu Candava, MD, Assistant Professor of Pediatrics Galen Hartman, MD, Assistant Professor of Pediatrics

#### Clinical Overview

The Division of Pediatric Gastroenterology, Hepatology, and Nutrition is comprised of 5 board certified pediatric gastroenterologists, and 4 GI pediatric nurse practitioners who provide comprehensive outpatient and inpatient care for children with disorders related to the gastrointestinal, pancreatic, and hepato-biliary systems. Our team also includes an incredibly dedicated nursing staff, working alongside a division-dedicated specialized dietician and social worker to provide multidisciplinary care to a growing number of children. This expertise and teamwork 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 located on the 3rd floor in the University Hospital.

#### Common Conditions We Treat

- · Celiac disease
- Chronic abdominal pain
- Chronic diarrhea
- Constipation
- · Crohn's Disease
- Failure to thrive
- Fatty liver disease
- Feeding and swallowing disorders
- Gallstones
- Gastroesophageal reflux disease
- Hepatitis B and C (viral hepatitis)
- Hirschsprung Disease
- · Infectious diarrhea
- Inflammatory Bowel disease
- Intestinal Failure
- Pancreatitis
- · Short bowel syndrome
- Ulcerative colitis

#### Common Procedures We Perform

- Upper Endoscopy
- Colonoscopy
- Capsule Endoscopy
- · 24-hour Impedance/pH testing
- FibroScan (Vibration-controlled Transient Liver Elastography)
- Lactose and Small Bowel Overgrowth Breath Testing

The Upstate Golisano Children's Pediatric Inflammatory Bowel Disease Program is nationally recognized for providing advanced care for children with Crohn's disease and Ulcerative Colitis. Under the supervision of Dr. Prateek Wali, we have been a long-standing participant in ImproveCareNow, an international collaborative effort focused on managing pediatric patients with Inflammatory Bowel

Disease (IBD). As a burgeoning Center of Excellence and one of only 5 children's Hospitals in New York to participate in this effort, we are proud to offer our families with IBD a unique, comprehensive, state of the art, and personalized approach to IBD care. Our IBD program has among the highest in steroid free remission rates; we also work with dedicated pediatric surgeons on the care of children with severe disease.

The division also operates an expanding Intestinal Failure/Short Bowel Syndrome (SBS) and Total Parenteral Nutrition management program under the supervision of Dr. Marcus Rivera. His team including our specialized dietician, Kellie Wall works with home care providers and outpatient pharmacies to provide comprehensive multidisciplinary gastrointestinal, nutrition, and surgical care to these complex patients.

Recently we have helped to establish a Pediatric Aerodigestive Program under the supervision of Dr. Jeff Dorrity from Pediatric Otolaryngology and coordinated by Katie Boyd, NP. The program provides an interdisciplinary team approach in the treatment of aerodigestive disorders. The collaboration of the team, which includes Dr. Zafer Soultan from Pediatric Pulmonary, Dr. Prateek Wali from Pediatric Gastroenterology and Jill Merrow from Pediatric Speech Therapy, provides integrated multi-specialty care to assure quality and patient-centered care to children and their families. The Aerodigestive Program coordinates the care of children with complex conditions of the upper airway, lungs, upper digestive tract, including problems with sleep and feeding.

# **Educational Highlights**

The gastroenterology faculty are involved in a variety of educational activities for residents and medical students. Medical students in their fourth year can enroll in the pediatric gastroenterology elective which has had excellent reviews. Our faculty also provide non-GI education for medical students: Dr. Rivera participates in the bioethics curriculum, while Dr. Hartman is co-director for the gastrointestinal system and nutrition unit in the new curriculum for first- and second-year medical students at Upstate. GI faculty participate in the annual pediatric resident lecture series and provide the fundamental knowledge basis for recognizing and treating common GI disorders. The Pediatrics and Family Medicine residents also benefit from both inpatient and outpatient pediatric GI experiences. We encourage the residents to participate in clinical academic projects and research with multiple residents presenting posters at national meeting in the last three years. Dr. Candava and Dr. Hartman are both members of the Pediatric Resident Evaluation and Promotion Committee. Four of our senior residents have matched for pediatric gastroenterology fellowships since 2021 at acclaimed programs: Children's Memorial Hermann Hospital, Texas Children's Hospital, and University of Rochester Golisano Children's Hospital.

# Research Highlights

The Upstate Golisano Children's Pediatric Inflammatory Bowel Disease Program has generated several research studies. The Protect Trial was a NIH-sponsored multicenter study examining the diagnosis and management of Ulcerative Colitis in children. Along with our involvement in the ImproveCareNow collaborative, we were invited and completed participation in a unique national study, the Clinical Outcomes of Methotrexate Binary Therapy in Practice (COMBINE) trial. The COMBINE trial findings were recently published in *Gastroenterology*. The division is also working with six pediatric IBD centers in a study led by Dr. Harland Winter at Mass General Hospital on the Detection of Serum Protein Biomarkers to Predict and Monitor Response to Infliximab Using SOMAscan, which will soon be complete. Initial findings from SOMAscan have been submitted to the European Crohn's and Colitis Meeting in 2024.

#### **Posters:**

Guilbo K, Black J, Byler M, Soultan Z, Gupta S, Wali P, Cherrick I, Lebel R, Wratney A. Adverse Outcome in FAM111A: A Case Report. Poster presentation. American College of Medical Genetics and Genomics Conference, 2023

Sherwani R, Wali P. Celiac disease and MZ Alpha-1-Antitrypsin deficiency in a Toddler with Rothmund-Thomson Syndrome. Poster presentation. North American Society of Pediatric Gastroenterology and Nutrition Annual Meeting, 2022

#### **Grants Awarded:**

#### Wali P & Lisa Susko, RN

2022: GI Outpatient Clinic Patient Experience, Upstate Foundation, Upstate Golisano Children's Hospital. \$3491

2023: GI Pediatric IBD Infusion Hoodies, Upstate Foundation, Upstate Golisano Children's Hospital. \$6,000

#### **IMPROVECARENOW Our Success** • Member since 2013 • 215 children with IBD • 18 months to 22 years old • Over 100 children receiving biologic satisfactory GROWTH infusions are in UGCH: Advanced TDM/standardization REMISSION are not taking workgroup STEROIDS Weekly Pre-visit Planning • Quarterly Population Management 59% 91% Current remission UGCH 87.6% have show SUSTAINED satisfactory Current Prednisone free remission NUTRITION REMISSION 86.6% for at least one year Unique programs · Enteral therapy/Crohn's exclusion diet 990 pediatric gastroenterologists · Capsule Endoscopy care centers caring for 30,500+ MR Enterography participating across: children with IBD 37 states Family support group at core centers that include 43 of the top 50 pediatric Patient Education Night gastroenterology programs + Oalai 8 at the top 10 honor roll · CCFA Take Steps children's hospitals Adult Transition of Care

ImproveCareNow is an international collaborative effort focused on managing pediatric patients with Inflammatory Bowel Disease (IBD)

# **General Pediatrics**

### **Faculty**

**Steven Blatt, MD,** Professor of Pediatrics, Division Director; Associate Professor Syracuse University College of Law

John Andrake, MD, Associate Professor of Pediatrics

Janice Bach, MD, Assistant Professor of Pediatrics

Winter Berry, DO, Associate Professor of Pediatrics

Joshua Bonville, MD, Assistant Professor of Pediatrics

Rheu Candava, MD, Assistant Professor of Pediatrics

Ahmed Eltayeb, MD, Assistant Professor of Pediatrics

Colleen Feeney, MD, Assistant Professor of Pediatrics

Robert Hingre, MD, Assistant Professor of Pediatrics

Travis Hobart, MD, Assistant Professor of Pediatrics and Public Health & Preventive Medicine

Tobey Kresel, MD, Assistant Professor of Pediatrics

Jessica Mayer, MD, MPH, Assistant Professor of Pediatrics and Medicine

Elizabeth Nelsen, MD, Associate Professor of Pediatrics;

Yekaterina Okhman, MD, Assistant Professor of Pediatrics

Jenica O'Malley, DO, Assistant Professor of Pediatrics

Ronald Saletsky, PhD, Professor of Psychiatry

Ellen Schurman, MD, Assistant Professor of Pediatrics

Andrea Shaw, MD, Assistant Professor of Pediatrics and Medicine

Jaclyn Sisskind, MD, Assistant Professor of Pediatrics; Medical Director, Upstate Pediatrics

Holly Stacey, MD, Assistant Professor of Pediatrics

Anne Sveen, MD, Assistant Professor of Pediatrics

Karen Teelin, MD, MSEd., Associate Professor of Pediatrics, Director, Section of Adolescent Medicine and Director of Adolescent Gender Clinic

Shauna Thariath, MD, Assistant Professor of Pediatrics

#### Clinical Overview

Upstate Pediatrics and Adolescent Medicine (UPAC)

Adolescent Medicine

**ENHANCE Services for Children in Foster Care** 

Center for International Health

**Upstate Pediatrics** 

Clinical activity occurs in General Pediatrics at Upstate Pediatrics, a busy five-pediatrician practice in Baldwinsville, NY and at Upstate Pediatric and Adolescent Center (UPAC) in Syracuse, as well as in the term newborn nursery at Crouse Hospital. Both UPAC and Upstate Pediatrics are Level 3 NCQA Patient Centered Medical Homes.

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.

#### Programs include:

**ENHANCE Services for Children in Foster Care** which provides primary and comprehensive health care services to children in Onondaga County Department of Social Services custody. ENHANCE is one of the oldest free-standing medical clinics for children in foster care in the country.

The Adolescent Medicine Program offers specialty care to patients 11 to 21 years of age. Patients and their families receive care for typical adolescent health issues, including mental health, reproductive health, and sexuality issues. Adolescent Medicine also provides services to a large, adolescent transgender community.

The Center for International Health first opened in 2005 and now provides primary and specialized care to the more than 1000 new immigrants 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.

# **Educational Highlights**

Pediatric Residents are assigned their weekly continuity clinic and their own panel of patients for whom they are the primary care provider. They also rotate through the Division during their month of Newborn medicine, 2 months of outpatient pediatrics as a PL-1, 2 months as a PL-2, and 1 month as a PL-3. Additionally, as a PL-1, they spend time in the Center of International Health and ENHANCE. Senior residents spend a month in Adolescent Medicine.

Residents rotating through UPAC attend conferences 3 days each week, including the Current Events faculty-led journal club, UPAC lecture series, and UPAC case conference. UPAC faculty join the entire residency program each week for resident Journal Club or Intern Conference.

# Research Highlights

Division Faculty participate in various research projects in the areas of Global Health; Lead Poisoning; Vaccine Development; Mental Health and Child Development.

# **Division Highlights**

UPAC provides care through ~ 24,000 annual visits each year. Approximately 80-90% of our patients receive public assistance and Medicaid. Approximately 20-30% of our patients are new refugees or were born in Syracuse as children of new refugees. The majority of our patients are in one-parent families, and the majority of the mothers had their first child when they were a teenager. Care is provided by 15 faculty, 8 Nurse Practitioners, and 47 Pediatric Residents. UPAC moved to the new Nappi Wellness Institute, a 200,000 square foot outpatient facility attached to University Hospital. A feature of our practice is integrative mental health within our medical office. This includes 3 mental health therapists, 2 social workers, a mental health care manager, a psychiatric Nurse Practitioner, a Child Psychiatrist, and two Child Psychologists.

# UPAC has a number of special programs including:

**UPAC Diaper Bank:** Analogous to a food bank, the Diaper Bank helps defray the cost of this necessity for our young families.

Healthy Steps provides extra developmental and parental support to families with new babies.

**Reach Out and Read** is a national program providing books at each pediatric visit to young children.

**Integrative Mental Health Therapy** includes 3 mental health therapists, 2 social workers, a mental health care manager, a psychiatric Nurse Practitioner, a Child Psychiatrist, and two Child Psychologists.

**Respiratory Therapy at UPAC** is a program with a respiratory therapist to provide Asthma teaching and **Pulmonary Function Tests** on site.

#### **Grants and Contracts**

Berry, W

Field Testing Measures of Stress System Activation in Children in Pediatric Primary Care Settings

#### Berry, W & Blatt SD

Health Steps for Young Children. Enhanced Ambulatory Care grant via NY State Office of Mental Health. Co-PI. 2016-2023

#### O'Malley, J

Pediatrics Supporting Parents

#### Hobart, T

Central/Eastern NY Lead Resource Center

CNY Children's Environmental Health Center

# UPAC DIAPER BANK/CNY DIAPER BANK COLLABORATION

- Significant need in patient population
  - 1 in 2 families nationally, higher locally
  - Similar to food insecurity but has no funding via other assistance programs (WIC, SNAP, etc)
- UPAC specific small scale solution started via Upstate Foundation funding --> increased scale in partnership with CNY Diaper Bank in 2016
- Screening at all well visits up to age 3 addresses
   SDOH and builds rapport
- Decreases diaper rash, parental stress, child absence from daycare --> allows parent to attend work/school



# **UPSTATE CENTER FOR INTERNATIONAL HEALTH** SUPPORTING HEALTHY ASSIMILATION OF NEW AMERICAN REFUGEE FAMILIES

- · CIH functions as a primary care medical home for vulnerable new arrival refugees in their initial years of resettlement with a goal of gaining health literacy skills to transition to other PCP practices for ongoing care.
  - · CIH currently serves ~2,500 patients with ~40 registered languages, in a city that supports 1-2% of all newly arrived refugees coming to the United States.
- · Our work is trauma-informed, communityengaged, and interprofessional by nature. "It takes a village" to support new arrivals who come from very different cultural and system backgrounds to help them understand how to access care and stay healthy as they assimilate to a new life in Syracuse.
- · Residents (PGY1 + PGY3) and medical students join our team in clinic as well as at community-based sites where we partner on public health initiatives.
- · Residents consistently join us at the annual North American Refugee Health Conference to present on important cases and community projects with a steady focus on advocacy and social justice.



CIH Interprofessional Team Fall 2023



North American Refugee Health Conference, July 2023, Calgary.

5 poster presentations, 1 oral presentation

# **Section of Adolescent Medicine**

### **Faculty**

Karen L Teelin, MD, MSED, Associate Professor of Pediatrics, Director of Adolescent Medicine Priyanka Kaul, MD, Assistant Professor of Pediatrics

Robert M Cavanaugh Jr, MD, Professor Emeritus

#### **Additional Practitioners:**

Davia Moss, FNP, Adolescent Medicine Nurse Practitioner Kelsey Irvin, PHD, Integrated Psychologist, Adolescent Medicine

#### Clinical Overview

The Adolescent Medicine program was started by Dr. Robert M. Cavanaugh Jr. in 1981, and currently provides a broad spectrum of specialized healthcare care for adolescents and young adults, as well as education for the next generation of physicians. Our aim is to prioritize each youth as an individual, treat all patients with the highest level of respect and dignity, meet them where they are, and help them reach their goals through collaboration, listening, problem solving, and advocacy. We serve the Syracuse area as well as a 22-county catchment area and beyond, with referrals coming from as Binghamton, Utica, the North Country, and southern Canada. We are known as a regional center of expertise, providing consultations for primary care physicians and subspecialists, as well as inpatient consultations.

Outpatient care is provided in the Nappi Wellness Institute, which opened in 2023. The clinic is located on the fourth floor, in an affirming space designated for adolescents. A dedicated RN and pediatric nurse practitioner are on-site to provide care for adolescents and help with real time consultations from our colleagues. In the outpatient clinic we provide free supplies for adolescents including condoms, menstrual products, and affirming stickers, bracelets, and pins. Inpatient consultations are provided in the Upstate Golisano Children's Hospital, along with our interdisciplinary inpatient eating disorders team.

We are committed to quality and to improvement. We meet twice a month as an interdisciplinary team to share best practices and learn from invited speakers and each other. Additionally, practitioners work with residents on Quality Improvement projects, and attend national meetings yearly to support our learning and disseminate our work. We are also committed to community involvement and advocacy, including volunteer work at the Rescue Mission's LGBTQ homeless shelter, collaboration with the Q Center, the Unitarian Universalist Beyond the Binary Conference, and the Syracuse Reproductive Wellness Coalition.

# **Clinical Programs**

Mental Health: As part of our response to the pediatric mental health crisis, we added an integrated psychologist in September 2023, as well as a dedicated mental health consultation clinic for two half days per week, to supplement and complement the mental health care we were already providing. We provide diagnosis and treatment (including medication and psychotherapy) for adolescent mental health concerns including depression, anxiety, and ADHD (Attention Deficit Hyperactivity Disorder), and we have a close, collaborative relationship with our Department of Psychiatry. Drs. Priyanka Kaul and Kelsey Irvin focus their practice in this area.

# Biennial Report 2022-2023

Sexual and Reproductive Health: We offer nearly the full spectrum of adolescent sexual and reproductive health, including Nexplanon placements, two forms of emergency contraception on-site, Pre-exposure Prophylaxis (PREP) for HIV, and treatment for a range of menstrual concerns including dysmenorrhea, menorrhagia, and polycystic ovarian syndrome. We partner with the division of Pediatric Infectious Disease (to provide a PREP health educator and advocate), pediatric hematology (to care for girls with Von Willebrand disease and other bleeding disorders), and the Department of Obstetrics and Gynecology (IUD placements and advanced family planning).

Gender Affirming Care: We are the only adolescent gender clinic in our 22-county catchment area. We currently care for over 400 transgender adolescents, providing the full spectrum of gender affirming care, including GNRH agonists and gender affirming hormones. We are fortunate to have a grant from the NYS HIV Institute to support care of LGBTQ patients, which funds our LGBTQ patient services coordinator. We collaborate with adult medicine (Inclusive Health Services and Endocrinology), Pediatric Infectious Disease, Pediatric hematology / oncology (fertility preservation team) as well as Syracuse University's Trans Team, and we are part of a Central New York collaboration to enhance affirming care in our region.

Eating Disorders: We have a busy outpatient eating disorder program, providing care with an individualized, affirming approach. We have fostered close relationships with area dieticians and therapists who specialize in eating disorders. Davia Moss, FNP focuses her practice in this area, regularly attending the International Conference on Eating Disorders (ICED) and fostering community collaborations. Dr. Teelin provides inpatient consultations at the Children's Hospital and in University Hospital's inpatient adolescent psychiatry unit (7W), and she brought together a multidisciplinary and interprofessional inpatient eating disorders team to create an inpatient treatment protocol for adolescents admitted for malnutrition associated with feeding and eating disorders. This inpatient team now meets quarterly for quality improvement. In addition, in 2023 we were invited to join a regional collaboration with the Children's Hospitals in Rochester and Buffalo, with regular meetings to share resources, develop protocols, and plan trainings. Also in 2023, along with colleagues in the Department of Psychiatry, we began planning for our Adolescent Eating Disorders Intensive Outpatient Program (AEDIOP), funded with generous support from the Upstate Foundation.

