

**Pediatrics** 



# DEPARTMENT OF PEDIATRICS 2024 ANNUAL REPORT

# Harnessing Scientific Discovery to Advance Children's Health



# **Pediatrics**

# Mission

Accomplishing extraordinary things every day for children of all ages.

# Vision

Be a world-renowned leader, ensuring that children achieve optimum health and well-being through inclusive excellence in clinical care, teaching and mentoring, research, advocacy, social justice, and community engagement.



# Message from the Chair

The optimal health and well-being of children are the top priorities of the Department of Pediatrics at the University of Miami Miller School of Medicine (MSOM). Addressing these priorities is possible only through the enormous contributions by our tremendous team of physicians, scientists, nurses, advanced practice providers, social workers, pharmacists, clerks, administrative staff, and other healthcare professionals, as well as our critical partnership with Holtz Children's Hospital in the Jackson Health System.



The MSOM Department of Pediatrics is a regional, state, national,

and global leader in pediatrics. We are the only provider of pediatric care in South Florida affiliated with a major school of medicine ranked in the top three in the state of Florida. The Department also by far is the number one recipient of National Institutes of Health (NIH) funding for pediatric research in all of South Florida, and is ranked number two in NIH pediatric funding in the state of Florida. The MSOM Batchelor Research Institute additionally is the largest research institute devoted to child-health research in South Florida. The Department's world-class researchers include internationally acclaimed experts on whole-genome sequencing in newborns, rare pediatric diseases, pediatric sleep disorders, pediatric infectious diseases, food allergies in children, and child-health policy and advocacy, including pioneering parent-mentor interventions that resulted in federal legislation. Our NICU is the largest in the entire state of Florida, and one of the largest in the US.

The 2024 Annual Report features a plethora of exciting achievements and stories, including national awards and recognition, multiple publications and prestigious NIH grants, rises in our patient volumes, a spotlight on physician superheroes, and inspiring patient and family stories.

The approach of the Department of Pediatrics to children's health and well-being is best embodied by what President John F. Kennedy stated: "Children are the world's most valuable resource and its best hope for the future."

Please enjoy and be inspired by the 2024 Annual Report of the Department of Pediatrics.

Kind regards,

glenn flores

Glenn Flores, M.D., FAAP

Chair of Pediatrics Senior Associate Dean of Child Health Professor of Pediatrics, Psychiatry and Behavioral Health Sciences, and Public Health Sciences George E. Batchelor Endowed Chair in Child Health Director, Batchelor Children's Research Institute

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# Our Department

The Department of Pediatrics at the University of Miami Miller School of Medicine, along with our hospital partner, Holtz Children's Hospital at the UM/Jackson Memorial Medical Campus, is recognized as one of the world's top children's clinical-care programs.

Ranging from one of the largest pediatric dialysis units in the nation to a transplant program that inspires advances around the globe, our doctors and care teams never stop pursuing innovative solutions for a growing number of conditions and challenges.

The following pages reflect pioneering advancements made by our health care professionals and development of new treatments to help children of all ages – demonstrating that there's no limit to the depths we'll go to preserve, improve, and save lives.

# SECTION OF Adolescent Medicine

The Section of Adolescent Medicine continues to provide graduate and undergraduate medical education, specialty clinical services, community outreach activities, and research opportunities for health care trainees and youth patients.

We experienced 669 outpatient volume and 37 inpatient visits.



## SECTION CHIEF

Lawrence B. Friedman, M.D. Professor of Clinical Pediatrics Director of Educational and Research Activities

FACULTY Catherine Silva, M.D. Assistant Professor of Clinical Pediatrics



# Pediatric Allergy and Immunology

Our Division of Pediatric Allergy and Immunology is nationally recognized for expertise in primary immune deficiency, disorders of immune dysfunction, transplant immunology, and all aspects of allergy, including food allergies, allergic rhinitis, and asthma. The Division provides clinical care for the UM/Holtz campus, including Sylvester Cancer Center, and the University of Miami Hospital.

We experienced 2,812 outpatient volume and 88 inpatient consults in 2024.

The Division is a referral center for the Florida Department of Health's newborn screening program, and the SCID Referral Program. It is a Jeffrey Modell Diagnostic and Research Center for Primary Immune Deficiency, and receives referrals from the Southeast United States and Central and South America. The University of Miami Department of Pediatrics is proud to have been awarded designation as an NIH Primary Immune Deficiency Transplant Consortium Center (PIDTC). Over the last several years, the Center has gained prominence in food allergy treatment and research, and received national recognition as a Food Allergy Center of Excellence for FARE (Food Allergy Research Education). The Pediatric Adult Allergy and Immunology fellowship at the University of Miami and Jackson Health System was approved by the ACGME in 2024 and will welcome its first fellow in 2025. It is a two-year training program with one fellow per year with outstanding training in all allergic and immunological diseases. The program is for outpatient clinics in addition to outpatient clinics at the Miami VA. Fellows perform inpatient pediatric consults at Jackson's Holtz Children's Hospital and inpatient adult consults at Miami VA Healthcare System with their Division of Allergy and Immunology. Fellows will have robust allergen immunotherapy practice and care for many local patients with allergic rhinitis and asthma. In particular, the fellows will also be well versed in complex food allergies and primary immunodeficiency.