Adolescents with Chronic Unexplained Symptoms or Post Covid Conditions: We offer consultations for adolescents with dizziness, headaches, chronic abdominal pain, fatigue, or other symptoms. We provide a full psychosocial and medical assessment in an affirming environment, with a focus on careful diagnosis, conservative measures, adaptive coping, and a stepwise approach to improve overall wellness. We collaborate with Physical Therapy, Neurology (especially for patients with Postural Tachycardia), and Pediatric Integrated Health to support patients and foster recovery.

# **Provider Highlights**

Karen Teelin, MD, MSED is Associate Professor of Pediatrics and Director of Adolescent Medicine. She attended Haverford College, UPenn's Graduate School of Education, and the University of Massachusetts Medical School. She completed residency and fellowship at Upstate, the Leadership in Adolescent Health program at Rochester's Strong Memorial / Upstate Golisano Children's Hospital, and has additional training in gender care and diversity equity and inclusion. She is core faculty in the Pediatrics Residency Program and the Child Abuse Fellowship. She is passionate about providing high quality evidenced-based care to all adolescents, and about education for medical students, residents, and fellows. She has presented her work at the American Academy of Pediatrics' National meeting's

Section on Adolescent Health, The North American Society for Pediatric and Adolescent Gynecology (NASPAG) national meeting, the Society for Adolescent Health and Medicine national meeting, the Pediatric Program Directors National Meeting, and other national conferences. She has published her work in the Journal of Pediatrics, the Journal of Pediatric and Adolescent Gynecology, and Journal of Medical Ethics.

**Kelsey Irvin, PhD** is a Licensed Clinical Psychologist working as part of the Integrated Behavioral Health Care Program in the Adolescent Medicine Clinic. She received her BA from Washington University in St Louis and MA and PhD from the University of Missouri, Columbia, before completing her internship and postdoctoral fellowship at Upstate's Child and Adolescent Psychiatry Clinic. She specializes in integrated care and providing affirming and evidence-based mental health care to adolescents, addressing a wide range of concerns, including anxiety, depression, eating disorders, and gender identity.

**Priyanka Kaul, MD** trained in India (medical school and pediatrics residency) before coming to the SUNY Upstate Medical University for her pediatrics residency. She provided pediatric care in private practice for 10 years before returning in 2023 as faculty. She has special interest and expertise in behavioral and mental health problems in the pediatrics population and is leading the Pediatrics program in developing a mental health core curriculum. Her vision is to improve the mental health of youth using mindfulness-based practices tailored for young children and adolescents. She is active in the American Board of Pediatrics (ABP) as the Secretary-Treasurer of the Board of Directors, and is a member of several committees of the ABP.

Davia Moss, RN, FNP is a graduate of Nottingham High School and Syracuse University, with roots and deep commitment to the Syracuse community. She worked as a registered nurse in the Pediatrics Emergency Department and Pediatric Intensive Care Unit prior to completing her Family Nurse Practitioner degree and joining the Adolescent Medicine Program in 2017. She also teaches at Saint John Fisher's College of Nursing. She is passionate about caring for youth with eating disorders and about education. She frequently gives talks to the community and for local nursing programs.

#### Education

All our educational programs are learner-centered, interactive, and/or clinically based, with respect for the learner's emerging autonomy, prior experiences, and comfort level. Learners from a range of levels and disciplines bring energy, diversity, and a range of perspectives such that we can all enhance our knowledge and the quality of patient care.

# Institutional Educational Highlights

clinic two half days per week.

Case Conferences: Weekly on Thursdays, reaching over 150 medical students yearly and all pediatrics residents in a highly rated interactive case conference presented by students, and emphasizing the value of the psychosocial history as well as focusing on critical thinking and clinical thought processes. Pediatrics Clerkship: Monthly orientation conference to introduce the HEADS FIRST psychosocial-medical review of systems. Additionally, two clerkship students per block rotate through Adolescent

**Adolescent Medicine Elective:** The medical student electives fill every year to capacity, with the option of a 1-month elective and/or a year-long continuity experience.

**Pediatrics Residents:** All pediatric residents complete an Adolescent Medicine month, typically during their PGY-2 year. Their experience includes the Adolescent Clinic, opportunities with the Ob/Gyn Family Planning Clinic, pediatrics Infectious Disease HIV clinic, orthopedics Sports Clinic, and Syracuse University's ADHD consultation clinic. We were one of the first programs nationally to provide

subdermal implant procedural training for all Pediatric Residents.

### Rotation for Psychiatry Interns, Child Psychiatry Fellows, and Pediatrics Child Abuse Fellows:

Adolescent Medicine block is required for Child and Adolescent Psychiatry Fellows (Department of Psychiatry) and for Child Abuse Fellows (Department of Pediatrics). Psychiatry interns may also enroll in an optional Adolescent Medicine block, as one of their required medical blocks.

**Education for Nurse Practitioners and Physician Assistants:** NP and PA students (five per year) rotate through clinic. In addition, Davia Moss FNP regularly gives talks on Adolescent Medicine for the advanced practice programs.

# Regional Education, Selected Presentations (2022-23)

#### Karen Teelin, MD

"Collaborating to Provide Evidence Based Affirming Care in CNY," Central New York Psychological Association Annual Meeting, March 2023

"Caring for Transgender Youth in Challenging Times," New York State Department of Health Clinical Education Initiative, Webinar, November 2022

"Depression in Teenagers," Pediatric ECHO, SUNY Upstate Medical University, May 2022

"Post COVID Conditions," AAP NY Chapter 1 Annual Meeting, June 18, 2022

#### Davia Moss, FNP

"Suicidality in the Transgender Community," Toxicology ECHO, SUNY Upstate Medical University, April 2023

"Caring for Adolescents with Eating Disorders." The Informed Patient Podcast, SUNY Upstate Medical

"Eating Disorders in a Post Pandemic World." Section 10 Nursing Conference, SUNY Upstate Medical University, May 2023

"Caring for Our Transgender Adolescents." Building Beloved Community, Beyond the Binary Conference, Syracuse Unitarian Universalist Conference, June 2023

"Leading for Social Justice." A Panel Discussion with LGBTQIA+ Mental Health Experts, Le Moyne College, Syracuse NY, October 2023

# Research Highlights (2022-23) Publications

Mcardle EF, Teelin KL, Caruso Brown AE, "When parents request nondisclosure: Rights of adolescents to access their health information and implications of the 21st Century Cures Act Final Rule," *Journal of Medical Ethics*, accepted for publication 10/2023

Teelin KL. "Emergency Contraception for Adolescents." Elsevier Clinical Key. Senior editor Elizabeth Alderman. Accepted for publication 2023.

#### **Posters**

Gul S, Teelin KL, Ali ST, Eldokla A. "Evaluation of chronic orthostatic intolerance in adolescents and young adults." 34th International Symposium on the Autonomic Nervous System, Puerto Rico, November 15-18, 2023.

Buscemi-Kimmins T, Teelin K, Mozo N, Shaw J. "Routine vaccination in a vulnerable adolescent transgender population in a large tertiary care center in the U.S." Pediatric Academic Society, National Meeting, Washington DC, April 2023.

#### **National Presentations:**

Shubkin C, O'Dea CLH, Osborn R, Teelin KL, Caruso-Brown A, "I Object! Conscientious Objection to Gender Affirming Care in Residency Training, Balancing Vulnerabilities." Association for Pediatric Program Directors National Meeting, Atlanta, GA, 2023

Shubkin C, Teelin KL, English A, Caruso-Brown AE, "Protecting Access to Care for Transgender Youth," Workshop, American Society for Bioethics and Humanities, National Meeting, Portland Oregon, October 2022.

Teelin KL, Caruso-Brown AE, English A, Shubkin C, "Transgender Care, Medical Education, and Medical Ethics in 2022: Practical Approaches to Enhance Access for Vulnerable Youth while Balancing Professionalism, Empathy, and Standards of Care." Workshop, Society for Adolescent Health and Medicine National Meeting, San Diego CA (converted on online due to pandemic), March 2022.

### Diversity, Equity, and Inclusion

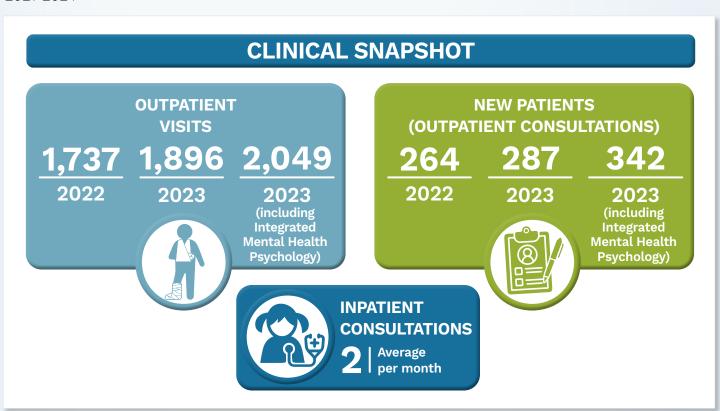
Our Section of Adolescent Medicine, along with our department and institution, is committed to recruiting, supporting, and retaining diverse faculty and staff, and to treating all patients with respect and dignity. Dr. Teelin is co-chair of the Departments Diversity, Equity, and Inclusion Committee, and is also a Department of Pediatrics DEI Advocate. Dr Teelin is also completing the Foundations of Understanding Equity, Inclusion, and Bias microcredential through SUNY Upstate Medical University.

#### **Grants and Contracts**

Adolescent Medicine Upstate Foundation Fund, Campaign for Pediatric Mental Health, Eating disorder fund and adolescent medicine fund, \$100,000

Make it Happen Fund for Mental Health, Upstate Foundation, to support patients with eating disorders (\$1000/year odd years), 2023-present

American Academy of Pediatrics, NY Chapter 1 Subcommittee on Infectious Diseases, (\$2000/year), 2021-2024



# ADOLESCENT MEDICINE CONSULTATION CLINIC: GENDER PROGRAM

- One of only two clinics in NYS outside of NYC providing this care
- Currently serves >450 transgender youth
- Serves 22 county catchment area, with patients traveling up to 4-5 hours for care
- Several patients from Canada
- Full spectrum of gender care (blockers, hormones)
- · Mental health and sexual health addressed at all visits
- Integrated psychologist to help with assessment and readiness letters
- Care manager helps with specialized medication access (GNRH agonists)
- Grant from NYS HIV Institute supporting LGBTQ patient services coordinator and peer mentors, as well as pronoun pins, affirming stickers, and regional education
- Collaborations: Adult ID (IHS), adult endocrinology, Syracuse University's Trans Team of therapists
- Opportunities for medical student clinical elective as well as research
- Research: Recent Publications:
  - Buscemi-Kimmins T, Teelin KL, Mozo N, Shaw J, "Routine vaccination in an adolescent transgender population in a large tertiary care center in the United States," Journal of Pediatric Health Care, 2024.
  - Teelin KL, Shubkin CD, Caruso Brown AE, "Conscientious Objection to Providing Gender Health Care in Pediatric Training: Balancing the Vulnerability of Transgender Youth and the Vulnerability of Pediatric Residents," The Journal of Pediatrics, 2021, doi: https://doi.org/10.1016/j.jpeds.2021.09.018.



# Pediatric Hematology/Oncology

#### **Faculty**

Melanie Comito, MD, Professor of Pediatrics, Paige Yeomans Arnold Endowed Professor in Pediatric Oncology; Division Director

Adrienne Borschuk, PhD, Instructor of Pediatrics, Pediatric Psychologist, Pediatric Hematology/Oncology and Palliative Care Programs

**Robyn Borsuk, MD,** Assistant Professor of Pediatrics; Pediatric Neuro-oncology program and Quality Programs

Amy Caruso Brown, MD, MSc, MSCS, Associate Professor of Pediatrics; Interim Chair of the Center for Bioethics and Humanities



**Irene Cherrick, MD,** 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 BrainTumor Center **Philip Monteleone, MD,** Associate Professor of Pediatrics; Principal Investigator, Children's Oncology Group, SUNY Upstate affiliate

**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

The Division of Pediatric Hematology / 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 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 space designed for children. The Outpatient Infusion Center is also located in this facility and serves all pediatric subspecialty patients. The physicians of the division are readily 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 unit and its 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

# Biennial Report 2022-2023

biotherapy treatments. Consultative services are available throughout Upstate Golisano Children's Hospital and are 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, 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. 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 central lineassociated bloodstream infections (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 nucleus of the center is a dedicated clinic that is focused on the pediatric brain tumor survivor with support from the educational specialist, family therapist, 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. Dr. Robyn Borsuk recently joined our team after doing extra training in pediatric neuro-oncology with the hope of developing further research efforts.

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, psychologist, educational specialist, and social work support. New programs include Thriving Together, a program of family-centered events and connection, as well as Thriving Onward Transition Program for adolescent and young adult patients with sickle cell disease.

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 COG, 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.

The **Pediatric Bleeding Disorder Program** is directed by Dr. Andrea Dvorak. This is a special program for patients with hemophilia, rare factor deficiencies, and von Willebrand's disease. The program is part of a research network through the Center for Disease Control and Prevention's (CDC) Public Health Surveillance for Bleeding Disorders project and with the American Thrombosis and Hemostasis Network. In addition to the diseases above, the Program also follows patients with platelet disorders and a variety of other rare bleeding disorders. There is a weekly multidisciplinary clinic with involvement by a hemophilia nurse coordinator, physical therapist and psychologist.

A **Pediatric Vascular Malformation Program** has been established under the guidance of Dr. Phil Monteleone, who has put together a multidisciplinary team which includes specialists from pediatric oncology, pediatric radiology, pediatric surgery, interventional radiology, pediatric cardiology, ENT as well as other pediatric subspecialists. This team meets monthly in a dedicated tumor board for interdisciplinary discussions of patients referred to the program. The goals of this program are to create a home for these patients in our system so that they can be evaluated and treated in an efficient/ effective way as well as to standardize the work up and management across divisions.

# **Educational Highlights**

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 a popular acting internship in inpatient Pediatric Hematology/oncology 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 hematology/oncology 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 this field. Our division are frequent presenters for the Morbidity and Mortality conferences presented by our pediatric residents. We have had a number of residents continue their education with fellowships in Pediatric Hematology & Oncology.

Dr. Amy Caruso Brown teaches courses in bioethics for medical and health profession students. She is co-director of the health systems science curriculum for students in the MD program. Several of are faculty are facilitators for the clinical case discussions for the MS-1/2 course Foundations in Reasoning in Medicine. Dr. Scott facilitates the MS-1 course Patients to Populations. Our division sponsors a student in the new MS-1 longitudinal course and will be expanding to sponsor MS-2 longitudinal students as well.

Our division has worked collaboratively with medical students on a variety of projects. Recent projects have included:

- 2020, Kathryn Skolnick MD 2022 "Assessing the need for a Pediatric Cancer Predisposition Program at Upstate". Preceptor: Dr. Amy Brown
- 2021, Gavrielle Rood MD 2023 "Multi-institutional analysis of tumor mutational burden and outcomes in pediatric central nervous systems tumors". Preceptor: Dr. Melanie Comito
- 2023, Paolo Robles, MD candidate 2025 "Iron overload in post-therapy pediatric oncology patients". Preceptor: Dr. Kathryn Scott

Our Thruway Pediatric Hematology/Oncology Collaboration has held annual meetings. Themes of these meetings includes the following:

- 2022 Keynote Speakers: Denise Adams, MD Vascular Anomalies; Kira Bona MD, MPH Health Care Disparities/Material Hardships in Pediatric Hem/Onc (Meeting held virtually)
- 2023 Keynote Speakers: Michele Lambert, MD Immune Dysregulation presenting as Immune Thrombocytopenia (Meeting hosted by SUNY Upstate and held at Weiskotten Hall, Syracuse NY)

Our division provides the following CME conferences on a regular basis that are available on Webex:

- Pediatric Tumor Board, 1st and 3rd Tuesdays
- Pediatric Hematology Case Conference, 2nd Tuesdays
- Pediatric Vascular Anomalies Case Conference, 4th Tuesdays

#### Faculty / Research Highlights

All of the clinical pediatric oncologists participate in clinical trials with the COG and regularly enroll patients in these international clinical trials.

Dr. Comito, as the division chief, brings expertise in pediatric neuro-oncology, pediatric stem cell transplant therapies, as well as work in post-graduate education in pediatric hematology/oncology. She has participated in collaborative efforts in innovative therapies for infants with malignant brain tumors as well as studies in diffuse intrinsic pontine gliomas. Under her direction, the division has focused on quality projects and has established additional programs in Vascular Anomalies and Cancer Predisposition Programs. She was instrumental in establishing the Pediatric Hematology/Oncology Thruway Network which is a multi-institutional collaboration among the 4 upstate pediatric hematology/oncology. This network has held annual meetings since 2017 and has completed several joint projects, many resulting in publications.

Dr. Monteleone has been a pediatric hematology/oncology physician for over 30 years. His main interests include running the COG research studies in children with cancer. He also has specific interests in children with leukemia or lymphoma and teenagers with cancer. He also has an interest in childhood vascular anomalies and has developed a multidisciplinary team and program for our center. A more recent quality project is participation in a multi-institutional project in ITP (ICON) which works on getting all members of the division to apply nationally agreed upon guidelines to all pediatric patients with ITP.

Dr. Irene Cherrick is board certified in Hospice and Palliative Care in addition to Pediatric Hematology/ Oncology. Her interests span the two fields including supportive care for the pediatric oncology patient (management of pain as well as nausea/vomiting). She leads the CHOICES Pediatric Palliative Care team with particular interest in perinatal palliative care, particularly of genetic disorders such as Trisomy 18/13 as well as symptom management and care for the child with severe neurological impairment. She is actively involved in quality improvement studies within each of these fields. Under her guidance she has established a multi-disciplinary team which now includes a full-time nurse practitioner as well as a pediatric psychologist.

Dr. Caruso Brown's interests include all aspects of pediatric ethics, decision-making, and health equity as well as the provision of pediatric hematology/oncology and pediatric palliative care in resource-limited settings. She is the Interim Chair of the Center for Bioethics and Humanities and the co-director of the health systems science curriculum for students in the MD program. Her research interests include understanding the role of faith and culture in treatment disagreements and the impact of social media on trust and the family-provider relationship. Dr. Brown also has an interest in global health. Through these efforts, the division has hosted a pediatrician from Kenya who spent time learning about our sickle cell protocols.

Dr. Jody Sima has expertise in pediatric solid tumor multidisciplinary management. As director of the Survivor Wellness Clinic, she has a special focus on cancer survivorship and long-term complications of cancer treatment. Dr. Sima also leads a specialized team working to improve fertility options after cancer treatment. This team has expanded and provides oncofertility support to the transgender population. Research interests included the Survivorlink Project, a multi-institutional study. She has received a cancer center pilot grant in multi-disciplinary AYA efforts, along with Dr. Katja Reuter.

Dr. Kennedy's interests include brain tumors, especially those occurring in children with NF1 and Tuberous Sclerosis. She is director of the Dubowy Brain Tumor Center for survivors of Pediatric brain tumors. She received her certificate in genetic cancer risk assessment with the City of Hope. She has now established a Pediatric Cancer Genetics program which is part of the Upstate Cancer Center Genetics program. This new clinic now meets monthly to see pediatric cancer patients who may be at risk for a cancer predisposition.

Dr. Dvorak has special interests in Bleeding Disorders, Thrombosis, Hematologic Malignancies, and Vascular Anomalies. As the Director for the Pediatric Bleeding Disorder Clinic, she participates in

research through the Center for Disease Control and Prevention's Public Health Surveillance for Bleeding Disorders project and with the American Thrombosis and Hemostasis Network.

Dr. Adrienne Borschuk is a pediatric psychologist with our division and is focused on providing psychological services with a focus on neuro-oncology, palliative care, and sickle cell disease. She joined us in 2022 after working at Cincinnati Children's Medical Center where she was instrumental in the chronic ventilator program. She is already a



frequent contributor to pediatric resident M&M conferences. Her pediatric grand rounds on effective and intentional communication was well received.

Dr. Scott's interests are in pediatric hematology and education. She is the Medical Director of our Comprehensive Pediatric Sickle Cell Program. She runs our chronic transfusion/iron chelation program and has interests in bone marrow failure syndromes, thrombosis, and other benign hematologic disorders. Her interest in Thalassemia care has led to participation in the Mid-Atlantic Regional Thalassemia Group.

Dr. Robyn Borsuk is our newest member of our division, having joined us in 2023. She completed an additional year of pediatric neuro-oncology training following her fellowship. She is working to establish additional research programs in pediatric brain tumors and has an interest in circulating tumor DNA and liquid biopsies as monitoring techniques. She is participating in formal quality program course and plans to lead our divisional quality projects.

# **Division Highlights**

Our program has been a long-standing member of the COG. Patients are enrolled in Phase II and III clinical trials, biology studies, cancer control, and late effects studies. We are also members of 2 other consortiums: the National Experimental Therapeutics (NEXT) consortium, which sponsors the Head Start 4 study for young children with malignant brain tumors, and the North American Consortium for Histiocytosis (NACHO), which sponsors studies for children with Langerhans cell histiocytosis. We have opened the SurvivorLink study, which is a multi-center trial whose purpose is to the evaluate the impact of SurvivorLink on the patient survivor care clinic attendance and risk-based surveillance. We have our own pediatric hematology/oncology research office which oversees these studies. In addition, this office also enrolls patient on trials sponsored by the CDC in hemophilia and bleeding disorder. We also have done investigator-initiated studies and completed studies in vaccine retention after childhood cancer treatment and a feasibility study on cancer predisposition syndromes in our cancer survivors.

In addition to the programs highlighted above, we have an active hematology program directed by Dr. Scott. She runs our chronic transfusion service and chelation program for iron overload. We are experts in iron deficiency, thrombosis/hemostasis, and bone marrow failure syndromes.

The division has been actively involved in patient safety. 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. We also participate in the Solutions for Patient Safety Hematology/Oncology pioneer cohort for prevention of CLABSI.

Our division has been highly productive over the past 2 years. These efforts have led to 11 peer-reviewed publications which are highlighted elsewhere in this report.

#### **Grants and Contracts**

#### Comito MA

Infrastructure Grant for clinical oncology research support. Sponsor: St Baldrick's Foundation. Pl. 2016 to present, \$50,000/year

LCH-IV: International Collaborative Treatment Protocol for Children and Adolescents with Langerhans Cell Histiocytosis. Sponsor: NACHO – North American Consortium for Histiocytosis through St. Jude's Children's Research Hospital. 2017-present

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 or Sequential Cycles of Marrow-Ablative Chemotherapy with Autologous Hematopoietic Progenitor Cell Rescue. Sponsor: NEXT Consortium, Nationwide Children's Hospital. 2016-present

#### Dvorak A

Mount Sinai School of Medicine: Hemophilia Treatment Centers. Through the Maternal Child Health Bureau. Pl. 2013-present.

Mount Sinai School of Medicine: Community Counts: Public Health Surveillance for the Bleeding Disorders. PI. 2013-present.

#### Monteleone P

Children's Oncology Group - awards and subcontracts, ongoing

40 open COG trials and 2 hybrid (SWOG/ECOG/COG) trials open.

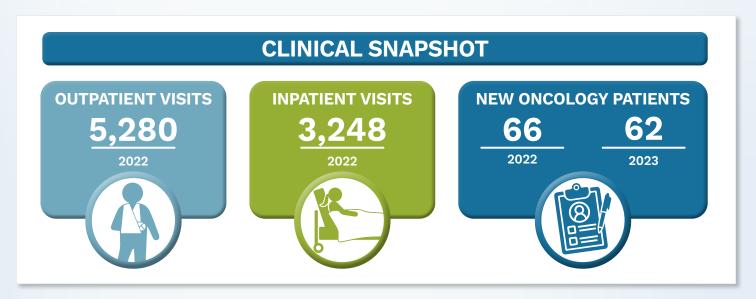
2 open non-COG consortium trials open.

Patient enrollment for 2023: 6 therapeutic enrollments and 57 non-therapeutic enrollments. 16 tumor specimens submitted for the Molecular Characterization Initiative.

#### Sima J

SurvivorLink: Scalability of an Electronic Personal Health Record for Cancer Survivors and Caregivers at Pediatric Cancer Centers ("SurvivorLink Scalability"). Sponsor: Emory University School of Medicine,

Pilot grant, Upstate Cancer Center: Multidisciplinary Care for AYA patients, Collaborator with Katja Reuters, PhD. 2023-present



# **Pediatric Hospital Medicine**

#### **Faculty**

Melissa Schafer, MD, Associate Professor of Pediatrics, Division Director

Olamide A. Ajagbe, MD, Assistant Professor of Pediatrics; Director, Pediatric Residency Program

John S. Andrake, MD, Associate Professor of Pediatrics

Kerry Biggs, MD, Assistant Professor of Pediatrics

lan Dargon, MD, Assistant Professor of Medicine, and Pediatrics

Francesca McCaffery, DO, Assistant Professor of Pediatrics

Matthew Mittiga, DO, Assistant Professor of Pediatrics

**Jennifer Myszewski, DO, PhD,** Assistant Professor of Pediatrics; Director, Pediatric Hospital Medicine Fellowship Program

Jennifer A. Nead, MD, Assistant Professor of Pediatrics; Director, Pediatrics Clerkship Program

Andrew Osten, MD, Assistant Professor of Pediatrics; Pediatric Quality Officer

Elizabeth Paulsen Lodge, MD, Assistant Professor of Pediatrics

Nusrat Zaman, MD, Assistant Professor of Pediatrics

#### **Fellows**

Alex Dang, MD Tanmai Shah, MD

#### **Nurse Practitioners:**

Christine Lopez, MSN, PPCNP-BC, PMHNP-BC, NE-BC, RN-BC Erin BlaivMarissa Paparo, PNP

Cassie Senif, NP

#### Clinical Overview

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 conditions, cardiac conditions, and neurologic concerns. The faculty provides direct care and coordination of care for medically complex patients while they are inpatients. The hospitalists provide medical care alongside an excellent team of Nurse Practitioners and the Child Psychiatry Consultation and Liaison service for children and adolescents with psychiatric and behavioral health problems. The division also provides consultative care for patients on surgical and medical subspecialty services.

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

# **Educational Highlights**

All three years of Pediatric residents have required rotations on the Inpatient Service. The faculty provides the inpatient education and evaluation of each of the residents. Family Medicine residents also

rotate onto the Hospital Medicine Service. We currently are teaching residents from Upstate, Lourdes, and St. Joseph's Family Medicine programs.

Dr. Olamide Ajagbe took over as Pediatric Residency Program Director in June of 2023.

Dr. Jennifer Nead continued to serve as Pediatric Clerkship Director, Dr. Matt Mittiga served as 4th year student Pediatric Acting Internship Coordinator, and Dr. Jennifer Myszewski served as Pediatric Hospital Medicine Fellowship Director. The newly established Pediatric Hospital Medicine Fellowship welcomed the first fellow into training in July of 2022.

Professional development in Improvement Science is available in a six-month quality scholars course offered by Dr. Schafer for the first time in 2023 and supported by a grant from the Upstate Foundation.

Division faculty present lectures to the residents in their Thursday Conference series, present at department Grand Rounds, and regularly participate and present in Morbidity and Mortality Conferences. This Morbidity and Mortality Conference is organized and led by Dr. Melissa Schafer, one of the faculty in the division. Dr. Schafer also provides education to the residents throughout the year with a series of lectures about quality improvement and patient safety, online modules, and resident led quality projects.

Dr. Ajagbe has developed and presented a much-anticipated resident workshop semiannual series on topics in Diversity, Equity, and Inclusion for residents and faculty.

Hospitalist faculty participate in teaching residents through simulation. In 2023, Dr. Andrew Osten and fellow Dr. Alex Dang received a grant from the Upstate Foundation to purchase a lumbar puncture trainer and a multiple procedure training mannequins to develop just in time training for lumbar punctures for pediatric residents.

Dr. Olamide Ajagbe received the Alpha Omega Alpha Gamma Chapter Excellence in Teaching Award, given by Upstate 4th year medical students.

Dr. Myszewski works with the PHM Fellowship Director's Council's Faculty Development Subcommittee.

# Research Highlights

Pediatric Hospital Medicine Faculty participate in various research projects. Members of our division participate in the multicenter study for Eliminating Monitor Overuse (EMO) Hybrid Effectiveness De-Implementation Trial, and other projects through the Pediatric Research in Inpatient Settings (PRIS) network. We were recognized for achieving the highest percent change in our monitor overuse rate for a non-freestanding Children's Hospital.

Dr. Melissa Schafer is involved in multiple QI research projects and presentations, including a first author paper on pediatric sepsis in hospitalized patients and collaborative work through the Children's Hospitals Association and Solutions for Patient Safety. See more in the Quality and Safety section.

Research projects and case reports led and written by students, residents, and fellows are regularly presented at local, regional, and national meetings with mentorship from our faculty, see research and publications section below for details.

# **Division Highlights**

Our division participates in Solutions for Patient Safety, a patient safety network of Children's Hospitals across the US and Canada committed to prevention of hospital acquired harm to children and staff. We were named the Solutions for Patient Safety Hospital of the Month for February, 2023; where the

hospital and safety team was again honored for performance in preventing central line infections, pressure injuries, and unplanned extubations, as well as 100% data submission and contributions to the "all teach, all learn" model.

Dr. Andrew Osten, Dr. Jennifer Myszewski, and Dr. Elizabeth Paulsen led our participation in REVISE II (Reducing Variability in Infant Sepsis Evaluation) - a multi-center collaboration American Academy of Pediatrics Value in Inpatient Pediatrics Network spanning more than 115 hospitals nationwide. Key improvements from this project in our hospital included an estimated 27 fewer lumbar punctures, avoided 26 admissions, and saved nearly 4000 hours of hospitalization time for febrile infants. Dr. Osten has continued to guide development of clinical pathways to help standardize and improve care provided across the division. A new Pediatric Clinical Pathway website has been published to share these pathways locally and across our region and can be found at <a href="https://www.upstate.edu/gch/professionals/clinical-pathways.php">www.upstate.edu/gch/professionals/clinical-pathways.php</a>.

The Hospital Medicine division has established a collaborative working relationship with the other PHM divisions in Upstate, NY, including Buffalo, Rochester, and Albany. We have been meeting quarterly to review topics of common interest.



# **Pediatric Immunology and Infectious Diseases**

#### **Faculty**

**Leonard B. Weiner, MD,** SUNY Distinguished Service Professor of Pediatrics, Pathology and Family Medicine, Division Director, Pediatric Infectious Disease; Pediatric Infectious Disease Fellowship Program Director; Vice Chair of Pediatrics

Danielle Daniels, MD, Assistant Professor of Pediatrics

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

Jana Shaw, MD, MPH, MS, Professor of Pediatrics and Public Health and Preventive Medicine

Manika Suryadevara, MD, Professor of Pediatrics

#### Clinical Overview

The Division of Immunology and 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 AIDS Center of Excellence, we provide medical care for pediatric and young adult patients infected with or exposed to the human immunodeficiency virus (HIV). Outpatient care is provided in the Pediatric and Adolescent Infectious Disease and Immunology Center located in the pediatric outpatient setting. Patients referred by their primary care physicians for infectious disease and immunologic diagnostic evaluations are also cared for in this Center along with follow-up evaluations for recently hospitalized patients.

Hospitalized patients are evaluated upon the request of their physicians at Upstate Golisano Children's Hospital and the Crouse NICU. Our infectious disease specialists work closely with nurses and primary care pediatricians, family physicians, surgical specialist, intensivists, emergency physicians, child abuse pediatricians, hospitalists, and neonatologists to direct the diagnostic and therapeutic evaluations of patients with infectious disease and/or immunologic problems.

As noted, the activities of the Division of Immunology and Infectious Diseases 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 referral center for evaluation of T-cell lymphopenia disorders/SCIDS and has received a Center of Excellence designation. Additionally, as of October 2023, we now serve as the regional NYSDOH designated newborn referral center for evaluation of infants with congenital cytomegalovirus/infection.

The Division of Immunology and Infectious Diseases also has oversight responsibilities for the Infection Prevention and Antimicrobial Stewardship Programs at Upstate Golisano Children's Hospital and for the infection prevention activities at the Crouse Hospital NICU.

# **Educational Highlights**

The Division of Immunology and Infectious Diseases has a long-standing accredited fellowship program that accommodates one postgraduate resident a year. This sub-specialty education program focuses on 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 division faculty is participation in multi-center, national and international clinical trials to evaluate the safety and efficacy of new pharmacologic agents and vaccines for children and adolescents. Specifically, Dr. Leonard Weiner currently supervises protocols to evaluate novel antiviral therapies and multiple clinical vaccine trials.

Dr. Joseph Domachowske's clinical research interests focus on the epidemiology, prevention and clinical manifestations of viral infections. Dr. Domachowske is recognized internationally for his contributions toward prevention of RSV infection in infants. Dr. Domachowske is the Director, Maternal-Child Pediatric Health for the institution's Global Health Program.

Dr. Jana Shaw's clinical research interests focus on epidemiology, infection prevention, and vaccine policy. She has also undertaken studies aimed at elucidating the causes of vaccine hesitancy among various populations and to describe the epidemiology of vaccine hesitancy in the US.

Dr. Manika Suryadevara's research interests include the study of vaccine preventable diseases, increasing vaccination rates by both improving access to vaccines and understanding and intervening with parental and provider vaccine hesitancy. She is also involved in clinical vaccine trials.

Dr. Danielle Daniels, our newest faculty member, will be continuing viral epidemiologic studies which were initiated during her fellowship. In addition, she will take on MA/OR responsibility for projects related to the NYSDOH congenital cytomegalovirus newborn screening program.

# **Division Highlights**

Clinical and research activities of the Division of Immunology and Infectious Diseases have continued to grow. We worked to develop tools to define new epidemiologies of burgeoning pathogens and to collaborate with others in the evaluation of effective vaccines and therapeutic modalities. To that end, the Division has undertaken large scale pediatric vaccine trials which remain in progress.

#### **Grants and Contracts**

#### Weiner LB

A phase 3, multi-center, open-label, randomized, comparator controlled trial of the safety and efficacy of Dalbavancin versus active comparator in pediatric subjects with acute bacterial skin and skin structure infections. Sponsor: Allergan Sales LLC. PI. 2018-2022.

A Phase IIIB, Observer-Blind, Randomized, Placebo-Controlled, Multi-Center Study to Assess the Safety and Immunogenicity of GSK Meningococcal Group B Vaccine and 13-valent Pneumococcal Vaccine when Administered Concomitantly. Sponsor: GlaxoSmithKline. PI 2018-2023.

A phase 3, multicenter, randomized, double-blind, active comparator-controlled study to evaluate the safety and tolerability of V114 in healthy infants (PNEU\_LINK). Sponsor: Merck Sharp and Dohme Corporation. PI. 2019-2022.

A Phase 3, Multicenter, Randomized, Double-blind, Active-Comparator controlled Study to Evaluate the Safety, Tolerability, and Immunogenicity of a 4-dose Regimen of V114 in Healthy Infants (PNEU-PED). Sponsor: Merck Sharp and Dohme Limited Corporation. Pl. 2019-2022.

A Phase 1b, Randomized, Observer-Blind, Placebo-Controlled, Dose-Ranging Trial to Evaluate the Safety and Immunogenicity of mRNA-1653, a Combined Human Metapneumovirus (hMPV) and Parainfluenza Virus Type 3 (PIV3) Vaccine-Adults & 12-36 mo. Sponsor: ModernaTX. Pl. 2021-2022.

A Phase 3, Randomized, Double-Blind Trial To Evaluate The Safety And Immunogenicity Of A 20-Valent Pneumococcal Conjugate Vaccine In Healthy Infants. Sponsor: Pfizer Incorporated. PI. 2020-2022.

Pre-Exposure Prophylaxis (PrEP) Services in General and Primary Care Settings. New York State Department of Health AIDS Institute. Co-PI. 2021-2024.

Adolescent/Young Adult HIV Specialized Care Center (SCC). New York State Department of Health AIDS Institute. Pl. 2021-2024.

Congenital and Perinatal Infections Rare Diseases Clinical Research Consortium (RDCRC). Sponsor: Board of Trustees of the University of Alabama Birmingham. Pl. 2021-2024.

A phase 2/3 two-part, open label, dose escalation, age de-escalation and randomized observer blind placebo controlled expansion study to evaluate the safety tolerability reactogenicity and effectiveness of mRNA 1273 SARS CoV2 vaccine. Sponsor: ModernaTX. Pl. 2021-2024.

A phase 2/3, randomized, observer-blind, placebo controlled, study to evaluate the safety, reactogenicity, and effectiveness of mRNA-1273 SARS CoV 2 vaccine in healthy adolescents 12 to <18 years of age. Sponsor: ModernaTX. 2021-2025.

Adolescent/Young Adult Specialized Care Center (SCC). Sponsor: NYS Department of Health AIDS Institute. Pl. 2022-2023

Pre-Exposure Prophylaxis (PrEP) Services in General and HIV Primary Care Settings. Sponsor: NYS Department of Health AIDS Institute. Co-PI. 2022-2023.

NYSDOH AI Research & Evaluation Projects: A Retrospective Survey Analysis of Pre-Exposure Prophylaxis (PrEP) in HIV Positive Individuals in Central New York. NYS Department of Health AIDS Institute. Co-PI . 2022-2023.