Fellows will have experience with clinical trials for emerging food allergy treatments and diagnosing new inborn errors of immunity and dysregulation. Fellows will partner with immunologists at the University of Miami for cuttingedge science research collaborations and basic science laboratory experience. The faculty for the fellowship program is committed to trainee education. Fellows will be well prepared for their board certification exam, receive formal training in allergy and immunology procedures, and be ready for academic or private practice caring for pediatric and adult patients with allergic or immunologic disease. Fellows will have opportunities to work with residents and medical students, and collaborate with other divisions and departments for educational endeavors.



## **DIVISION CHIEF**

Gary Kleiner, M.D., Ph.D.

Associate Professor of Clinical Pediatrics Director of the Jeffrey Modell Center at the University of Miami Director of NIH PIDTC Center Director of the FARE Center

# FACULTY

Melissa Gans, M.D.

Assistant Professor of Clinical Pediatrics Director of Allergy and Immunology Elective Director of Medical Student Immunology Integrative Selective Director of Allergy and Immunology Resident Pathway Immunologist for UM Interdisciplinary Mitochondrial Genetics Clinic



# Pediatric Cardiology

The Division of Pediatric Cardiology is a core component of the UHealth Jackson Children's Care Congenital Heart Center, whose faculty includes physicians trained to provide general and specialty cardiovascular care to patients of all ages. Our pediatric cardiologists diagnose and treat virtually every type of congenital or acquired cardiac or vascular disorder that occurs in fetal life, the newborn period, and through childhood into adulthood. The Congenital Heart Center operates under an integrated, multidisciplinary care-team model in which we bring together the highest-level expertise in cardiology, cardiovascular surgery, cardiac anesthesia, cardiac critical care, neonatology, maternal-fetal medicine, nursing, and other specialties to provide the most advanced care for patients and families.

We experienced 3,363 outpatient volume and 3,756 inpatient admissions in 2024.

# **Clinical Services**

- General pediatric cardiology
- · Echocardiography and advanced cardiac imaging
- Fetal cardiology
- Diagnostic and interventional catheterization
- Electrophysiology testing, treatment, and pacemaker management
- Heart failure management, heart transplantation, and short- and long-term mechanical
- Circulatory assist (e.g., ECMO, VADs)
- Cardiovascular critical care for all cardiac and non-cardiac conditions
- In-patients with cardiac disease with a dedicated cardiac ICU and integrated multidisciplinary care team structure
- Adult congenital cardiology



## INTERIM IVISION CHIEF

Sethuraman Swaminathan, M.D. Professor of Clinical Pediatrics Pediatric Cardiology Fellowship Training Program Director Specialty: General and fetal cardiology/imaging/ACHD

# FACULTY

### Jaime Alkon, M.D.

Assistant Professor of Clinical Pediatrics Medical Director, Echocardiography Laboratory Specialty: General and fetal cardiology/imaging

#### Juanita Hunter, M.D.

Assistant Professor of Clinical Pediatrics Pediatric Cardiology Fellowship Training Program Associate Director Medical Director, Outpatient Pediatric Cardiology Specialty: General and fetal cardiology/imaging

#### Paolo Rusconi, M.D.

Professor of Clinical Pediatrics Medical Director, Pediatric Heart Failure and Heart Transplant Specialty: Heart failure/transplant

### Satinder (Neena) Sandhu, M.D.

Professor of Clinical Pediatrics Director, Pediatric Cardiac Catheterization Laboratory Director, Adult Congenital Heart Disease Program Specialty: General cardiology/interventional cardiology/ACHD

### lleana Torres-Burgos, M.D.

Assistant Professor of Clinical Pediatrics

### Nai Yu Tang, M.D.

Assistant Professor of Clinical Pediatrics Medical Director, International Relations and Medical Outreach Specialty: Cardiac intensive care

#### **Philip Zegelbone, M.D.** Assistant Professor of Clinical Pediatrics

## ASSOCIATED FACULTY: CARDIOVASCULAR SURGERY

#### Leonardo A. Mulinari, M.D., Ph.D.

Associate Professor of Surgery Chief, Pediatric Cardiac Surgery Co-Director, UHealth Jackson Children's Care Congenital Heart Center Specialty: Pediatric and adult congenital cardiac Surgery/ VAD and heart transplantation

#### Sandeep Sainathan, MBBS

Assistant Professor of Surgery Specialty: Pediatric and adult congenital cardiac Surgery/VAD and heart transplantation

# RADIOLOGY

**Christopher Schettino, M.D.** Assistant Professor of Radiology Specialty: Congenital cardiac and thoracic imaging

# Pediatric Clinical Psychology

The 17 faculty, three staff psychologists, and one associate scientist of the clinical psychology division are engaged in providing clinical services and conducting research in the community and in primary care and subspecialty pediatric clinics; training graduate psychology students, interns, and postdoctoral fellows; and advocating for children and their families in multiple ways. Clinical programs at the Mailman Center for Child Development include the Psychological Assessment Service, the Interdisciplinary Evaluation Service, and the Pediatric Psychology Clinic. There are a number of other clinical programs funded by the Children's Trust and HRSA that serve children and their families in their communities. Psychologists work on interdisciplinary teams in collaboration with the Division of Pediatric Endocrinology, Pulmonology, Pediatric Hematology/Oncology, Allergy Immunology, Infectious Diseases, and Primary Care (via the Behavioral Health Hub, Healthy Steps, and the Pediatric Mobile Clinic). In addition, psychologists work in the Early Steps Program, Child Protection Team, and School Health Initiative. The faculty are engaged in a number of externally funded research projects addressing obesity prevention, health disparities, behavioral interventions for chronic disease management, parenting interventions for child behavioral problems, and interventions to promote child development. The faculty are PIs of about 15 externally funded projects that totaled over \$10 million in direct costs during 2024. Our training program typically includes 25 individuals per training year, including graduate practicum students, interns, and postdoctoral fellows.