Health and Human Services for Lesbian, Gay, Bisexual and Transgender Individuals, Families and Communities. Sponsor: NYS Department of Health AIDS Institute. Co-PI. 2022-2023.

A phase 3, multicenter, placebo controlled, randomized, observer-blinded trial to evaluate efficacy, safety, tolerability of a pneumococcal 20-valent conjugate vaccine in infants. Sponsor: Pfizer Incorporated. Pl. 2022-2023.

A phase 2/3 interventional safety pharmacokinetics and efficacy open label multi center single arm study to investigate orally administered PF-0732133. Sponsor: Pfizer Incorporated. PI. 2022-2024.

Targeted clinical research to address select viral infections. Sponsor: University of Alabama Birmingham. Pl. 2022-2024.

An open label phase 3 study to evaluate the safety and immunogenicity of the mRNA-1273.214 vaccine for SARS-CoV-2 variants of concern in participants aged 6 months to < 6 years. Sponsor: ModernaTX. Pl. 2023-2024.

A phase 2 two-part study followed by observer blind/randomized (Part2) to evaluate the safety tolerability reactogenicity and effectiveness of mRNA 1273.214 SARS-CoV-2 vaccine in participants aged 12 weeks to <6 months. Sponsor: ModernaTX. Pl. 2023-2024.

Improving equity through clinical HIV prevention in community health settings, component A: PrEP services in primary care settings. Sponsor: NYS Department of Health. Pl. 2023-2024.

A phase 2 randomized double-blind placebo-controlled study to evaluate the efficacy and safety of GS-5245 for the treatment of COVID-19 in participants with standard risk for developing severe disease.

Sponsor: Gilead Sciences Incorporated. Pl. 2023-2024.

A phase 3 randomized double-blind placebo-controlled study to evaluate the efficacy and safety of S-217622 in the prevention of symptomatic SAR-CoV-2 infection in household contacts of an individual with symptomatic COVID-19. Sponsor: Shionogi and Company, Ltd.. Pl. 2023-2024.

Improving equity through clinical HIV prevention in community health settings-component B: young adult community access programs (YACAP). Sponsor: NYS Department of Health. PI. 2023-2024.

Advancing health equity through comprehensive community-based HIV ambulatory care services component B: centers for young adults. Sponsor: NYS Department of Health. PI. 2023-2024.

Family Focused HIV Health Care for Women. Sponsor: Health Research Inc. Pl. 2023-2024.

A phase 2/3 single arm open label study to evaluate the safety pharmacokinetics and efficacy of obeldesivirs. Sponsor: Gilead Sciences Incorporated. PI. 2023-2024.

An interventions I phase 1b randomized double blind sponsor open placebo controlled multi center dose finding study to evaluate safety tolerability and pharmacokinetics of sisunatovir. Sponsor: Pfizer Incorporated. Pl. 2023-2024.

Newborn screening follow-up study of congenital cytomegalovirus infection. Sponsor: Health Research Inc. Pl. 2023-2024.

#### Domachowske JB

A Phase 2/3 Randomized, Double-blind, Palivizumab-controlled Study to Evaluate the Safety of MEDI8897, a Monoclonal Antibody With an Extended Half-life Against Respiratory Syncytial Virus, in High-risk Children (MEDLEY). Sponsor: MedImmune. Pl. 2019-2024.

A phase 1 open-label dose-finding study to evaluate safety tolerability and immunogenicity and phase2/3 placebo controlled observer blinded safety. Sponsor: Pfizer Incorporated. PI. 2021-2024.

A phase 2 open label uncontrolled single dose study to evaluate the safety and tolerability pharmacokinetics and occurrence of antidrug antibody for Nirsevimab in immunocompromised children less than or equal to 24 months of age. Sponsor: AstraZeneca LP. Pl. 2021-2023.

A phase 2 observer blind randomized controlled study to evaluate the immunogenicity and safety of a varicella vaccine at various potencies compared with Varivax as a first dose administered in healthy children in their second year of life. Sponsor: GlaxoSmithKline. Pl. 2022-2024.

EHR surveillance of lower respiratory tract (LTRI) and respiratory syncytial virus (RSV) in infants. Sponsor: Clinetic. PI. 2022-2024.

A double randomized double blind placebo-controlled dose ranging trial to evaluate pharmacokinetics, pharmacodynamics and safety of AT-752 in patients with Dengue infection. Sponsor: Atea Pharmaceuticals Incorporated. PI. 2022-2024.

A phase 3 randomized observer blind placebo-controlled study to evaluate the efficacy safety and immunogenicity of mRNA-1647 cytomegalovirus vaccine in healthy participants 16 to 40 years of age. Sponsor: ModernaTX. Pl. 2023-2025.

A phase Il single blind randomized controlled study to evaluate the immunogenicity and safety of a measles, mumps, rubella, varicella vaccine compared with ProQuad administered in healthy children 4 to 6 years of age. Sponsor: GlaxoSmithKline. Pl. 2023-2024.

#### Suryadevara M

A multicenter, single-arm, open-label study to assess the safety, pharmacokinetics, and efficacy of Baloxavir Marboxil in otherwise healthy pediatric patients from birth to <1 year of age with influenza-like symptoms. Sponsor: Genentech Incorporated. PI. 2019-2023.

A prospective study to characterize vaccine knowledge, attitudes, and practices among healthcare providers in NYS. Sponsor: Merck Sharp and Dohme Corporation. Pl. 2021-2023.

The impact of positive vaccine attitudes and communications among primary care office staff on practice level pediatric and adolescent vaccine completion rates. Sponsor: Merck Sharp and Dohme Limited Liability Corporation. Pl. 2023-2024.

### **INFANT RSV PREVENTION EFFORTS**

1997 to present Dr. Joseph Domachowske (Pediatric Infectious Diseases) and a Dream Team of Co-Investigators, Laboratory and Clinical Research Support Specialists, Research Assistants, and Volunteers

- Translational Research Grants: 12
- Preclinical Research Grants: 6
- Surveillance and Epidemiology: 4
- Clinical Development Programs (31) for Safe and Effective:
  - Antiviral therapies
  - Live attenuated RSV vaccines
  - Inactive RSV vaccines
  - Monoclonal Ab for highest risk
  - Extended half-life monoclonal Ab to protect all infants
  - Maternal vaccines during pregnancy
- Outcomes
  - Funding in excess of \$14 million
  - Dozens of high impact publications
  - NEJM, Lancet, JAMA, Nature Medicine, J Peds, J Exp Med, J Infect Dis, others
  - FDA approval of the first RSV vaccines to be available (2023)
  - FDA approval of an RSV vaccine during pregnancy
  - FDA approval of the first immunization to be recommended to protect all newborns and infants against RSV (2023)
- Clinical Development Programs advancing to include others at high risk
- Current, active enrollment in therapeutic studies
- Working with NYS and Regional Stakeholders to develop centralized immunization locations
- Recent and Current Policy Development Efforts for Universal Infant RSV Prevention with Senior Health Officials in Canada, Ecuador, India, Saudi Arabia, Spain, United Arab Emirates and the USA



# **Pediatric Nephrology**

### **Faculty**

Scott Schurman, MD, Associate Professor of Pediatrics, Division Director; Vice Chair of Pediatrics Dongmei Huang, MD, Assistant Professor of Pediatrics Heather Wasik, MD, Assistant Professor of Pediatrics Thomas Welch, MD, Professor Emeritus of Pediatrics

#### Clinical Overview

The Division of Nephrology provides inpatient consultation and acute dialysis care, including peritoneal dialysis, hemodialysis, and continuous renal replacement therapies (CRRT) at the Upstate Golisano Children's Hospital (UGCH). In 2019, Pediatric Outpatient Dialysis Units for peritoneal dialysis and hemodialysis opened at UGCH. Other outpatient services are provided in our offices at 725 Irving Ave, Suite 805, directly across the street from UGCH. This office has been recognized multiple times for exemplary Patient Experience Performance.

Division members evaluate and treat 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, all stages of chronic kidney disease, and inpatient and outpatient dialysis. The division is part of the University Hospital Transplant team, providing comprehensive kidney transplant services for children and adolescents; over the last 15 years our team has consistently performed the most pediatric kidney transplants in the Upstate New York region, with 100% 1, 3, and 5-year graft survival.

We have an established expertise in the evaluation and management of children with hypertension, including 24-hour ambulatory blood pressure monitoring. Metabolic evaluations of children with urolithiasis are performed, stressing dietary measures that can minimize risk of recurrence.

The division 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 colleagues in Pediatric Urology, including a bi-monthly combined case review.

# **Educational Highlights**

Nephrology faculty are involved in a variety of educational activities. The pediatric residency lecture series, in which our faculty actively participate, provides the fundamental knowledge basis for recognizing and treating common kidney diseases.

Residents often choose to spend a month with our team on elective; this time focuses on inpatient rounds and outpatient care, including general nephrology, dialysis, and transplant patients. Elective curriculum includes a series of didactic case discussions that focus on nephrology subjects pertinent to the general pediatric board examination.

# Research Highlights

Dr. Heather Wasik's focus has been on using large databases to ask and answer questions related to End Stage Kidney Disease Care in children. This has included retrospective cohort studies using the North American Pediatric Renal Trials and Collaborative Studies database to evaluate dialysis and transplant outcomes in children with end stage kidney disease due to lupus nephritis and analysis of peritonitis risk factors and hospitalization costs of hemodialysis catheter-associated blood stream

infections in children by using data from the Standardizing Care to Improve Outcomes in Pediatric ESRD (SCOPE) Collaborative and the Pediatric Health Information System databases.

# **Division Highlights**

The division is involved in Quality Improvement initiatives touching multiple areas of care.

The Pediatric Nephrology Center at UGCH participates in the SCOPE Collaborative. A Quality Transformation Network, the SCOPE Collaborative of 50+ Pediatric Nephrology centers implements evidence-based catheter bundles aimed to reduce catheter related infection. The UGCH Dialysis Center has consistently scored at or near the top of the Collaborative in terms of infection outcomes.

The division coordinates Quality Assessment and Performance Improvement (QAPI) programs in chronic Pediatric Dialysis and Pediatric Kidney Transplantation, including projects to improve viral and rejection surveillance and transition readiness of adolescents and young adult transplant patients.

Dr. Schurman co-Chairs Upstate University Hospitals Outpatient Quality Coordinating Committee with University-wide projects focused on reducing provider generated appointment cancellations and other measures of the Vizient Outpatient Scorecard. He also coordinates Risk Management initiatives and Medical Malpractice functions for the Upstate Faculty Practice Plan.

Dr. Wasik serves as Associate Program Director for the Pediatric Residency Program and is focused particularly on improving resident evaluations and curriculum development.

Dr. Huang serves as the Director of Pediatric Dialysis services and on multiple patient care related committees.



Doctors Heather Wasikand Reza Saidi with pediatric transplant patient.

# **Pediatric Palliative Care**

#### **Faculty**

Irene Cherrick, MD, Professor of Pediatrics; Medical Director Nusrat Zaman, MD, Assistant Professor of Pediatrics Adrienne Borschuk, PhD, Instructor of Pediatrics

#### Staff

Sara Fisher, Pediatric Nurse Practitioner

#### Clinical Overview

The CHOICES Pediatric Palliative Care Program provides care from prior to birth (prenatal period) into adulthood for children and their families with complex and life-threatening medical conditions. Program Director Dr. Irene Cherrick is Board-Certified in Hospice & Palliative Care Medicine. All medical providers on the CHOICES team have completed a nationally recognized intensive Pediatric Pain Master Class. Pediatric Palliative Care provides an extra layer of support and various services to patients (and their families) that are cure-seeking, life-prolonging, comfort-enhancing to optimize quality of life. The CHOICES team provides care across the spectrum of life and is NOT limited to end of life or hospice care. This team provides care and support to children dealing with medically complex problems. This care is provided in the inpatient, outpatient as well as home setting based upon need. The CHOICES team partners with the patient's medical team as well as numerous community-based agencies to perform this complex care and greatly assists with complex care coordination.

The CHOICES team supports medical decision-making, providing timely and effective interventions to minimize suffering (pain and symptom management) while maximizing quality of life and managing and coordinating the logistics of care to provide seamless transitions between settings (thus optimizing patient and family continuity) to maintain the highest quality of care. Team members have collective expertise to address the physical, psychosocial, emotional, practical, and spiritual needs of the child and family as a whole (including extended families and siblings in addition to patients and parents). This care includes bereavement care which consists of anticipatory grief and following the death of the child.

Pediatric Palliative Care populations are very different from adult palliative care populations. Although adult palliative care teams often focus on improving quality of life for patients with terminal diseases, pediatric palliative care programs support children and families with chronic medical disease across the spectrum of many years. The Pediatric Palliative Care population continues to grow on an annual basis with the number of new patients added annually surpassing those discharged.

#### The CHOICES team provides the following:

- Establishes rapport with the patient/family/support system throughout a continuum incorporating complex medical conditions and care.
- Explores and assists with defining and advocating for patient's/families' goals of care.
- Expert pediatric pain and symptom management, including those with severe neurological impairment who often require a different level of expertise.
- Assist with processing the impact of serious medical conditions/injuries for the patient/family and support network, and providing educational resources for coping, communication, decision making, and parenting in the face of a complex medical illness.

- Offers continuity of care throughout including specialists' appointments, hospitalizations, attending and arranging care conferences, and provides continuous support services among specialties and settings including Upstate Golisano Children's Hospital, Crouse NICU, perinatal center, home, provider's office, specialty clinics, outpatient and inpatient settings, and hospice services.
- Facilitates the processing of anticipatory grief, end-of-life care and bereavement support, and coordinates with local hospices providing pediatric expertise for those children nearing the end of their lives, when available since Pediatric Hospice services are currently not available to all patients. When hospice is not available, the CHOICES team provides this care in the home setting.

# **Educational Highlights**

The faculty are involved in many educational activities including clinical teaching with nursing staff, housestaff, and medical students.

There is an elective for pediatric house staff in Pediatric Palliative Care which is tailored to their plans for the future whether this be specialty or primary care. These residents are encouraged to have this experience reinforce and present a unique time to enhance their communication skills with patients/families. A similar elective is available to medical students.

Dr. Cherrick has presented at the National/International, State and Local (including within the institution) levels on various topics within Pediatric Palliative Care including being a guest speaker. She is also involved in teaching of Palliative Care fellows at Rochester Regional Medical Center.

The team members are also regular participants at National and International conferences within the field.

Sara Fisher, PNP is a tremendous resource for pediatric nursing providing ongoing, hands-on and formal teaching regarding Pediatric Palliative Care.

# **Faculty Overview:**

Dr. Cherrick is the medical director and founder of Pediatric Palliative Care at Upstate. She is board certified in Hospice and Palliative Care. She leads the CHOICES Pediatric Palliative Care team with particular interest in perinatal palliative care, particularly of genetic disorders such as Trisomy 13/18 as well as symptom management and care of the child with severe neurological impairment.

Dr. Adrienne Borschuk is a pediatric psychologist focused on providing psychological services with pediatric sickle cell disease and pediatric palliative care populations. Her primary interests are in optimizing quality-of-life for children living with medical conditions, communication in the healthcare setting, ethics, and program development.

Dr. Nusrat Zaman is a Pediatric Hospitalist and the Associate Program Director for the PHM fellowship. Her interest in Pediatric Palliative Care stemmed from encountering hospitalized children with complex diagnoses and medical issues and recognizing the benefit of early pediatric palliative care intervention. Her primary interests are pain management, particularly improving comfort for hospitalized children during bedside procedures and emphasizing an interdisciplinary approach to chronic pain.

# **CLINICAL SNAPSHOT**

50% of the CHOICES team visits involve patients at the Upstate Perinatal Center and Crouse NICU which is anticipated since the highest risk for pediatric death is within the perinatal and newborn period.



The addition of a full-time nurse practitioner in July 2023 has greatly facilitated patient care of these complex patients including much improved follow-up and greatly enhanced care coordination.

### CHOICES: PEDIATRIC PALLIATIVE CARE TEAM



Team created in 2018 and led by board certified 0.7 FTE physician, 1.0 FTE nurse practitioner (full time since July 2023) and 0.5 FTE pediatric psychologist

Sees pediatric patients including prenatal visits for pain and symptom management, care continuity, goals of care, advocacy and ongoing support

Most are chronically medically ill and followed over many years, not just at end of life with a persistently increasing population served

Patients seen inpatient, outpatient (including PNC), with option for home visits based upon clinical condition

Care coordination involves pediatric subspecialists, primary care team, community agencies (home nursing, hospice, community based palliative care programs)

# Pediatric Pulmonary, Asthma & Sleep Medicine

### **Faculty**

Zafer Soultan, MD, Associate Professor of Pediatrics; Division Director
Chris Fortner, MD, PhD, Associate Professor of Pediatrics; Cystic Fibrosis Care Center Director
Robert V. Hingre, MD, Assistant Professor of Pediatrics
Christina Nicolais, PhD, Assistant Professor of Pediatrics
Marium Yabe-Gill, MD, Assistant Professor of Pediatrics

#### Clinical Overview

The Division of Pulmonary, Asthma, and Sleep Medicine provides care for the full range of respiratory disorders and diseases in children and adolescents.

The main highlight of 2023: moving to a new house! The new Center is a renovated suite at Madison-Irving Building. The Center has is a renovated suite of 15 exam rooms, 3 Pulmonary Function laboratories, and offices/workstations for allied staff, administrative offices, and a conference room.

The second highlight is adding an in-center Pediatric Cardiorespiratory Laboratory with new state-of-art equipment.

The Cystic Fibrosis Center (Robert C. Schwartz Cystic Fibrosis Program) is accredited by the Cystic Fibrosis Foundation. A team of physicians, a nutritionist, a social worker, cystic fibrosis (CF) care nurses, a CF Center coordinator, a pharmacy technician, a specialized CF pharmacist, and the CF Center psychologist strive to provide excellent care for children with CF.

The Center has been the site for many of the landmark therapeutic trials sponsored by the Cystic Fibrosis Foundation's Therapeutic Development Network (TDN).

Our Center was well represented in the American Cystic Fibrosis Conference, Phoenix 2023.

We collaborate with NY State CF Newborn screening program. We contributed to 3 major QI projects which were presented as posters.

Dr. Fortner presented at two sessions in NACFC 2023: "Taking care of infants who were exposed to CFTR modulators in utero" and "Weight- based dosing of ETI for infants at risk for complications due to CFTR modulator withdraw." We presented our QI work on early detection of CF-related liver disease.

The Center has been repeatedly recognized by the Cystic Fibrosis Foundation for excellence in partnership with the Central New York chapter of the Cystic Fibrosis Foundation.

**The Asthma Program:** Our mission is helping children with asthma breathe easier and free from asthma symptoms. A group of enthusiastic and experienced nurses and providers collaborate and apply the latest asthma management guidelines, including monitoring and improving adherence via a comprehensive Medication Management Program.