## **DIVISION CHIEF**

Alan Delamater, Ph.D., ABPP Professor of Pediatrics and Psychology (tenured), (Director, Mailman Center Research)



## FACULTY

**Daniel Armstrong, Ph.D., ABPP** Professor of Pediatrics and Psychology Director of Mailman Center

### Michelle Berkovits, Ph.D.

Associate Professor of Clinical Pediatrics Director, Early Steps; Lead for the Neurodevelopmental Intervention Interprofessional Collaborative at Mailman Center

#### Jennifer Coto, Ph.D. Assistant Professor of Clinical Pediatrics

Anai Cuadra, Ph.D.

Assistant Professor of Clinical Pediatrics

**Susan Dandes, Ph.D.** Associate Professor of Clinical Pediatrics Clinical Director, Child Protection Team

### Eileen Davis, Ph.D.

Assistant Professor of Clinical Pediatrics Director, Mailman Center Clinical Services

### Dainelys Garcia, Ph.D.

Associate Professor of Clinical Pediatrics Director of Innovation and Community Engagement for Mailman

### Jason Jent, Ph.D.

Director of Psychology Training Associate Professor of Clinical Pediatrics Assistant Director of the Mailman Center

**Luiza Mali, Ph.D.** Assistant Professor of Clinical Pediatrics

**Elana Mansoor, Psy.D.** Assistant Professor of Clinical Pediatrics Director of Mailman Center Training

**Connie Morrow, Ph.D.** Research Associate Professor

**Ruby Natale, Ph.D., Psy.D.** Professor of Clinical Pediatrics Lead for the Community Wellness Interprofessional Collaborative at Mailman Center

# Pediatric Clinical Psychology

**Paula Perez, Psy.D.** Assistant Professor of Clinical Pediatrics

**Elizabeth Pulgaron, Ph.D.** Associate Professor of Clinical Pediatrics Director of Mental Health Services for the School Health Initiative Lead for Promoting Behavioral Health Interprofessional Collaborative at Mailman Center

**Maite Schenker, Ph.D.** Assistant Professor of Clinical Pediatrics Associate Director of Psychology Training

Allison Weinstein, Ph.D. Assistant Professor of Clinical Pediatrics

# STAFF PSYCHOLOGISTS:

Raquel Concepcion, Ph.D. Tara Kenworthy LaMarca, Ph.D. Abigail Peskin, Ph.D.

## ASSOCIATE SCIENTIST:

William Andrew Rothenberg, Ph.D.

## UM PSYCHOLOGISTS WITH SECONDARY APPOINTMENTS IN PEDIATRICS:

**Michael Alessandri, Ph.D.** Clinical Professor of Psychology and Pediatrics

Annette La Greca, Ph.D. Professor of Psychology and Pediatrics

**Ivette Cejas, Ph.D.** Associate Professor of Otolaryngology and Pediatrics

**Meaghan Parlade, Ph.D.** Assistant Professor of Clinical Psychology and Pediatrics

# Clinical Services and Program Volumes

**Psychological Assessment Service.** Approximately 60 children are seen per year for comprehensive psychological assessment. Two faculty members participate in this clinic (Cuadra, Perez).

**Interdisciplinary Developmental Evaluation Service** (**IDES**). Approximately 50 children are seen per year for comprehensive interdisciplinary developmental assessment, including psychological evaluations. One faculty member participates in this clinic (Perez).

**Pediatric Psychology Clinic.** Approximately 60 children and adolescents are seen per year for outpatient therapy services, with about 800 patient contacts per year. Three faculty members participate in this clinic (Delamater, Weinstein, Mali).

Pediatric Psychology Integrated Behavioral Health Care Programs. One psychologist (Coto) works full-time with the Pediatric Hematology-Oncology Division, providing psychological evaluations and therapies for children with various cancers and hematologic disorders. One psychologist (Mali) works with the Pediatric Pulmonary Division's Cystic Fibrosis Program one afternoon per week (10% FTE funded by philanthropy), with 6 patients typically seen per week. One psychologist (Mali) works with the Pediatric Endocrinology Division's Diabetes Outpatient Clinic two days per week (funded at 15% FTE by a CMS contract), with psychosocial screening for all patients and approximately 12 consults seen in clinic per week for brief evaluations and interventions. One faculty member (Cuadra) works with the Pediatric Mobile Clinic (PMC) two days per week at 40% FTE funded by the PMC, providing psychological consultations in this primary care setting. One faculty member (Pulgarón) and one staff psychologist (LaMarca) supervise several psychology trainees, funded by the Children's Trust, providing psychological services in the School Health Clinics. In the School Health clinics, comprising several middle and high schools, approximately 250 children completed psychological screeners during the year, and 150 youth received a total of over 800 therapy sessions.

**PCIT.** In this Children's Trust funded program (Jent, PI), 380 children and their parents receive parent-child interaction therapy services. Each family typically has 12 sessions, so annually, there are approximately 5,000 patient contacts. Several psychology faculty members (Davis, Jent, Garcia, and Weinstein) participate in the PCIT program.

**Healthy Steps.** During CY 2024, approximately 500 families with children 0-3 years old were seen and followed by Healthy Steps Specialists in three primary care practices (ACC, Kendall, and Professional Arts Center) in which they received developmental screening, recommendations, and preventive intervention services. One psychology faculty member (Schenker) supervises developmental specialists who had nearly 2,000 patient contacts (including well-child visits, consultations, and parenting groups), which occurred mostly at well-child visits; but also included some home visits. This program is funded entirely by the Children's Trust (Schenker, PI).

**Families First.** Families First, funded by The Children's Trust since 2004, has successfully provided evidencebased, relationship-focused, culturally competent, family strengthening parenting services for parents and caregivers with young children (birth to three years old) throughout Miami-Dade County. Families First currently offers two evidence-based/best-practice, relationship-focused parenting groups: one focused on mothers, fathers and/or relative/ nonrelative caregivers with infants (Baby and Me), and the other focused on parents and caregivers with young children (The Incredible Years Toddlers Basic Parenting Program for parents/caregivers of children 1-3 years old). Groups have broad enrollment outreach and are offered in English and Spanish at community-based and childcare settings throughout the county. During CY 2024, Families First served approximately 300 families, of which about two-thirds participated in the Incredible Years Toddler Basic Program, and one-third participated in Baby & Me. (Mansoor, PI).

**Florida Healthy Start (FHS).** The UM Florida Healthy Start Program, funded since 1995 by the Florida Department of Health and the Healthy Start Coalition of Miami Dade (Morrow, PI), is a free home-visiting program that provides education and care coordination to pregnant women and families of children under 3 years old. The goal of the program is to lower risk factors associated with preterm birth, low birth weight, infant mortality, and poor developmental outcomes. Healthy Start offers home visiting, prenatal and parenting education,



# Pediatric Clinical Psychology

inter-conception education, stress management education, and care coordination to help families learn about community resources. The UM FHS Program employs a team of 25+ service providers and served approximately 1,500 pregnant women and infants in 2024.

Moving Beyond Depression. The Moving Beyond Depression<sup>™</sup> (MBD) Program, funded by the United Way and the Healthy Start Coalition of Miami-Dade (Morrow, PI), is a 15 session in-home cognitive-behavioral therapy approach developed by Every Child Succeeds<sup>®</sup> and Cincinnati Children's Hospital Medical Center. MBD is the only evidence-based program for the treatment of perinatal depression designed for mothers in home visitation programs. Women are screened and referred into the program from Florida Healthy Start countywide. The program is currently staffed by three licensed therapists under the supervision of a psychology faculty member, Dr. Connie Morrow, and served about 150 pregnant and postpartum women during 2024.

#### Connect - Coordinated Intake and Referral (CI&R).

Connect/CI&R is a referral program funded by the Florida Department of Health and Healthy Start Coalition of Miami Dade (Morrow, PI) that helps pregnant women, caregivers, and families with young children by providing a one-stop entry point to home-visiting programs and needed resources in Miami-Dade. The program coordinates referrals into Healthy Start, Healthy Families, Nurse Family Partnership, and the Jasmine Project home visiting programs for families with young children. Participating programs provide education and support in childbirth, newborn care, breastfeeding, child development, nutrition, family planning, help to quit smoking, infant safety, financial self- sufficiency, parenting, and more. The UM Connect/CI&R Program employs five CIR workers, two who serve the delivery units at Holtz Children's Hospital, and one CIR Program Manager. The program screened and referred approximately 350 pregnant women and infants during 2024.



Jasmine Project/Federal Healthy Start. The Jasmine Project, a national Healthy Start Initiative funded by the Health Resources and Services Administration since 2010 (Morrow, PI), focuses on eliminating racial disparities in Black infant mortality and improving women's and family health and wellness among pregnant and postpartum women, infants, and fathers. Services emphasize cultural sensitivity and strengthening family resilience through the provision of case management, service referrals, childbirth and breastfeeding support and education, inter-conception health education, depression/mental health screening and referral, healthy infant care, parenting and family wellness, and substanceabuse screening and prevention. Two psychology faculty members are involved in the Jasmine Project (Morrow as PI, Mansoor as Evaluation Director). The program is staffed by a team of five Care Coordinators, a Program Supervisor, and Outreach/Transportation Specialist. The program served approximately 650 families in 2024.

**Parent Club.** This targets parents in the community and provides workshops with helpful information about effective parenting practices and strategies to manage challenging child behaviors. The program is funded by the Children's Trust (Weinstein, PI) with several psychology faculty members participating. In 2024, approximately 3,000 parents participated in various workshops.

**Team COACH.** This Children's Trust program (Garcia, PI) provides ongoing comprehensive professional development services that support programs in delivering their evidencebased interventions in alignment with best practices. These professional development services include individualized coaching, live training, peer learning opportunities, and ondemand courses that promote ongoing professional growth and organizational capacity. Workshops target communitybased professional providers providing parenting programs throughout Miami-Dade County — this work reached 40 parenting programs that served nearly 10,000 families in 2024.