In 2023, we started a specialized clinic aiming at providing care to underprivileged children with severe asthma. The clinic is conducted by Mrs. Kristen Mass, NP.

The Sleep Center cares for sleep-related breathing disorders, insomnia, parasomnias, narcolepsy and other hypersomnia, circadian rhythm disorders and rhythmic movements disorders, and restless legs syndrome. The Center is unique for having on staff a dedicated sleep respiratory therapist to support families and children treated with Positive Airway Pressure therapy.

Soon, AI will be utilized in preliminary reading of studies for children >12 years and adult. This will improve the efficiency and quality of interpreting studies.

**The Bronchopulmonary Clinic,** directed by Dr. Robert Hingre, provides comprehensive care to infants born with extreme prematurity or other serious congenital problems that will affect their pulmonary function. Care is provided from the time of discharge from the NICU and continues throughout childhood for patients who have long-term pulmonary problems.

**Aerodigestive Disorders:** We coordinate the care of children with complex medical issues with Pediatric GI, Pediatric ENT, and Speech pathologists.

The highlight of 2023 is adding a care coordinator, Mrs. Katie Boyd, NP.

We look forward for impactful improvements in the program and for starting QI and research projects.

**Neuromuscular Disorders:** The clinic for children dependent on technology specializes in prescribing and monitoring children on ventilators and cough assist devices.

We care for respiratory complications in children with neuromuscular disorders, such as aspiration and restrictive lung diseases.

We treat **rare lung diseases** such as primary ciliary dyskinesia and **interstitial lung diseases**, and **congenital lung conditions** such as bronchogenic cysts, congenital cystic adenomatoid malformations and lobar emphysema.

**Pulmonary Pediatric Psychology** collaborates with pulmonary providers and offers assessment and intervention services to address emotional, behavioral, and social concerns related to pulmonary medical diagnoses (e.g., sleep difficulties, treatment compliance/adherence, coping with disease burden, medical/procedural anxiety, adjustment to new diagnosis).

We offer comprehensive **pediatric pulmonary function assessments and cardiorespiratory stress testing**.

A 5-bed **Pediatric Sleep Laboratory** within Upstate Sleep Laboratory provide overnight comprehensive sleep studies, home sleep studies, Multiple Sleep Latency, and Maintenance of Wakefulness tests.

Flexible bronchoscopy is provided at the Pediatric Surgery Center in 3 North, University Hospital.

We acquired disposable bronchoscopy units for the PICU. This will facilitate timely and effective bronchoscopy on critically ill children.

**Outpatient care** is provided at the newly opened state-of-art Center! The Center is located at Madison-Irving medical Building.

Inpatients are cared for both in the Upstate Golisano Children's Hospital and the Crouse Hospital Neonatal Intensive Care Unit.

# **Educational Highlights**

The Division is invested in the education of all learners, from medical school to residency. We provide:

- Docs for Tots shadowing opportunities for first year medical students
- · An outpatient site for the third-year medical students during their Pediatric clerkship
- Elective opportunities for 4th year medical students
- Elective site for 1st-3rd year Pediatric Residents
- Grand rounds for the Department of Pediatrics
- 6 core curriculum lectures for Pediatric Residency Program
- Annual CF Teaching Day
- Annual Sleep Teaching Day, a CME activity

# Research Highlights

The Division is active in quality improvement.

#### **Current Projects:**

- Improving adherence to asthma therapies by application of comprehensive medications management program with collaboration of Upstate Outpatient Pharmacy
- Early detection and monitoring of CF related liver disease by applying the Stanford Algorithm.
- Transition to adult care program: a comprehensive multidisciplinary program to prepare older children and adolescents to transition to adult medicine.

#### Current CFF TDN therapeutic studies at our Center, with Dr Fortner as PI

VX20-121-104: A Phase 3, Open-label Study Evaluating the Long-term Safety and Efficacy of VX-121 Combination Therapy in Subjects with Cystic Fibrosis

VX20-121-103: A Phase 3, Randomized, Double-blind, Controlled Study Evaluating the Efficacy and Safety of VX-121 Combination Therapy in Subjects with Cystic Fibrosis Who Are Homozygous for F508del, Heterozygous for F508del and a Gating (F/G) or Residual Function (F/RF) Mutation, or Have At Least1 Other Triple Combination Responsive CFTR Mutation and No F508del Mutation

BEGIN-OB-19: A Prospective Study to Evaluate Biological and Clinical Effects of Significantly Corrected CFTR Function in Infants and Young Children

SIMPLIFY-IP-19: A master protocol to test the impact of discontinuing chronic therapies in people with cystic fibrosis on highly effective CFTR modulator therapy (SIMPLIFY)

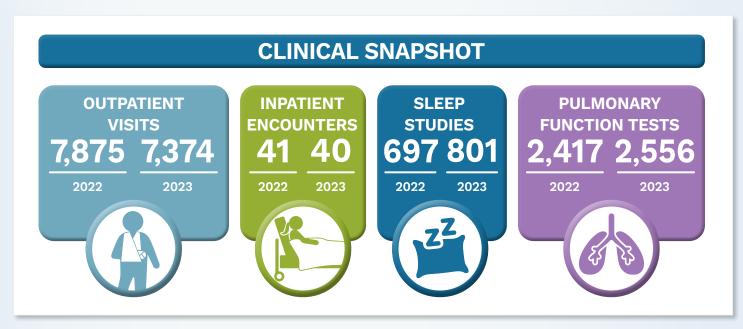
# Awards and Recognition

The Upstate Cystic Fibrosis Center (Robert C. Schwartz Cystic Fibrosis Program) was recognized at the 2021 North American Cystic Fibrosis Conference for its excellence in partnership with the Central New York chapter of the Cystic Fibrosis Foundation.

#### **Grants and Contracts**

Cystic Fibrosis Foundation Care Center Grant. Pl. 2022-2023.

Cystic Fibrosis Foundation Therapeutics Development Network Grant. Pl. 2022-2023.



# PEDIATRIC SLEEP MEDICINE PROGRAM

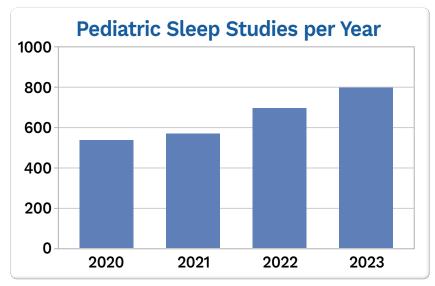
- Upstate supported the Department of Pediatrics in launching and developing the Pediatric Sleep Medicine program.
- A state-of-art sleep laboratory accredited by the AASM was built. It is a 10-bed lab, 3 are dedicated for Pediatric.
- The State hired and trained Pediatric specialized sleep technicians, and a specialized sleep/ respiratory therapist to work with children and families on adherence to PAP therapy.

 $\bullet$  The Department of Pediatrics and the State support allocating a good part of the efforts of 4

nurse practitioners to sleep medicine.

 This program started with 0, and we had approximately 3000 visits for sleep related issues/year.

 The State represented by the Department of Respiratory collaborates with the Department of Pediatrics and supports annual CNY Sleep teaching day, a CME accredited activity





# **Quality and Safety**

### **Faculty**

Andrew Osten, MD, Assistant Professor of Pediatrics; Pediatric Quality Officer Sarah Harding, MD, Assistant Professor of Pediatrics; ICU Quality and Safety Melissa Schafer, MD, Associate Professor of Pediatrics; previous Pediatric Quality Officer Beth Nelsen, MD, Associate Professor of Pediatrics; Pediatric Residency QI/PS education

### Nursing

Michelle Jeski, MSN, RN, PCNS-BC, CPN
Jennifer Murphy MSN, RN, CCRN
Kristen Connelly BSN, RN, CCRN
Bonnie Seitz, MS, RN, CNS, CPN, Pediatric Patient Safety Officer (through 2023)
Janean Stewart, Quality Office Nurse Specialist

### Clinical Overview

Our patient safety program is Children's Hospitals' Solutions for Patient Safety (SPS), in which we have participated since 2012. Through this program, we work to reduce hospital-acquired harm and staff injuries. We were honored to be named "Hospital of the Month" from SPS in February 2023, for achieving a sustained rate of zero events per 1000 line days in central line infections, pressure injuries and zero unplanned extubations per 100 ventilator days, as well as 100% data submission and contributions to the "all teach all learn" model. We model safety as a priority every day by tracking our Preventable Harm Index and our current Serious Safety Event rate on the daily safety call available to all staff. We were also honored as a Solutions for Patient Safety "Top Performing Hospitals" for Central Line Associated Bloodstream Infections, 2022.

We are also active participants in the Pediatric Trauma process improvement program. Our Pediatric Trauma team received their level one reverification in 2023. We were also recertified in 2023 through Cribs for Kids as a gold level safe sleep hospital. We are also active in the Pediatric Surgery process improvement program, the Children's Hospital Association Improving Pediatric Sepsis Outcomes collaborative, the Pedi-Res-Q resuscitation collaborative, local projects of our own design, and more. For faculty we have an American Board of Pediatrics Maintenance of Certification (MOC) portfolio program.

In 2022 and 2023 the Children's Hospital quality and safety team expanded, welcoming new nurse specialists focused on resuscitation, children's surgery, and off hours staff safety. At the end of 2023 Bonnie Seitz retired and was honored with the inaugural Linda McAleer Patient Safety award for her decades of distinguished service.

# **Educational Highlights**

Our program has three distinct phases occurring over the three-year training cycle with a few longitudinal elements, in addition to quarterly didactic sessions.

- 1. First year Pediatrics residents complete the Institute for Healthcare Improvement basic certificate online, do the solutions for patient safety error prevention course, and develop a proposed SMART aim and PDSA cycle. The last two are worksheets, which they are encouraged to prepare in small groups.
- 2. In the second year we take those proposed PDSA cycles and add to them faculty mentors and QI

mentors who strongly encourage completion of the PDSA cycle including data, submission for MOC credit, and presentation.

3. In the third year, each Pediatrics resident does a Morbidity & Mortality conference (M&M) for grand rounds on a case in which they believe we could have done better. Preparation includes identifying a faculty mentor, developing an interdisciplinary team, identifying health equity factors, doing an event timeline, a cause analysis fishbone, and an impact/effort grid for proposed system improvements.

Professional Development in Quality Improvement – newly launched in 2023 and funded by a grant from the Upstate Foundation, we offered a six-month professional development course in improvement science focused on utilizing the model for improvement on real world projects resulting in scholarly presentations.

### **National Presentations**

Reducing Length of Stay Following an Uncomplicated Appendectomy in Pediatric Patients. Jennifer Stanger. American College of Surgeons Quality & Safety Conference, July 17, 2023. Minneapolis MN.

BUBBLE: Popping Post-Operative Pneumonia in Pediatric Patients. Michelle Jeski. American College of Surgeons Quality & Safety Conference, July 17, 2023. Minneapolis MN.

Reducing Time to Fluid Bolus. Bonnie Seitz and Melissa Schafer. Children's Hospital Association Improving Pediatric Sepsis Outcomes Spring Workshop. April 18, 2023. Chicago, IL.

Developing a Sustainable Data Pipeline. Todd Schuler and Melissa Schafer. Children's Hospital Association Improving Pediatric Sepsis Outcomes December Virtual Symposium Plenary Session. Dec 14, 2022.

Landing on the Hudson: Learning about safety when events go well; Workshop. Anu Subramony, Nena Osorio, Melissa Schafer, Elizabeth Haines, Jenna Merandi. Workshop at Pediatric Hospital Medicine Annual Conference, 11:00am to 12:30pm, July 30, 2022, Lake Buena Vista, FL

Racial/Ethnic Differences in Pediatric Sepsis from the Improving Pediatric Sepsis Outcomes Collaborative, Lori Rutman presenting author, Melissa Schafer coauthor. Pediatric Academic Society Meeting April 21-25, 2022, Denver, CO

### **National Posters**

Reducing Length of Stay Following an Uncomplicated Appendectomy in Pediatric Patients. Michelle Jeski, Jennifer Stanger, Melissa Schafer. American College of Surgeons Quality & Safety Conference, July 17, 2023. Minneapolis MN.

BUBBLE: Popping Post-Operative Pneumonia in Pediatric Patients. Michelle Jeski, Jennifer Stanger, Gina Lozito. American College of Surgeons Quality & Safety Conference, July 17, 2023. Minneapolis MN.

Nurse Driven Diabetic Ketoacidosis Protocol outside the ICU. Michelle Jeski, Melissa Schafer, Emilie Hess, Meg Anderson, Abeir Mohamed, Alana Guidetti, David W. Hansen, Angela Wratney, Roberto Izquierdo. Academic Pediatric Association 12th Annual Quality Improvement Research Conference, April 28, 2023. Washington DC.

Utilization of Asthma Control Test (ACT) As an Objective and Standardized Tool to Assess Asthma Control; A Quality Improvement Initiative. Simi George, Colleen Feeney, Melissa Schafer, Karyn Reinhardt. Academic Pediatric Association 12th Annual Quality Improvement Research Conference, April 28, 2023. Washington DC.

# **Pediatric Rheumatology and Integrative Medicine**

### **Faculty**

**Caitlin Sgarlat, DO, MSc,** Associate Professor of Pediatrics; Division Director; Department of Pediatrics Wellness Officer; Upstate Information Technology Medical Advisor

William Hannan, MD, Associate Professor of Pediatrics

Anjali Sethi Sura, MD, Assistant Professor of Pediatrics

### Clinical Overview

The Division of Pediatric Rheumatology 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, as well as inflammatory processes associated with COVID-19 infection. 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 our 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 diseases followed by the division.

Integrative care is also offered in our Division of Pediatric Rheumatology and Integrative Medicine. This includes both Integrative Medicine Clinic as well as an Auricular Acupuncture Clinic. Integrative Medicine combines the well-researched conventional medicine with well-researched complementary therapies and makes use of all appropriate therapeutic and lifestyle approaches, healthcare professionals, and disciplines to achieve optimal health and healing plan for patients.

# **Educational Highlights**

Our Rheumatology providers have medical students, residents, and graduate medical fellows rotate with them in both Pediatric Rheumatology and Pediatric Integrative Medicine Clinics. They give formal and impromptu lectures and do teaching on various diseases and treatment management as we see patients, as well as topics regarding integrative therapies and tools. They also give our Pediatric Rheumatology Lecture series to the residents each year consisting of at least 6 formal lectures. They have given multiple lectures at the Pediatric Society of Central New York monthly meetings. Dr. Sgarlat provides wellness lectures and workshops for our residents.

# Research Highlights

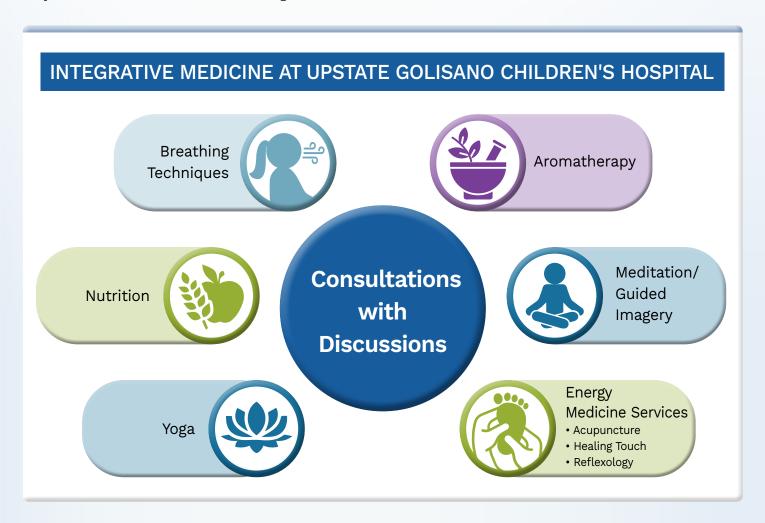
The Pediatric Rheumatology Clinic was accepted in 2012 as a "small site" member of the CARRA, which is a national collaborative research group.

The Pediatric Rheumatology Division has been involved in development of a clinical pathway for Multisystem Inflammatory Syndrome in Children (MIS-C). Their quality improvement project won 2nd prize for a Quality Improvement Poster at SUNY Upstate Pediatric Annual Research Poster/Platform Day in 2022. They also analyzed the cytokine profile of children with MIS-C, culminating in a platform presentation at Pediatric Academic Societies in 2023. Dr. Sura has also co-authored a review paper on childhood systemic lupus, and this has been accepted into an upcoming issue of Pediatrics in Review. Also in the past year, 2 interesting case reports have been published from our division.

### **Division Highlights**

Another important clinical highlight was the creation of the innovative Pediatric Integrative Medicine Clinic. This clinic has also grown substantially since its inception in 2015. Prior to this creation there was not a resource of Integrative Medicine for children in Central New York. In this clinic, Dr. Sgarlat strives to enhance each patient's health and wellbeing, as well as prevent and treat disease. Integrative methods of medicine, in combination with any necessary conventional practices, are offered in a welcoming and stimulating peaceful environment. A comprehensive integrative approach is used. This approach is anchored in lifestyle medicine in combination with nurturing intrinsic healing of the whole patient. Integrative treatment can include any of the following modalities: dietary recommendations (supplements, botanicals), mind/body medicine (guided imagery, yoga, breathing techniques), manual medicine (massage therapy, physical therapy), and whole medicinal systems (Ayurveda, Traditional Chinese Medicine therapies such as acupuncture or acupressure, and aromatherapy).

Upstate Medical University has recently been accepted as a member of the Academic Consortium for Integrative Medicine and Health (ACIMH) in recognition of its Integrative Medicine program. By joining the ACIMH, Upstate becomes the only institution in New York state outside of New York City and one of only 80 in the world to have this designation.



# Other Pediatric Specialties Pediatric Anesthesiology

# **Faculty**

Joseph Resti, MD, Associate Professor of Anesthesiology; Director of Pediatric Anesthesiology Jadwiga Bednarczyk, MD, Assistant Professor of Anesthesiology

Elizabeth Demers Lavelle, MD, Associate Professor of Anesthesiology

Chiagozie Fawole, MD, Assistant Professor of Anesthesiology

Robert Kale, MD, Assistant Professor of Anesthesiology; Director of Pediatric Regional Anesthesia

Venkata Sampathi, MD, Assistant Professor of Anesthesiology

Bettina Smallman, MD, Professor of Anesthesiology and Pediatrics

### Clinical Overview

The Division of Pediatric Anesthesiology in the Department of Anesthesiology continues to experience significant growth. Surgeons from all specialties provide care for children requiring surgery in the Olivia Louise Pietrafesa Center for Children's Surgery (CCS). 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.

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

The Pediatric Anesthesia Division participates actively in anesthesia coverage at the Upstate Ambulatory Surgical Center.

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

# **Pediatric Emergency Medicine**

### **Faculty**

**Tyler Greenfield, DO,** Assistant Professor of Emergency Medicine and Pediatrics; Division Chief, Pediatric Emergency Medicine and Medical Director, Pediatric Emergency Medicine; Associate Medical Director, Pediatric Advanced Life Support

**Leah Bennett, MD, MPH,** Assistant Professor of Emergency Medicine and Pediatrics; Associate Pediatric Clerkship Director

**Vincent Calleo, MD,** Assistant Professor of Emergency Medicine and Pediatrics; Division Chief, Medical Toxicology and Medical Director New York Poison Center; co-Director of Pediatric Emergency Medicine Simulation Training

**Gregory P. Conners, MD, MPH, MBA,** Professor of Pediatrics and Emergency Medicine; Chair Department of Pediatrics

**Kayla Dueland-Kuhn, MD,** Assistant Professor of Emergency Medicine and Pediatrics; Course Director, Acting Internship in Emergency Medicine; TLLT (Teach to Learn Learn to Teach) Course Director; co-Director of Pediatric Emergency Medicine Simulation Training; Director of Emergency Medicine Simulation Training,

**Erin Hanley, MD,** Assistant Professor of Emergency Medicine and Pediatrics; Program Director Pediatric Emergency Medicine Fellowship; Course Director Acting Internship in Pediatric Emergency Medicine,

**Samantha Jones, MD,** Assistant Professor of Emergency Medicine and Pediatrics; Diversity, Equity and Inclusion Officer for Department of Emergency Medicine,

**Phillip Mackewicz, MD,** Assistant Professor of Emergency Medicine and Pediatrics; Medical Director, Golisano Pediatric After Hours.

Rhonda Philopena, MD, Assistant Professor of Emergency Medicine and Pediatrics

**Peter David Sadowitz, MD,** Associate Professor of Emergency Medicine and Pediatrics; Associate Medical Director, Pediatric Advanced Life Support,

**Asalim Thabet, MD,** Associate Professor of Emergency Medicine and Pediatrics; Associate Chief Wellness Officer, Upstate University Hospital; Wellness Officer Department of Emergency Medicine,

**Matthew Thornton, MD,** Associate Professor of Emergency Medicine and Pediatrics; Associate Program Director, Pediatric Emergency Medicine Fellowship; Course Director, Foundations of Reasoning in Medicine; Pediatric Emergency Medicine Quality Officer

### **Advanced Practice Providers**

Elana Weintraub, PA Kelsey Nolan, NP

Fellows (2023-2024)

Amanda Russo, MD Samantha Ribeiro, MD Dane Nickel, MD (Raizada) Akhil Vaid, MD Adrienne Cheng, MD Kathryn Keenan, MD



Waiting room in Pediatric Emergency Department

### Clinical Overview

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 acute complaints affecting infants and children, including major and minor trauma, poisonings, burns, behavioral illnesses, and major medical issues. Care is provided in a 24-bed modern Pediatric Emergency Department setting.

Specialists in Pediatric Emergency Medicine have completed fellowships in Pediatric Emergency Medicine with board certification under the shared management 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 and pharmacist services during our busiest hours.

The Division also operates the Golisano Pediatric After Hours children-only urgent care at the Upstate Community Hospital, under the medical direction of Dr. Phillip Mackewicz.

# **Division Highlights**

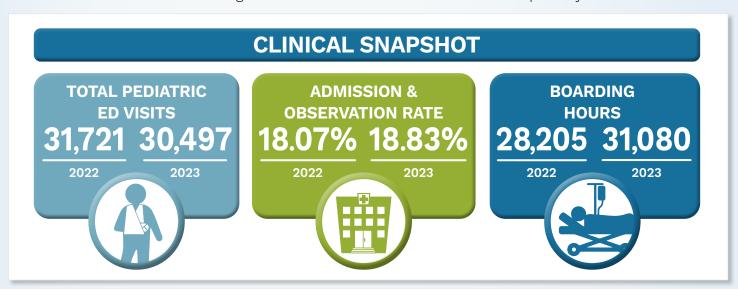
Dr. David Sadowitz received the SUNY Upstate President's Award for Excellence in Teaching.

Dr. Asalim Thabet received the SUNY Upstate Gold Standard Award and the Leonard Tow Humanism in Medicine Award.

# **Educational Highlights**

The well-established Pediatric Emergency Medicine Fellowship training program accepts two new fellows each year, following their residency training in either Pediatrics or Emergency Medicine. Fellows produce original research over the course of their training. Dr. Erin Hanley is director of this successful training program.

The Division of Pediatric Emergency Medicine presents an Annual Pediatric Emergency Medicine Assembly, held in the Winter in Syracuse. Attendees range from 80 to 110 persons encompassing all levels of pediatric emergency care, including pre-hospital care providers, nurse practitioners, nurses, physician assistants, and physicians. This teaching day has been a tradition for over 20 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 Practice, as well as fellows in Pediatric Hospitalist Medicine and Child Abuse. We also maintain an active clinical training environment for these aforementioned specialty trainees.



# **Neonatology: Community Campus**

### **Faculty**

Matthew O'Connor, MD, Division chief, chair of pediatrics (Community Campus)

Jonathan Chai, MD

Jenny Taylor, MD

### Clinical Overview

The division cares for newborns in the nurseries at Upstate Community Campus and St. Joseph's Hospital, as well as cares for more critically ill newborns in the Extra Care Nursery at Community Campus and Level III NICU at St. Joseph's Hospital. At Community Campus, the newborn and Extra Care Nurseries care for about 1,000 babies per year, who are generally born at a gestational age of 34 weeks or greater and a birth weight of 1800g or greater. The Extra Care Nursery at Community Campus is a specialized 6 bed unit that provides care for infants with higher medical needs due to common issues that arise after delivery such as respiratory distress syndrome, meconium aspiration, and hypoglycemia. By increasing management options available at Community, we are able to keep mom and baby to close together to facilitate bonding and improve the delivery experience. The team has recruited a full complement of mid-level providers to provide 24/7 in house coverage for the unit allowing sicker babies to stay at Community and avoid transfer to higher level NICUs and therefore separating mom and baby.

To further support mom and baby, the newborn nursery at Community Campus works closely with nurses and lactation consultants to provide education and support for parents working on exclusive breastfeeding. Additionally, these efforts extend beyond discharge from the nursery, as our outpatient lactation consultants maintain contact with families to ensure that moms are properly supported in their efforts to breastfeed even after going home. Through these efforts the hospital has been awarded the "Baby Friendly" designation by Baby Friendly, USA.

The team also provides outpatient consults as well for mothers who anticipate a longer stay in the newborn nursery or the Extra Care Nursery. Most commonly, the team meets with mothers who are undergoing treatment for opiate abuse and whose babies are at risk for developing neonatal opiate withdrawal syndrome.

# **Educational Highlights**

The division is involved in the training of residents from a number of different programs. We are responsible for training family practice residents from Upstate and St. Joseph's during their newborn nursery rotation and we train Upstate pediatric residents on their NICU rotation at St. Joseph's Hospital. Additionally, we work with medical students from Upstate and Touro College of Osteopathic Medicine during their pediatric clerkships. We also teach mid-level providers who are training in neonatal care.

Dr. O'Connor, along with Dr. Denise Hiser-Ruddick, have taught "The High Risk Infant" course at Syracuse University to masters students in the early childhood special education program. The goal of the course was to enhance the medical knowledge of future educators for them to better understand how neonatal and early childhood medical problems impact learning and behavior and to improve their ability to coordinate care and education plans with medical providers.

Dr. O'Connor has been involved in community outreach and advocacy lectures to discuss Beyfortus and the significant clinical impact it has on keeping babies safer from severe RSV infection.

# **Child Neurology**

### **Faculty**

Ai Sakonju, MD, Assistant Professor of Neurology and Pediatrics, Division Director Arayamparambil C. Anilkumar, MD, Professor of Neurology and Pediatrics Nicole C. Brescia, MD, Assistant Professor of Neurology and Pediatrics Katherine Wojcicki, DO, Assistant Professor of Neurology and Pediatrics Bagwan Moorjani, MD, Assistant Professor of Neurology and Pediatrics Steven Rothman, MD, Professor of Neurology and Pediatrics Lisa Carter, NP Meghan Claver, NP

### Clinical Overview

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

The Child Neurology team 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, programs, 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. Additionally, we have a dedicated neurogenetic counselor for genetic diagnoses in each of the subspecialty clinics and for complex disorders.

# **Subspecialty Clinics**

**Epilepsy:** We have established the Upstate Comprehensive Pediatric Epilepsy Center for Epilepsy monitoring, management of medically refractory epilepsy cases, and surgical management of epilepsy. This includes phase 1 scalp video EEG studies, stereotactic EEG, ambulatory and inpatient long-term monitoring as well as intracranial EEG monitoring. Surgical procedures include lesionectomy, laser ablation, and procedures including Vagus Nerve Stimulation, Responsive Neurostimulation, and Deep Brain Stimulation.

We have an intraventricular and intrathecal infusion clinic for rare genetic disorders including Batten's disease. We have a well-developed ketogenic diet program for refractory and some genetic epilepsies, under the direction of Dr. Nicole Brescia. Dr. Arayamparambil Anilkumar is the Director of the Pediatric Epilepsy program.

**Neuromuscular:** Children with muscular dystrophies and hereditary neuropathies are eligible for care under the auspices of the Muscular Dystrophy Association clinic. Evaluation of new and ongoing pediatric neuromuscular patients can also be done by board 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. Dr. Ai Sakonju is the co-director for the

Muscular Dystrophy Association and leads efforts in gene transfer and infusion therapies for neuromuscular and neurogenetic disorders.

**Neurocutaneous Disorders and Tumors:** Several faculty members see patients with various neurocutaneous syndromes including Tuberous Sclerosis, Neurofibromatosis, and other genetic syndromes. These patients often have seizures, require surveillance imaging for tumors and tumor management. In collaboration with Dr. Gloria Kennedy and her pediatric oncology colleagues, children with brain tumors and other tumors of the central nervous system are cared for with multisubspecialty groups in a monthly neuro-oncology clinic at Golisano Children's Hospital.

**Headaches:** All types of headaches seen in children and teens with both common and refractory headaches are evaluated and treated by several faculty members and NP Carter for timely access and evaluation. Patients may also be seen in concussion clinic in the department of rehabilitation and neurology clinic for comprehensive care. Dr. Sakonju is the principal investigator for several clinical trials for patients with migraines that are actively enrolling.

**Neuro-ophthalmology:** This is a unique clinic with faculty trained to perform the evaluation of visual pathways in infants to adolescents which 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 & Rehabilitation and Developmental Pediatrics subspecialty groups for comprehensive management.



# **Pediatric Neurosurgery**

### **Faculty**

Satish Krishnamurthy MD, MCh, Professor of Neurosurgery
Zulma Tovar-Spinoza MD, Professor of Neurosurgery, Neurology, and Pediatrics

### Clinical Overview

The Pediatric Neurosurgery division provides care for children with structural disorders of the brain and spinal cord. Our patients are from the regional community 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, Trauma Center, Centers for Development, 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, Craniocervical 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]

Upstate Medical University is the only hospital 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 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 service for the parents of individuals identified with central nervous system lesions. That allows correct preparation of the family as well as the discussion of possible immediate surgical procedures.

Faculty provide a surgical solution to patients with craniosynostosis, as well as treating patients with plagiocephaly in our clinic. 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 need to be used, optimization of these devices is utilized. Dr. Satish Krishnamurthy continues his research on using a sensor to determine if a shunt has a normal or dysfunctional flow.

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. Margaret Turk and David Kanter from the Department of Physical Medicine and Rehabilitation and offers a comprehensive plan for the treatment of these patients.

# **CLINICAL SNAPSHOT**





# **Pediatric Ophthalmology**

# **Faculty**

Stephen Merriam, MD, Associate Professor of Ophthalmology and Pediatrics, Section Chief Robert Fechtner, MD, Professor and Chair of Ophthalmology
Katharine Liegel, MD, Assistant Professor of Ophthalmology and Pediatrics
Preethi Ganapathy, MD, Assistant Professor of Ophthalmology
Robert Swan, MD, Associate Professor of Ophthalmology
Samuel Alpert, MD, Associate Professor of Ophthalmology

### Clinical Overview

The division of Pediatric Ophthalmology in the Department of Ophthalmology continues to take care of children with a wide variety of acute and chronic eye conditions. Drs. Stephen Merriam and Katharine Liegel manage most of the pediatric eye care. Drs. Robert Fechtner and Preethi Ganapathy are both fellowship-trained in glaucoma and manage children with glaucoma. Dr. Robert Swan is fellowship trained in uveitis and ocular inflammation and takes care of children with uveitis. Dr. Samuel Alpert helps with both inpatient and outpatient pediatric eye care.

The number of children seen by physicians in the Department of Ophthalmology continues to grow. Patients come from both the local and regional communities. Regional extension is from the Canadian to Pennsylvania borders. Services include routine outpatient examinations, elective surgery, inpatient, and emergency consultation as well as surgical trauma.

The Department of Ophthalmology continues to show a strong commitment to the education of our ophthalmology residents, primary care residents, and medical students. In addition to active participation in patient care, residents undergo a series of didactic lectures and journal clubs.

# **CLINICAL SNAPSHOT**



# **Pediatric Orthopedic Surgery**

# **Faculty**

**Stephen A. Albanese, MD,** Professor of Orthopedic Surgery; Chair of the Department of Orthopedic Surgery, Chief of Pediatric Orthopedics

Danielle A. Katz, MD, Associate Professor of Orthopedic Surgery

Rajin Shahriar, MD, Assistant Professor of Orthopedic Surgery

Allyson Zakrzewski, MD, Assistant Professor of Orthopedic Surgery

### Clinical Overview

Upstate Medical University's pediatric orthopedic service is the region's primary resource for the management of children with musculoskeletal conditions. In addition to the management of traumatic injuries in children in the immediate Syracuse area, the group provides advanced care for complex musculoskeletal disorders for an extensive referral area.

The Pediatric Orthopedic Division consist of three (3) full time surgeons and one (1) part time surgeon. All surgeons in the group have fellowship training in pediatric orthopedics. These four (4) physicians provide the bulk of the pediatric musculoskeletal care for the Upstate system. One or more of these doctors are present in our pediatric orthopedic clinic daily. In addition to seeing new and established patient visits in clinic, these surgeons rotate coverage supporting an add-on program during business hours to handle urgent pediatric musculoskeletal conditions. The Orthopedic Department also has an evening and weekend walk-in urgent care program to manage pediatric orthopedic issues after normal business hours.

In addition to the core group of pediatric orthopedic surgeons, other physicians within the orthopedic department provide additional specialty care for children. Dr. Timothy Damron is trained in orthopedic oncology and is an expert in the management of benign and malignant skeletal conditions. Dr. Brian Harley completed a pediatric hand and upper extremity fellowship and helps with the management of congenital and traumatic conditions of the hand and upper extremity. Dr. William Lavelle completed a spine fellowship and has a special interest in pediatric spinal deformity. The adult trauma surgeons, Drs. Emil Azer, Matthew Sullivan, and Zachary Telgheder help to take care of pediatric orthopedic trauma patients who present through University Hospital's Emergency Department. Lastly, Drs. John Cannizzaro, Matthew Scuderi and Zachary Vredenburgh take care of pediatric sports injuries, such as ACL and other knee reconstructions.

Some of the common issues encountered in pediatric orthopedics for which the group offers expertise include:

- Trauma and fracture management, including fractures that damage the growth plate
- · Surgical management of bone and joint infections
- Limb deformity and deficiency
- Spine disorders, such as scoliosis or kyphosis
- Developmental hip dysplasia and dislocations and other complex disorders of the hip
- Foot deformity
- Neuromuscular disorders and gait disturbances
- · Orthopedic syndromes, such as Down syndrome
- Skeletal dysplasia

# **Educational Highlights**

The Division of Pediatric Orthopedic Surgery is responsible for the education of SUNY Upstate's 25 orthopedic surgery residents. The residency includes dedicated rotations at the PGY-2 and PGY-5 levels. The residents' education experience includes didactic lectures, simulations, case conferences, and twice-monthly indications conferences. The division runs a clinical rotation for interested fourth-year medical students and participates in the education of family medicine residents during their orthopedic surgery rotation.



# **Pediatric Otolaryngology**

### **Faculty**

Amar C. Suryadevara, MD, Professor and Interim Chair
Anthony Mortelliti, MD, Associate Professor; Division Chief of Pediatric Otolaryngology
Sherard Tatum, MD, Professor
Jeffrey Dorrity, MD, Assistant Professor
Ade Obayemi, MD, Assistant Professor

### 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, research and teaching.



# **Pediatric Radiology**

### **Faculty**

Michele Lisi, MD, Associate Professor of Radiology; Interim Chair of Radiology

# Division of Pediatric Radiology:

Saurabh Gupta, MBBS, DNB, DABR, CAQ, Associate Professor of Radiology; Section Head, Anand Majmudar, MD, DABR, Assistant Professor of Radiology Ravikumar Hanumaiah, MD, Assistant Professor of Radiology

### Clinical Overview

Members of the Pediatric Radiology Division provide leadership and expertise in the movement towards safer scanning for children in the ER, outpatient, and inpatient settings. Our team has established guidelines used around the country for safe, low-dose imaging practices. Our radiologists interpret every scan, providing expertise that helps our interdisciplinary teams to make the best decisions about patient care. Our team performs a wide variety of diagnostic tests, from X-ray, CT scans, MRI, Nuclear scans and PET scans, to fluoroscopy and interventional procedures. Noninvasive fetal MRI techniques were introduced in 2017, to extend and support the integrated specialty of maternal fetal medicine. Additional establishment of an advanced MR urography technique, used for detailed evaluation of structure and functional analysis of the urinary tract as an added compliment to integrated urology care. There is continued integration of contrast ultrasound which has further improved diagnostic pediatric integrated care.

Extended multidisciplinary support is provided through tumor board, vascular board, rheumatology rounds, non-accidental trauma committee, endocrine board, M&M, perinatal, peds TPIC, surgical and system meetings to the respective specialties.

# **Educational Highlights**

Our faculty are involved in variety of educational activities. Since beginning of 2017, our division has established the foundation of an ACGME-implemented pediatric radiology educational curriculum and offered rotations towards residents training. Residents are trained to develop skills towards a collaborative approach in multi-disciplinary patient management. The Division provides stewardship of education and research programs in pediatric radiology for radiology residents, medical students, and technical students. Also, responsibilities include evaluation and mentoring of assigned residents. Our faculty also provide several lectures to the radiology residents.

# **CLINICAL SNAPSHOT**

2022 and 2023

5,591 39,393 Computed **Tomography** 

**Radiographs** 

Magnetic Resonance Imaging

Nuclear Medicine incl PET Interventional Radiology **Procedures** 

5.716 319 786 16.523

**Ultrasound** 

We have performed about 155 fetal MRIs since 2017 since its recent introduction, additionally 71 contrast ultrasound procedures since 2019.