**Early Discovery.** The Early Discovery program, funded by the Children's Trust (Natale, PI), served approximately 600 children in 2024. The program is designed to provide therapeutic interventions to children with mild developmental delays who do not meet federal criteria for IDEA Part B or Part C services. The program works with community-based agencies as well as UM trainees to provide therapeutic services that cover the entire county. Services are provided in the parent's home or in childcare centers.

Jump Start. The Jump Start Program, funded by the Children's Trust (Natale, PI), served 100 childcare centers in 2024. The program employs 27 consultants across four agencies. Each consultant carries a caseload of four schools (four directors, eight teachers, and four children). Three types of consultation are provided at each school, following the Georgetown Model, working at the director, teacher level, and child levels. The main goal is to reduce the number of children expelled from childcare centers. Two psychology faculty members (Natale, Schenker) participate in Jump Start.

**Child Protection Team.** Approximately 1,200 children were seen by the CPT in 2024, with clinical supervision provided by the team psychologist. The psychology faculty member (Dandes, Clinical Director of CPT) provides 100% FTE funded by a State of Florida CMS Department of Health contract.

**Early Steps.** Funded by state of Florida CMS contract, the North Miami Dade County Early Steps clinic team at the Mailman Center conducted over 2,000 developmental evaluations in 2024, with an additional 500 children (who already had their individual family support plans) receiving various types of intervention services. One faculty member (Berkovits, Director of Early Steps) works full-time with the Early Steps team, providing supervision and training, as well as participating on state-wide committees.

# Teaching/Education

- APA-accredited psychology internship training program for over 34 years: nationally prominent (175 applications per year for 8 positions); about 200 graduates, many in faculty positions at academic institutions throughout the country; eight funded internship positions during 2023-2024 training year and seven funded positions during 2024-2026 training year
- Postdoctoral fellowship: APPIC-registered fellowship program with four fellows in 2023-2024 funded by grants and four fellows during the 2024-2025 training year; over 100 graduates of 1–2-year program in past 25 years
- Graduate student practicum training: usually 10–12 graduate students each training year from UM (clinical psychology and counseling psychology), FIU, and Nova Southeastern clinical psychology doctoral programs
- Continuing training initiatives in social justice issues
- Faculty regularly provide clinical supervision and lectures in ongoing seminars

# **Overview of Research Activities**

Psychology faculty members are working on a number of research projects addressing chronic disease prevention, disease management, and health promotion in children and adolescents. For example, Dr. Delamater is examining predictors of successful adaptation of adolescents with Type 1 diabetes as they transition to late adolescence and early adulthood; this study was funded by NIDDK and concluded in 2019 — the team is working on final data analyses and preparation of manuscripts for publication. Delamater is also studying the long-term effects of interventions delivered to parents in primary-care settings during the first two years of life to reduce child obesity and injuries (funded by NICHD; completed) and has been funded by PCORI to evaluate new programs to prevent early childhood obesity. He was previously funded by NIH on studies of predictors of cardiometabolic risk in Latino youth and a web-based family intervention for overweight children; manuscripts from this work continue to be submitted for publication. He has been working with colleagues in New Orleans on an NIDDKfunded grant as a co-I (and site PI) on a study to reduce health disparities in African American youth with Type 1 diabetes. He is also a co-I (and site PI) on a grant funded by NHLBI on predictors of early adiposity in young Hispanic children. He is a consultant on a study funded by the American Diabetes Association to reduce risk for developing Type 2 diabetes in youth living in rural settings. He has worked with Dr. Mali and Dr. Sanchez on a UM CTIS-funded pilot grant to evaluate integrated behavioral health care in low-income, ethnic minority youth with Type 1 diabetes.

Dr. Pulgarón is working with Dr. Gwynn in the School Health Clinics on an NIH-funded RADx grant examining factors related to COVID19 testing and vaccination. Dr. Cuadra is involved in research with the Radiology Department examining associations of imaging with neuropsychological functioning, as well as with the Division of Pediatric Infectious Diseases on NIH-funded studies on neurodevelopment of HIV infected children (Scott, PI). Dr. Cuadra is also examining longterm academic adjustment and neurodevelopment of children with sickle cell disease.

# Pediatric Clinical Psychology

Dr. Natale is conducting obesity prevention research in the childcare setting, in a grant funded by the HRSA. Dr. Natale also has a Children's Trust-funded project to prevent child abuse. She is the Pl of a grant entitled "Early Discovery," and is also the Pl of another grant, "Jump Start to Health," both funded by The Children's Trust. She is Co-Pl on a grant entitled "Step-UP Assistive Technology." Drs. Natale and Jent are MPIs on a NIH-funded study of virtual consultations to enhance the effectiveness of Jump Start in child care settings. Dr. Schenker is collaborating with Dr. Natale in the Jump Start program and is also involved in the Mailman Family Navigator Program.

Funded by HRSA, Dr. Morrow and Dr. Mansoor aim to reduce racial disparities in infant mortality by community-based healthy family programming, the Healthy Start Initiative this grant was renewed in 2024 for another five years. Dr. Mansoor and Dr. Morrow also collaborate on a grant from the Children's Trust entitled Families First, to promote effective parenting through community-based programs.