# **Pediatric Rehabilitation Medicine**

### **Faculty**

Margaret A. Turk, MD, SUNY Distinguished Service Professor, Physical Medicine & Rehabilitation, Pediatrics, Public Health & Preventive Medicine

David M. Kanter MD, Clinical Assistant Professor of Physical Medicine & Rehabilitation Meghan A. Klawonn, MD, Clinical Assistant Professor of Physical Medicine & Rehabilitation

### Clinical Overview

Pediatric Rehabilitation Medicine (PRM), a subspecialty of Physical Medicine & Rehabilitation, provides diagnostic and management services to improve the health and functional abilities of individuals with a variety of early-onset disability conditions. Disabilities can be temporary or permanent, new onset or longstanding, and typically interfere with the ability to perform developmentally appropriate activities of daily living, mobility, and social engagement. The Upstate Department of Physical Medicine & Rehabilitation provides state-of-the-art rehabilitation and therapy services, with access to new medical and rehabilitation therapies, equipment/devices, technology, and research protocols not otherwise available in the region. We provide services throughout the life continuum for children and youth, young adults, and adults with childhood onset disability. Our services are focused on enhancing function and promoting health and well-being. With the use of home and rehabilitation center-based therapies, assistive devices, a team-based approach, medications, counseling, education, and community resources, our goal is to improve our patients' quality of life. Services are provided in both outpatient and inpatient settings.

### **Outpatient Services:**

In the outpatient setting we see children and adults with childhood onset disabilities and a variety of functional issues stemming from a variety of conditions. Diagnoses and conditions seen include: cerebral palsy, traumatic brain injury, spinal cord injury and dysfunction, spina bifida, non-surgical orthopedic issues, concussion, muscle diseases, nerve disorders, brachial plexus injury, burns, hypermobility and Ehlers Danlos syndrome, developmental delay, torticollis, and plagiocephaly.

### Examples of Outpatient Services provided:

- Overall Assessment: history taking and examinations focused on age appropriate function, with an emphasis on an accessible, comfortable and comforting environment for patients and parents/care providers
- Tone Management: assessment of spasticity and abnormal muscle tone to determine appropriate therapeutic options: focused therapy/rehabilitation services and positioning, oral medications, botulinum toxin injections, consideration for and management of intrathecal baclofen, evaluation for selective dorsal rhizotomy and rehabilitation care following surgery
- Management and Direction of Therapies: close working relationship with physical, occupational, and speech therapists at Upstate and within the community to help determine best interventions to improve function and relieve pain, as well as for full evaluations for mobility devices. Access to state-of-the-art interventions offers a wide variety of services.
- Adult Spina Bifida Clinic with participation in the Spina Bifida Registry program, supported by Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities.
- Bracing Management: evaluation for and prescription of bracing for the arms and/or legs to improve functional abilities; working closely with the orthotists in the community, we ensure each patient is prescribed and receives the bracing that best suits their needs.

- Mobility Management Evaluation for appropriate mobility devices including canes, crutches, walkers, gait trainers, standers, and wheelchairs. Many devices can be trialed.
- Educational Support: working with different schools and systems along with referral to our Rehabilitation Counselor provides possibilities for patients to fully access their educational opportunities.
- Close Collaboration with other pediatric specialties as an example, intrathecal baclofen pump placement and selective dorsal rhizotomy are performed by pediatric neurosurgery. PRM manages the intrathecal pump as well as the needed rehabilitation following selective dorsal rhizotomy.

### **Inpatient Services:**

Inpatient Pediatric Rehabilitation Services often begin with consultation during acute hospitalization at the Upstate Golisano Children's Hospital. Initial assessments by the PRM specialists determines what services will be needed to promote function and return to home. Discharge to home from the acute hospital with outpatient or home services may provide the needed support, however a more comprehensive inpatient rehabilitation program may be the best option. For children who require a broad range of services following some type of life altering event – orthopedic trauma, traumatic brain injury, spinal cord injury, nerve disorders, muscle disorders, amputation, and burns – the Upstate Inpatient Rehabilitation Facility provides the needed services. The Upstate Rehabilitation Program is the only program in the region offering inpatient rehabilitation services to children. For patients who are hospitalized outside of Upstate, referrals are reviewed for possible admission. A dedicated team of professionals including physicians, nursing, physical therapy, occupational therapy, speech therapy, music therapy, child life, social work, case management, therapeutic recreation, and psychology work with patients and their families throughout the admission. Families are an integral part of the team, and play an important role in the rehabilitation process, especially discharge planning. Family members are welcome to stay with their children on the rehabilitation unit. Following discharge, follow-up for continued support and management with the PRM specialist is scheduled.

# **Education Highlights**

The Pediatric Rehabilitation Medicine staff are involved with the education of Upstate medical students and the Physical Medicine & Rehabilitation residents. PRM staff provide clinical educational experiences for medical students rotating through the department, including summer students just having finished their first year of medical school and 3rd and 4th year medical students rotating through their neuroscience clerkship or rehabilitation elective. Didactic presentations are also provided within the preclinical years of medical student education by PRM faculty. The PM&R Student Interest Club also organizes learning and volunteering opportunities with faculty, including staffing for the Special Olympics.

The Upstate PM&R Residency Program is the only upstate New York program that provides a comprehensive in- and outpatient pediatric experience for PM&R residents. To increase educational experiences across all specialty residency programs related to disability education, the Accreditation Council on Graduate Medical Education is developing a Summit on Disability Education for 2025 and Dr. Turk serves on the planning committee for the Summit.

# Research Highlights

Dr. Margaret Turk has been committed to research and education related to the health and wellness of people with disability. With the Disability & Health Research Team, educational tools to integrate

disability into medical school curriculum, along with evaluation tools to assure enduring knowledge (https://www.upstate.edu/pmr/education/toolkit/index.php) have been developed and are continually updated. Recent research interests have been analysis of COVID-19 data related to disparate outcomes for people with disability, particularly people with intellectual and developmental disability, and cause of death differences and disparities for people with intellectual and developmental disabilities. New additions to the research portfolio relate to health promotion education for adults with developmental disabilities related to physical activity and appropriate family planning and obstetric care.

Dr. Turk serves on the National Institute of Neurological Disorders and Stroke (NINDS), National Institute of Child Health and Human Development (NICHD), National Institutes of Health (NIH) Rehabilitation Common Data Elements (CDE) Working Group (Infant Pediatrics Subgroup), to determine recommended and/or required data elements for use in rehabilitation research.

Dr. Margaret Turk is the Co-Editor-in-Chief for *Disability and Health Journal* (Impact Factor 4.5) and has been since its inception in 2008.



# **Pediatric Surgery**

### **Faculty**

**Tamer A. Ahmed, MD,** Assistant Professor of Surgery and Pediatrics; Chief – Division of Pediatric Surgery; Surgeon-in-Chief, Upstate Golisano Children's Hospital; Liaison Surgeon for the Children's Oncology Group;

Michaela C. Kollisch-Singule, MD, Assistant Professor of Surgery and Pediatrics

**Andreas H. Meier, MD, MEd,** Michael and Rissa Ratner Professor of Surgery and Pediatrics; Director, General Surgery Residency Program Director; Vice Chair for Education, Department of Surgery

**Jennifer D. Stanger, MD, MSc,** Assistant Professor of Surgery and Pediatric; Pediatric NSQiP Surgeon Champion

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

### Clinical Staff

Cathleen Caltabiano, RNFA, PPCNP-BC Timothy Freund, PA

### Clinical Overview

The Division of Pediatric Surgery's purpose is to provide outstanding care to children and families in our region. Our providers see children and their families at Upstate Golisano Children's Hospital, the Neonatal Intensive Care Unit at Crouse Hospital, and our outpatient office in the Physician's Office Building. At Upstate Golisano Children's Hospital, our patients comprise the full range of the surgical problems from infancy to early adulthood. We value our close working relationship with the Pediatricians and Pediatric Surgical Subspecialists in the Children's Hospital, leading to a breadth of expertise necessary for the care of the children of Central New York. Our interests are broad and include basic science understanding of lung disease, management of the traumatically injured child, emergency surgical care, surgical management of inflammatory bowel disease, chest wall anomalies and the surgical management of neonatal disease. Our neonatal patients demonstrate a wide range of congenital anomalies requiring surgical management and follow up. Engagement with our medical and surgical colleagues and the community at large has been the hallmark of our division for the past 40 years.

Both inpatient and outpatient procedures are performed at the Pietrafesa Center for Children's Surgery. Our outpatient clinic is in the Physician's Office Building at 725 Irving Avenue.

**Dr. Tamer Ahmed** continues to maintain a busy clinical practice. His area of interest in Pediatric Oncology has led to our inclusion into the Pediatric Surgical Oncology Research Consortium and Surgical liaison of the Children's Oncology Group. Dr. Ahmed has recently assumed the role of Division Chief and Surgeon in Chief of the Upstate Golisano Children's Hospital where he is excited to continue to build on the practice and collaboration with the Children's Hospital and children and Pediatricians throughout the area. Multi-institution clinical collaboration in areas such as biliary atresia, IBD and congenital anomalies are on the horizon. Dr. Ahmed was awarded Upstate's Gold Standard Award in 2022.

The most recent addition to the division, **Dr. Mikki Kollisch**, joined us in the fall of 2020. She is a graduate of Upstate Medical University's General Surgery program and has already made an impact clinically by adding new surgical techniques and patient care protocols. She is particularly interested in research as well as increasing the surgical services provided by the Division and educating families and Pediatricians of the surgical care provided by Upstate Golisano Children's Hospital.

**Dr. Andreas Meier** is the senior surgeon in the Division and continues to contribute his experience in Pediatric Surgery and Upstate. He is active in leadership roles both locally and nationally.

**Dr. Jennifer Stanger** has established a busy clinical practice, where in addition to providing care for all pediatric surgical diagnosis, has established expertise in the management of vascular anomalies. She has been fundamental in the development of a vascular anomalies tumor board at GCH and in improving the care of our patients with these conditions at Upstate. Dr. Stanger's academic commitments have focused on clinical quality improvement. She is the surgeon champion for the National Surgical Quality Improvement Program (NSQiP) Pediatrics program at Upstate, a national quality improvement initiative through the American College of Surgeons. Dr. Stanger is also the Officer for Surgical Quality for Upstate Golisano Children's Hospital in which she chairs the monthly surgical quality improvement meeting and is leading the Children's Hospital's journey towards accreditation as a level 1 Center of Excellence in Pediatric Surgery. In this role there have been several successful quality improvement initiatives for the Children's Hospital, including presenting at national surgical meetings on the success in preventing post op pneumonia and decreasing length of stay for appendectomy patients.

Upstate Golisano Children's Hospital was the first pediatric hospital in New York State to receive accreditation as an American College of Surgeons (ACS) Level 1 Pediatric Trauma center and has maintained this accreditation since 2014. The Pediatric Trauma Program, which serves fourteen counties, is one of the busiest in the state and is the only one in the central New York region. Under the leadership of Medical Director **Dr. Kim Wallenstein** and Program Manager **Jill Hayward**, the Pediatric Trauma Program underwent an ACS reverification site visit in December of 2023, with no deficiencies noted by the reviewers. The Pediatric Trauma Program not only functions as a referral center for the region's critically injured children, but also has robust injury prevention and outreach education programs. Timely transport of injured children to hospitals that maintain Pediatric Readiness is vital to achieve the best outcomes. Dr. Wallenstein was awarded Upstate's Gold Standard Award in 2022.

Cathleen Caltabiano is a certified pediatric primary care nurse practitioner. She has worked in the division of pediatric surgery at Upstate for 23 years, 16 years as a Nurse Practitioner. Ms. Caltabiano's primary focus is outpatient care within the pediatric surgery clinic. She is the daily provider available to see new patients, follow ups, post-operative, and urgent same day visits. Ms. Caltabiano staffs our gastrostomy tube clinic for the practice, seeing all gastrostomy tube patients post placement as well as doing in office changes. She also staffs the pediatric trauma clinic in which she sees all trauma patients post hospital discharge back for routine medical follow up and performs psychological follow up for post-traumatic stress. Ms. Caltabiano has worked with the pediatric psychology department and submitted articles on their collaborative work and are currently validating a post trauma assessment tool. Ms. Caltabiano and Dr. Kathryn Hagen have written two children's books about pediatric trauma experiences for kids awaiting publication. Ms. Caltabiano also works with the Spina Bifida Clinic and Pediatric Urology department to establish and manage bowel management protocols for kids with Spina bifida and neurogenic bowel disorders.

**Tim Freund** is the most recent addition to the Pediatric Surgery team. He is a Physician Assistant who brings his experience from the Crouse NICU. His focus is on inpatient management of Pediatric Surgical inpatients and coordination of care with other Pediatric Services. He is interested in protocol development and bridging the care of infants as they transition from Crouse NICU to Upstate.

# **Educational Highlights**

The Division focuses on teaching third- and fourth-year medical students as well as junior and senior level general surgery residents the management of surgical disease in children. The educational efforts by the Division are valued highly by all learners based on resident and student surveys. **Dr. Andreas Meier** has been the program director for the General Surgery Residency since 2014. In this role, he has participated in multiple research projects on surgical education and co-authored multiple publications. Three of our recent General Surgery Resident graduates have matched into pediatric surgery fellowships. Pediatric Residents will soon be joining the Division in clinic alongside the General Surgery Residents. Dr. Meier is a leader in the development of creating a Resident Evaluation app (SIMPL) which was piloted at Upstate and is now being used nationwide. He is also a member and contributor of the national General Surgery Research Collaborative on Resident Wellbeing.

**Dr. Wallenstein** works with the New York State Department of Health to assist regional hospitals in improving pediatric care through the Always Ready for Children Pediatric Recognition Program. Dr. Wallenstein also provides trauma education as a course director and instructor for both the Advanced Trauma Life Support (ATLS) course and the Rural Trauma Team Development Course (RTTDC). Dr. Wallenstein also a member of the Medical School Admissions Committee.

In 2023, **Dr. Stanger** assumed the role of Assistant Program Director for the General Surgery Residency Program with responsibility for Resident Wellness. She also serves as a facilitator in the first year medical school class Health Systems Science (previously Patients to Populations).

**Dr. Kollisch** has developed didactic curricula for surgery residents and pediatric subspecialties but is especially interested in the role of simulation as medical/surgical training evolves. Her laboratory coordinates surgical simulation sessions for the residents including open and laparoscopic training, and Dr. Kollisch was recently certified as an Advanced Trauma Operative Management (ATOM) director. She is a member of the Curriculum Committee for the College of Medicine and has also taken on a new role as a Transition to Residency Co-Director for the graduating medical students to help facilitate the simulation experiences built into the course.

All the pediatric surgery faculty contribute to didactic medical student and resident teaching within the department of surgery as well as pediatric subspecialties including: Emergency Department, Pediatrics, Radiation Oncology, and Neonatology. Additionally, they participate in simulation sessions to augment pediatric surgical and trauma training through Mock Orals, laparoscopic and open simulation sessions, Advance Trauma Life Support (ATLS), and Advanced Trauma Operative Management (ATOM) courses.

# Research Highlights

**Dr. Kollisch** directs the Critical Care Laboratory and is a member of the Upstate Sepsis Interdisciplinary Research Committee. She has been awarded several NIH and DOD grants studying trauma resuscitation, sepsis and inflammation, and neonatal respiratory distress syndrome. **Dr. Wallenstein** has contributed to clinical pediatric trauma research at national meetings and publications. **Dr. Stanger** has presented at national meetings regarding quality improvement projects. **Dr. Meier** continues to make significant impact in locally and nationally in resident education and wellbeing. **Dr. Ahmed** contributes to the review of pediatric oncology care.

#### **Grants**

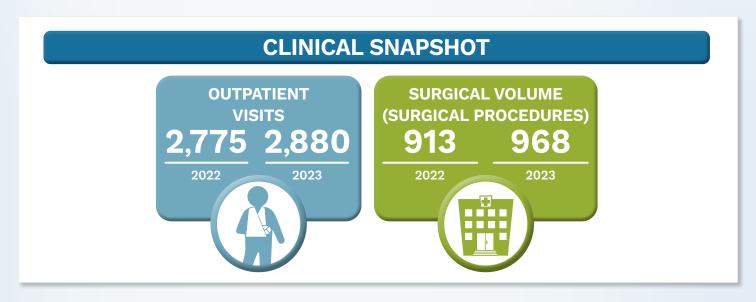
- Pharmacokinetics and Pharmacodynamics of IEX-039.glycine to Treat Lung Injury NIH / National Heart, Lung, and Blood Institute. The objective of this proposal is to determine the pharmacodynamic and pharmacokinetic effects of IEX-039.glycine, a novel treatment for acute respiratory hypoxia, to inform clinically meaningful dose levels for an eventual animal efficacy study. 1-year funding cycle. Co-I. Project Completed 2023.
- Novel Extracorporeal Therapy for the Reversal of Septic Shock and Restoring Hemodynamic Stability
   NIH / National Institute of General Medical Sciences. The goal of this study is to test the efficacy of a bioadsorbent strategy that combines the filtering of endotoxin and cytokines from the circulation in sepsis. 1-year funding cycle. Co-I. Project Completed 2023.
- Aerosolized Chemically Modified Tetracycline Nanoformulation for the Treatment of Acute Respiratory
  Distress Syndrome NIH / National Heart, Lung, and Blood Institute. The objective of this proposal is
  to determine the efficacy of an aerosolized nanoformulation of chemically modified tetracycline-3
  (CMT-3) on mitigating pulmonary inflammation and reducing the incidence and severity of acute
  respiratory distress syndrome in an adult porcine septic injury model. 3-year funding cycle. MPI.
  Project Ongoing.
- Novel Small Molecular Drug Candidate for the Prevention of Bronchopulmonary Dysplasia NIH /
  Eunice Kennedy Shriver Institute of Child Health and Human Development. The goal of this project is
  to determine the role of an aerosolized nanoformulation of chemically modified tetracycline-3 (CMT3) in attenuating pulmonary inflammation in neonatal respiratory distress syndrome in pre-term
  piglets and reducing morbidity and mortality. 1-year funding cycle. PI. Project Ongoing.
- A Multi-Modal Nanotrap to Alleviate ARDS in Traumatic Injuries Department of Defense. The goal of this study is to develop a translational multimodal nanotrap platform approach for controlling infection and inflammation for patients with traumatic injuries to alleviate the morbidity and mortality of subsequent sepsis and acute respiratory distress syndrome. 4-year funding cycle. Co-I. Project Ongoing.
- Novel Therapeutic Approach for Severe ARDS with a Potent Pharmacologic Allosteric Hemoglobin Modifier- NIH / National Heart, Lung, and Blood Institute. The objective of this proposal is to evaluate the impact of IEX-039.glycine, an allosteric hemoglobin modifier that can favorably shift the oxyhemoglobin curve, on peripheral oxygenation in a porcine model of acute respiratory distress syndrome. 3-year funding cycle. Site PI. Project Ongoing.
- Enhanced Combat Tourniquet with Modular Wound Infection Prevention Capabilities Department of Defense. The goal of the proposed project is to determine the effect of an intramuscular antibiotic on wound infection in a contaminated crushed laceration extremity injury model with tourniquet application. 3-year funding cycle. Site PI. Project Ongoing.
- Shape Memory Polymer Foams for Hemorrhage Control in Traumatic Wounds Department of Defense. The objective of this proposal is to characterize shape memory polymer (SMP) foams in traumatic wounds to determine their efficacy in hemorrhage control and to provide pre-clinical data to support submission to the Food and Drug Administration for consideration for clinical use. 3-year funding cycle. Site PI. Project Ongoing.
- Shape Memory Polymer Foams for Hemorrhage Control in Traumatic Wounds NIH / National Heart, Lung, and Blood Institute. The objective of this proposal is to characterize shape memory polymer

(SMP) foams in traumatic wounds to determine their efficacy in hemorrhage control and to provide pre-clinical data to support submission to the Food and Drug Administration for consideration for clinical use. 5-year funding cycle. MPI. Project Ongoing.