Dr. Berkovits in the Early Steps Program is examining developmental outcomes of low-birth-weight babies, as well as the developmental progress of children receiving early interventions. She is also collaborating in a study of the effects of internet-delivery of Parent-Child Interaction Therapy (PCIT).

Drs. Jent, Weinstein, Davis, and Garcia conduct research on PCIT. Funded by the Children's Trust, the team is examining factors associated with success in PCIT, including parent homework and therapist coaching style. Dr. Jent and his colleagues are also engaged in research on the effects of developmental and behavioral screening and intervention in primary care settings (funded by Children's Trust and through a contract with Little Havana Behavioral Health funded by the Health Foundation of South Florida). Dr. Weinstein is also serving as PI on a Children's Trust Universal Parenting grant that started in March 2019. Dr. Davis is PI of a version of PCIT implemented by teachers in the classroom setting, also funded by the Children's Trust. Dr. Garcia is PI of a Children's Trust-funded project providing parenting skills training for mental-health professionals in the community, Team COACH. Dr. Perez has begun a research program with colleagues in the TBI clinic, focusing on neuropsychological functioning.

# Awards and Honors

Jason Jent, Ph.D., received the 2024 Dean's Award for Inclusion and the 2024 Micah Batchelor Research Award, and was elected to membership in the American Pediatric Society. Alan Delamater, Ph.D., was also elected to membership in the American Pediatric Society. Ruby Natale, Ph.D., received the Dean's Award for Community Engagement. Dainelys Garcia, Ph.D., received the Parent-Child Interaction Therapy Trailblazer Advocacy Award from PCIT International for her innovative research.

# Physician Hero



The 2024 Psychology Division Hero is **Jason Jent, Ph.D.**, Associate Professor of Clinical Pediatrics. He is the PI or MPI of three programs funded by the Children's Trust — PCIT, Project SEW, and Team COACH — that serve young children as well as professionals throughout Miami-Dade County.

The PCIT program has been funded continuously since 2011 and has expanded substantially to serve nearly 400 young children and their families annually throughout Miami-Dade County in collaboration with community organizations. In addition, Dr. Jent is MPI on an NIH R01 grant to mitigate risks to young children in childcare settings. Dr. Jent also received the 2024 Micah Batchelor Award for Excellence in Research for an innovative study utilizing AI to enhance the effects of his Pocket PCIT program, received the Dean's Inclusion Award, and was elected to membership in the American Pediatric Society. Besides his research accomplishments, Dr. Jent is highly engaged in clinical teaching and research mentoring, provides leadership to the Mailman Center for Child Development as Assistant Director, and has facilitated the development of the Mailman Center's strategic plan during 2024. He also serves as Director of Training for Psychology and was selected by the American Psychological Association to serve as an internship program site examiner nationally.

# Pediatric Critical Care Medicine

The Division of Pediatric Critical Care Medicine (PCCM) is renowned for expertise in mechanical ventilation, respiratory and cardiac failure, traumatic brain injury, trauma care and injury prevention, multiple organ dysfunction, post-operative cardiac care, palliative care, and procedural sedation. The Division provides expert clinical care in the 24-bed Pediatric Intensive Care Unit (PICU and CICU) in the Holtz Women's and Children's Hospital/Jackson Memorial Medical Center. These specialists additionally provide deep procedural sedation for diagnostic imaging procedures and support the Pediatric Palliative Care Team. Our faculty are involved in the education of the next generation of physicians and play an integral role in participating in academic research focused on bridging the gap between basic-science bench work and the clinical bedside.

The PICU is the hub for the care of all critically sick and injured children from birth to 22 years old. The PICU consistently outperforms national averages in areas that include low catheter-associated blood-stream infection rates. The PICU supports a vast array of pediatric surgical specialties, including cardiothoracic surgery (in the CICU) and organ transplantation (general PICU). Trauma and burn patients requiring ICU care are admitted directly to the PICU team.

We experienced 4,786 admissions in 2024.



# **DIVISION CHIEF**

**G. Patricia Cantwell, M.D.** Professor of Clinical Pediatrics Medical Director, Pediatric Palliative Medicine Medical Manager, US&R South Florida Task Force 2

# FACULTY

**Monica Alba-Sandoval, M.D.** Assistant Professor of Clinical Pediatrics Director, Pediatric Residency Program Director, Pediatric Simulation

#### Amanda Alladin, M.D.

Assistant Professor of Clinical Pediatrics Co-Director, Pediatric Palliative Medicine Chair of the Pediatric Bioethics Committee

#### Barry Gelman, M.D., M.Ed.

Associate Professor of Clinical Pediatrics Associate Chair for Education, Department of Pediatrics Chief Medical Officer, Holtz Women's and Children's Hospital

#### Asumthia Jeyapalan, D.O., M.H.A.

Associate Professor of Clinical Pediatrics Chief Quality and Safety Officer and Medical Director of Pediatric Transport, Holtz Children's Hospital

#### Jennifer Muñoz-Pareja, M.D.

Associate Professor of Clinical Pediatrics Associate Program Director, Pediatric Clinical Care Fellowship Interim Medical Director of the Cardiac Intensive Care Unit

#### Michael Nares, M.D.

Associate Professor of Clinical Pediatrics Pediatric Critical Care Medicine Fellowship Director Medical Director, Pediatric Intensive Care Unit, Holtz Children's Hospital

#### Frances Rodriguez Ramos, M.D.

Assistant Professor of Clinical Pediatrics

# Brent Pfeiffer, M.D., Ph.D.

Assistant Professor of Clinical Pediatrics

## Juan Solano, M.D.

Associate Professor of Clinical Pediatrics Medical Director Pediatric of the Mild TBI Program

#### Kathryn Swaby, M.D. Assistant Professor of Clinical Pediatrics





# Pediatric Critical Care Medicine

## ASSOCIATED FACULTY

### Manuel Viamonte, M.D.

Assistant Professor of Clinical Pediatrics Joint Appointment with Division of Pediatric Neurology

# Teaching (activities, fellowships)

- PCCM Fellowship Program
- PCCM rotation for pediatric residency
- · Simulation training for residents and fellows
- Pediatric palliative-care rotation for fellows, residents, and medical students
- Integration into Pediatric Educational Committee and Clinical Competency Meeting

## Major Awards and Honors

Cantwell – Sebastian Strong Foundation C.A.P.E Award – 2024

## Research, including general areas in which your faculty is conducting research

- · Acute brain injury during Illness
- Global neurocritical care
- Transplant immunology: acute and chronic graft versus host disease
- Division data scientist
- · Palliative care and bioethics

# Physician Hero



**Brent Pfeiffer, M.D., Ph.D.**, Assistant Professor of Clinical Pediatrics, has been a member of the Division of Pediatric Critical Care Medicine since 2011. His attributes as a clinician-scientist were developed early on in his career, having received his B.S. in Biology and Chemistry at the University of Evansville, Indiana, and his M.D. and Ph.D. in Biochemistry

from the University of Missouri-Columbia Missouri. The Division of Pediatric Critical Care faculty members recognized his academic potential during his pediatric residency at the UM-Holtz Children's Hospital, which led to his pediatric critical-care fellowship training, culminating in his current faculty position.

Brent is a consummate physician-scientist with a passion for immunology and transplant medicine. His meticulous approach to pediatric critical care medicine has been an inspiration to countless residents and fellows. He thoroughly enjoys exploring the "why and how" of medicine. He is zealous about the management of critically ill children and adolescents who have had life-saving organ or stem cell transplants, yet who then face the ever-present fear of losing the transplanted graft. He has demonstrated the value in translational research by using targeted immune cell manipulations to bolster immune-cell tolerance of the transplanted organ. Brent is an exemplary by demonstrating success in balancing high intensity bedside clinical work along with basic-science research. Brent seeks to raise the bar in scientific outcome measures and has actively sought education in statistics and management of large data sets. He is energized by researching and honing his skills with emerging statistical methods and advanced immunology/molecular biology techniques. He is a team player in every sense and utilizes his passion for medicine and research to spearhead collaborative academic pursuits across subspecialities. Brent has exceptional skillsets in data visualization and reproducible analysis that have proven invaluable in managing clinical databases and generating data-driven visualizations that serve to enhance the quality of publications. He thrives on interactions with trainees and junior faculty and has been sought-after as a mentor.

The PICU environment can be tremendously daunting and stressful. Brent has supported clinical coverage in the CICU and PICU, recognizing the need for consistency and collaboration. He has developed a new format for the Morbidity and Mortality Conference that inspires and enhances an environment of inquiry for trainees and faculty. Brent's leadership is notable for his calm demeanor and approachable persona. He is extremely well rounded and leaves no stone unturned to assist colleagues. Brent's face lights up with the slightest reference to data sets and spread sheets. He is always quick with the offer, "how can I help?"

Brent has long been an unsung hero of the ICU.

# **Inspiring Patient**

# From Winning in Baseball to Winning in Life: Gianni Pillot's Story of Recovery from a Complex Brain Aneurysm

What started as an ordinary day for **Gianni Pillot** soon turned into a parent's worst nightmare. Thankfully, with the help of the University of Miami Health System's skilled interdisciplinary team of experts, Gianni's medical emergency became his biggest triumph.



On August 20, after winning a baseball game, playing on his Oculus virtual reality game system, and taking a ride on his electric bike, Gianni began experiencing headaches that quickly became intolerable and rapidly progressed to include a change in mental status, facial asymmetry, and unresponsiveness. After his parents called Emergency Medical Services, Gianni was transported to Coral Springs Hospital, where he was seen by experts at Broward Health Medical Center for a neurosurgical consultation.

Gianni was quickly admitted to the pediatric intensive care unit (PICU) to properly diagnose and manage his condition. To help him breathe, a tube was inserted into Gianni's windpipe to maintain an open airway and provide mechanical ventilation. This process is called intubation. While intubated, his care team also took steps to protect his brain.

During emergency brain surgery, a very large aneurysm (a bulge in the wall of an artery) with evidence of brain swelling was discovered. Gianni was immediately transferred to UM–Holtz Children's Hospital, where a team of pediatric critical care, pediatric neurosurgery, and neurointerventional specialists identified a right middle cerebral aneurysm with a large hemorrhage that was causing brain compression. This life-threatening condition can lead to stroke and brain damage if not addressed immediately.