• Preserving Epithelial Barrier Integrity in Ventilator-Induced Lung Injury – NIH / National Heart, Lung, and Blood Institute. The goal of this research is to elucidate the balance between pulmonary epithelial injury and repair in ventilator induced lung injury by interrogating the biophysical mechanisms of injury. 5-year funding cycle. MPI. Project start in 2024.

### **Presentations**

- Wallenstein KG. Presenter on panel on "Papers That Should Change Your Practice: Current Trauma Literature: A year in Review of Pediatric Trauma." Pediatric Trauma Society Annual Meeting, New Orleans, LA, November 2023.
- Wallenstein KG. Small Chests, Big Problems: Managing Pediatric Thoracic Trauma. Presented at the 2023 North Country Pediatric Emergency Care Conference St. Lawrence University, Canton NY June 10. 2023.
- Wallenstein KG. Presenter on panel on "Papers That Should Change Your Practice: Current Trauma Literature: A year in Review of Pediatric Trauma." Pediatric Trauma Society Annual Meeting, Portland, OR, November 2022.
- Lamoshi A, Lay R, Wakeman D, Edwards M, Wallenstein K, Fabiano T, Singh, Z, Zipkin J, Park S, Yu J, Chess M, Kaveh V. Validation of the Predictive Model for Operative Intervention After Blunt Abdominal Trauma in Children With Equivocal CT Findings: A Multi-Institutional Study. Presented at the Pediatric Trauma Society Annual Meeting, Nov 2022.
- Wallenstein KG. Presenter on panel on "Pediatric Abdominal Trauma From Farm to Table." Pediatric Trauma Society webinar, June 9, 2022.
- Stanger J. "Reducing Length of Stay Following Uncomplicated Appendectomy in Pediatric Patients." ACS Quality and Safety Conference July 10, 2023.



# **CHEST WALL PROGRAM**



# **Multidisciplinary Care**

- Cardiology, Pulmonology, Radiology, Surgery
- Addition of Physical Therapy and Psychology

### **Non-Operative Management**

• First regional center to offer the vacuum bell

# **Operative Management**

- Transition to titanium bars
  - Eliminates need for nickel allergy testing
- Use of cryotherapy for pain management
  - Reduced hospital stay from 6 to 3 days
  - Significant decrease in narcotic requirements

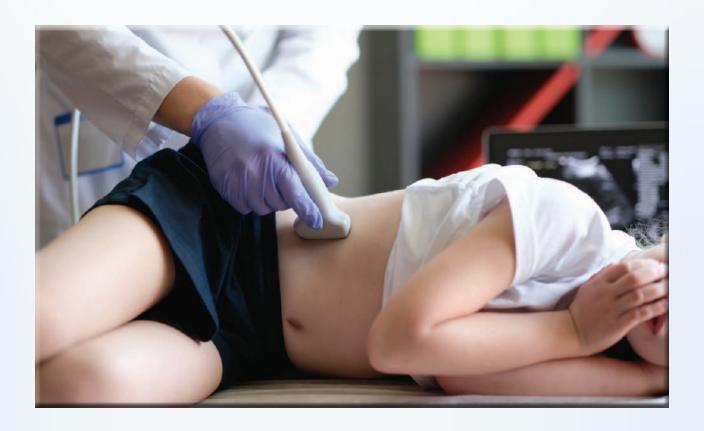
# **Pediatric Urology**

### **Faculty & Providers**

Matthew D. Mason, MD, FAAP, Assistant Professor and Chief of Pediatric Urology Anthony J. Tracey, MD, MPH, FACS, FAAP, Assistant Professor of Urology, Pediatric Urology Jeffrey A. Villanueva, MD, Assistant Professor of Urology, Pediatric Urology Rebecca Schroeder, MSN, PNP Wendy Broton, MSN, FNP

### Clinical Overview

The Division of Pediatric Urology has the only Board-Certified Pediatric Urologists in Central New York. Our providers utilize the most recent diagnostic and therapeutic technology, including minimally invasive surgeries and enhanced-recovery protocols for quicker recoveries. A strong focus on family centered care is an important element in 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**

The clinical and educational missions of the Department of Pediatrics are enhanced by 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 Associates of CNY**

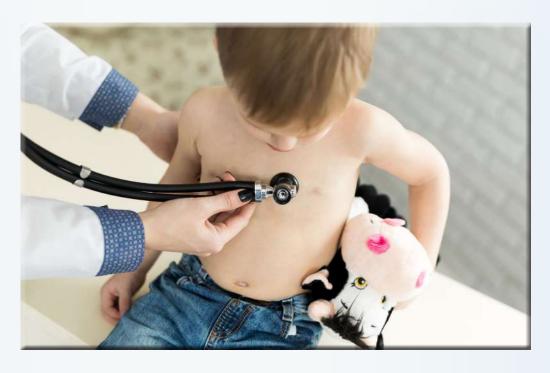
# **Faculty**

Matthew J. Egan, MD, Clinical Associate Professor of Pediatrics; Managing Partner Nader H. Atallah-Yunes, MD, Clinical Associate Professor of Pediatrics Craig J. Byrum, MD, Clinical Professor of Pediatrics and Medicine Christopher Prendergast, MD, Clinical Assistant Professor of Pediatrics Frank C. Smith, MD, Clinical Professor of Pediatrics Lauren Tague, MD, Clinical Assistant Professor of Pediatrics

### Clinical Overview

The Division of Pediatric Cardiology provides the full spectrum of non-invasive and interventional diagnostic and therapeutic services, including hemodynamic and interventional cardiac catheterization, for children and adults with congenital heart disease without age limit. This activity occurs in the neonatal intensive care unit and cardiac catheterization lab at Crouse Hospital, as well as in the inpatient and critical care units at University Hospital. The group has a busy fetal echocardiography practice providing both outpatient and inpatient services while working with the regional perinatal program. They also provide specialized hyperlipidemia management for the region. This team staffs a number of regional satellite clinics and provides pediatric cardiology support to numerous hospitals in the referral region. They operate as part of a regional consortium with the pediatric cardiology and pediatric cardiovascular surgery groups at the University of Rochester and at Oishei Children's Hospital of Buffalo, including Dr. Glenn Leonard from pediatric interventional cardiology.

The Division provides popular clinical rotations that attract pediatric trainees annually.



# Neonatology: Crouse Hospital

# **Faculty**

Steven Gross, MD, Clinical Professor of Pediatrics, Director Newborn Medicine Ellen Bifano, MD, Clinical Professor of Pediatrics
Susana Arriagada, MD, Clinical Associate Professor of Pediatrics
Bonnie Marr, MD, Clinical Assistant Professor of Pediatrics
Beverly Roy, MD, Clinical Assistant Professor of Pediatrics
Boura'a Bou Aram, MD, Clinical Assistant Professor of Pediatrics
Melissa Nelson, MD, Clinical Assistant Professor of Pediatrics
Swati Murthy, MD, Clinical Assistant Professor of Pediatrics
Sarah Mardanlou, MD, Clinical Assistant Professor of Pediatrics

### Clinical Overview

Nine board certified neonatologists direct care in the 57 bed Walter R.G. Baker Neonatal Intensive Care Unit (NICU) at Crouse Hospital. This unit serves as the CNY Regional Perinatal Center (RPC) providing quaternary care for a 16 county region in Central New York. The neonatologists head a team of dedicated mid-levels (8 NNPs and 5 PAs), NICU nurses, respiratory therapists, and occupational therapists. Surgical and cardiac patients are co-managed with these specialists. The NICU has access to a full complement of pediatric sub-specialists.

Under the leadership of Dr. Boura'a Bou Aram, the division is also responsible for the management of the Regional Neonatal Transport System. We provide physicians, mid-levels, specialized nurses, and respiratory therapists to stabilize and transport critically ill neonates for all of our 16 referral hospitals.

The neonatologists also care for approximately 1500 infants annually in the normal newborn nursery. We provide policy and education as well as direct patient care for pediatricians attending the well-baby nurseries.

Dr. Bonnie Marr spearheads the Extracorporeal Membrane Oxygenation Program which maintained an excellent track record of minimizing complications and exceeding national average survival rates for children requiring this support for a large range of conditions and illnesses.

Dr. Swati Murthy is the director of the Neonatal Follow-up Program. This is a multi-disciplinary clinic that provides comprehensive neurodevelopmental follow up to high risk NICU graduates. We evaluate approximately 300 extremely low birth weight, cardiac, surgical, and other graduates annually.

The Division of Neonatology is responsible for universal hearing screening in hospital and outpatient follow-up for infants whose fail screening to ensure all babies delivered at Crouse Hospital are identified with hearing loss early and are referred for optimal outcome.

# **Educational Highlights**

The Division of Neonatology participates in the education of pediatric residents for the Department of Pediatrics (Drs. Boura'a Bou Aram and Melissa Nelson are part of the residency committee) as well as the Department of OB/GYN. We also provide education to neonatal nurse practitioners and physician assistants from numerous programs. Dr. Nelson has developed and oversees the Neonatology Acting Internship Course for SUNY medical students. Dr. Nelson co-teaches a medical ethics course for our first-year medical students.

Dr. Susana Arriagada, co-director of Perinatal Outreach, along with our maternal fetal medicine colleagues, visit each of our referral hospitals yearly, providing education to the physicians and nurses at their sites. We also host a yearly symposium attended by nurses, physicians, and others from the region. Our symposium was established in 1973 and is the longest continuously running prenatal conference in the U.S.

# Research Highlights

The neonatologists are actively involved in clinical research. We were the sole RPC funded to establish and implement the NY State data base used throughout the state of New York. We were one of 8 RPCs funded by NY State to establish the universal Hearing Screening Program for NY State. This program is now used throughout all birthing hospitals in New York. We participate in the Vermont Oxford Network and have utilized the data to institute QI initiatives such as intraventricular hemorrhage prevention bundle.

The senior neonatologists (Drs. Steven Gross and Ellen Bifano) are members of the Society of Pediatric Research and have chaired sessions at the annual PAS meetings. They both regularly review for multiple journals including the New England Journal of Medicine, Pediatrics, and Journal of Pediatrics. Research interests in the division center around infant nutrition, management of chronic lung disease, and developmental follow-up. Recent peer review publications for the division are cited below:

Murthy S, Parker PR, and Gross SJ. Low rate of necrotizing enterocolitis in extremely low birth weight infants using a hospital based preterm milk bank. J. Perinatol 39:108-14, 2019

Marr BL, Mettelman B, Bode MM and Gross SJ. Randomized trial of 42 day vs 9 day courses of dexamethasone for the treatment of evolving bronchiopulmonary dysplasia (BPD) in extremely preterm infants. J Pediatr 211:20-6, 2019

Nelson MU, Shaw J, Gross SJ. Randomized Placebo-Controlled Trial of Topical Mupirocin to Reduce Staphylococcus aureus Colonization in Infants in the Neonatal Intensive Care Unit. J Pediatr 2021 Sep; 236:70-77.



# **Awards, Recognition, and Honors**

### Olamide Ajagbe, MD

Upstate Gold Standard Award, March 2024

### Janice Bach, MD

Dean's Exceptional Teaching Recognition, 2022

Dean's Exceptional Teaching Recognition, 2023

### Winter Berry, DO

Dean's Exceptional Teaching Recognition, 2023

### Steven Blatt, MD

American Academy of Pediatrics Special Achievement Award, 2022

### Joshua Bonville, MD

Dean's Exceptional Moments in Teaching Recognition, 2022

Dean's Exceptional Teaching Recognition, 2023

#### Ann S. Botash, MD

Awarded the Certificate of Special Recognition for Contributions in Pediatric Education by the American Academy of Pediatrics, July 2022

### Amy Caruso Brown, MD

Dean's Exceptional Moments in Teaching Recognition, March 2024

### Michelle Chai, MD

Dean's Exceptional Teaching Recognition, 2022

### Gregory Conners, MD, MPH, MBA

Dean's Exceptional Teaching Recognition, 2022

#### Andrew Craig, PhD

American Psychological Association Joseph V. Brady Significant Research Contribution Award, 2022

#### Ian Gallegos Dargon, MD

Dean's Exceptional Teaching Recognition, 2022

#### Christopher Delaney, MD

Dean's Exceptional Teaching Recognition, 2022

#### Robert Dracker, MD

Dean's Exceptional Teaching Recognition, 2022

#### JP Ervoes, MD

Dean's Exceptional Teaching Recognition, 2022

#### William Hannan, MD

Upstate Gold Standard Award, 2022

#### Aamer Imdad, MD, MPH

Upstate President's Award for Excellence in Clinical or Translational Research by a Young Investigator, 2022

#### Manish Kumar, MD

Dean's Exceptional Teaching Recognition, 2022

#### Robert Roger Lebel, MD, MS, MA, M Div, STM

Dean's Exceptional Teaching Recognition, 2023

Upstate Gold Standard Award, March 2024

### Jennifer Myszewski, DO, PhD

Upstate Gold Standard Award, 2022

### Melissa Nelson, MD

Dean's Exceptional Teaching Recognition, 2022

### Joseph Nimeh, MD

Dean's Exceptional Teaching Recognition, 2022

### Jennifer A. Nead, MD

Dean's Exceptional Teaching Recognition, 2023

#### Andrew Osten, MD

Member, Upstate President's Award-winning Non-Clinical Team of the Year

### Alicia Pekarsky, MD

Upstate Gold Standard Award, March 2023

Delivered the keynote presentation at the New York State Chapter of the International Association of Forensic Nurses Conference, May 2023.

### Joan Pellegrino, MD

Dean's Exceptional Teaching Recognition, 2022

### Henry Roane, PhD

American Psychological Association Azrin award for contributions in Applied Behavior Analysis, 2022

### Melissa Schafer, MD

Dean's Exceptional Teaching Recognition, 2022

#### Andrea Shaw, MD

The New American Forum Community Service Award, 2022

#### Jana Shaw, MD, MPH, MS

Dean's Exceptional Teaching Recognition, 2023

### Jaclyn Sisskind, MD

Dean's Exceptional Teaching Recognition, 2022

#### Holly Stacy, MD

Excellence in Teaching Award, 2023

### Karen Teelin, MD, MSED

Upstate Gold Standard Award, 2022

Avers-Meguid Endowed Award for Excellence in Shared Governance, 2023

Named an Onondaga County Woman of Distinction, 2023

#### Stuart Trust, DO

Excellence in Teaching Award, 2023

Heather Wasik, MD, MHS

Upstate Gold Standard Award, 2022

### Angela Wratney, MD, MHSc

Dean's Exceptional Teaching Recognition, 2023

# **Memberships in Honorary Societies**

### **American Pediatric Society**

Ann S. Botash, MD, Active Member

Gregory P. Conners, MD, MPH, MBA, Active Member

Joseph B. Domachowske, MD, Active Member

Leonard B. Weiner, MD, Active Member

Thomas R. Welch, MD, Active Member

### Ray E. Helfer Society

Ann S. Botash, MD, Active Member Alicia Pekarsky, MD, Active Member Heather Ross, MD, Scholar Member

# **Society for Pediatric Research**

Ellen Bifano, MD, Active Member

Ann S. Botash, MD, Senior Member

Amy Caruso Brown, MD, MD, MSc, MSCS, Active Member

Andrew Craig, PhD, Active Member

Joseph B. Domachowske, MD, Active Member

Steven Gross, MD, Active Member

Henry Roane, PhD, Active Member

Thomas R. Welch, MD, Emeritus Member

# **SUNY Distinguished Professors**

Ann S. Botash, MD, SUNY Distinguished Teaching Professor Leonard B. Weiner, MD, SUNY Distinguished Service Professor

#### **Endowed Chairs**

Melanie Comito, MD, Paige Yeomans Arnold Endowed Professor in Pediatric Oncology Gregory P. Conners, MD, MPH, MBA, Stanley A. Arnold Professor of Pediatrics Nienke Dosa, MD, MPH, Upstate Foundation Professor of Child Health Policy Henry S. Roane, PhD, The Gregory S. Liptak Professor of Child Development

# **Editorial and Professional Society Leadership**

### Winter Berry, DO

Past President of American Academy of Pediatrics New York Chapter 1

### Steven Blatt, MD

Co-President, Pediatric Society of Central New York

### Gregory P. Conners, MD, MPH, MBA

Editorial Board, Pediatric Emergency Care

Chair, American Academy of Pediatrics Committee on Pediatric Emergency Medicine

### Elizabeth Nelsen, MD

MedEd Portal Faculty Mentor, AAMC, 2023

Inaugural Chair, Program Director's Section Executive Committee, Association of Pediatric Program Directors, 2022-2023

### Alicia Pekarsky, MD

Guest Editor for a special edition of *The Quarterly*, a journal of reviews for recent peer-reviewed medical literature on the diagnosis, prevention and treatment of child abuse and neglect. The special edition was published in February 2023.

Editor Board, Merck Manuals

### Henry S. Roane, PhD

Board of Editors, Journal of Pediatrics

Editor-in-Chief, Behavioral Development Bulletin

Associate Editor, Journal of Developmental and Physical Disabilities

Review Panel Membership, National Institutes of Health – Child Psychopathology and Developmental Disabilities Study Section,

Editor-in-Chief, Behavioral Development Bulletin

Associate Editor, Journal of Developmental and Physical Disabilities

Board of Directors, Association of Professional Behavior Analysts

### Heather Ross, MD

Review of special edition of *The Quarterly* 

### Margaret A. Turk, MD

Co-Editor-in-Chief, Disability and Health Journal

Editorial Board, Pediatric Rehabilitation Medicine Journal

### Thomas R. Welch, MD

Associate Editor, Journal of Pediatrics

# **Publications**

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