To manage this condition, Gianni underwent a second brain surgery called a right frontotemporal decompressive craniotomy with drain, which involves removing a portion of the skull on the right side of the frontotemporal region to relieve pressure exerted by the brain, cerebrospinal fluid, and blood vessels inside the skull. The aneurysm was also successfully clipped by the neurointerventional surgeon.

Gianni's care and recovery is a testament to the success and necessity of interdisciplinary teamwork. From ICU admission to respiratory and seizure management to multiple brain surgeries and extensive rehabilitation to restore neurologic function, Gianni's care team included 15 subspecialties, all working together to help him get his life back. Additionally, the unwavering support of family, friends, and neighbors helped Gianni remain optimistic and resilient despite the ups and downs of his long medical journey.

It truly takes a village. The University of Miami Health System knows this and so does the Pillot family. They were confronted with the extreme fragility of life and, with the help of our dedicated team of experts, were able to overcome the most difficult obstacles to now continue living and thriving together.

# Pediatric Emergency Medicine

When emergency care is needed, most pediatric patients seek treatment near where they live. Research shows that when emergency departments (EDs) are pediatric ready, outcomes are improved and children's lives are saved. The Division of Pediatric Emergency Medicine (PEM) and Holtz Children's Hospital Pediatric Emergency Department (PED) have achieved a high score for pediatric readiness.

The Division of PEM has set an additional ambitious agenda of pediatric readiness at all emergency sites throughout JHS and for all satellite PEDs, including Jackson North, Jackson South, and Jackson West. PEM and EM physicians also provide care for ill and injured children at satellite EDs, including children with a history of high medical complexity.

We experienced approximately 29,500 visits at Holtz Children's Hospital, 9,500 at Jackson North, and 4,000 at Jackson West.

ED teams identify and understand children's unique needs and communicate evaluation and treatment priorities with primary care teams and specialists at Holtz Children's and UHealth. When deemed necessary, children are expeditiously transferred along the continuum of excellent emergency care for definitive therapy and ongoing evaluation. When a PED physician at one of our satellite EDs determines a higher or extended level of pediatric care is needed, including medical or surgical subspecialty care, 24/7 access is made available to sub-specialty physicians. Transport can also be coordinated at the highest level of care via the specialized Holtz Pediatric Critical Care and Transport Team.

## PEDIATRIC EMERGENCY MEDICINE AFFILIATES

#### Sara Angarita-Jones, M.D.

Medical Director - Jackson West Emergency Department

### **Hector Chavez, M.D.** Medical Director – Holtz Children's Pediatric Emergency Department

Sara B. Cortes, M.D.

Medical Director – Jackson North Pediatric Emergency Department

### Veronica Santiago, M.D.

Medical Director – Jackson South Emergency Department

# PEDIATRIC EMERGENCY MEDICINE ATTENDINGS

Elsie Graber Alves, M.D. Marc Arel, M.D. Carlos Eduardo Barahona, M.D. Friedrich Drescher, M.D. Wende Regine Gelb, M.D. Wendy P. Land, M.D. Eva Lester, M.D. Carolina Mendoza, M.D. Andrea Mancinelli, M.D. Shirley Press, M.D. Bruce J. Quinn, M.D. Katie Rebillot, M.D. Brent Rogers, M.D. Nirit Swerdloff, M.D.



### **DIVISION CHIEF**

Valerie T. Thompson, M.D. Assistant Professor of Clinical Pediatrics Pediatric Emergency Medicine Director, Pediatric Emergency Services-UHealth/Jackson Children's Care

# Pediatric Endocrinology

The Division of Pediatric Endocrinology is the only universitybased pediatric endocrinology program in South Florida. What truly distinguishes our team, however, is an unwavering commitment to provide children and adolescents the finest care possible in the treatment of diabetes, growth disorders, obesity, early-onset puberty, and thyroid conditions.

We experienced 6,404 outpatient volume and 350 inpatient consults in 2024.



# **DIVISION CHIEF**

**Gary Berkovitz, M.D.** Professor of Pediatrics

## FACULTY

**Yong Bao, M.D.** Assistant Professor of Clinical Pediatrics

**Veronica Figueredo, M.D.** Assistant Professor of Clinical Pediatrics

**Patricia Gomez, M.D.** Assistant Professor of Clinical Pediatrics

Janine Sanchez, M.D. Professor of Clinical Pediatrics Director of Pediatric Diabetes Program

**Tossaporn Seeherunvong, M.D.** Associate Professor of Clinical Pediatrics



# Pediatric Gastroenterology, Hepatology, and Nutrition

The Division of Pediatric Gastroenterology, Hepatology, and Nutrition is the leading academic pediatric gastroenterology program in South Florida. Our specialists provide expert outpatient clinical care in all areas of pediatric gastroenterology at multiple sites — including the Mailman Center, Weston, Jackson South, Jackson Main, Lennar, and the Miami Transplant Institute.

We experienced 5,949 outpatient visits and 4,095 inpatient admissions in 2024.

The Division provides 24-hour clinical coverage at Holtz Children's Hospital. Our Division receives referrals from the state, nationally, and internationally in critical areas of pediatric gastroenterology care. Our faculty provide education to the next generation of physicians at our clinics and on our inpatient service.

Division faculty participate in national and international committees and are regularly invited to lecture at national and international conferences. The Division participates in multiple multicenter trials and investigator-initiated projects.



# DIVISION CHIEF

**Miguel Saps, M.D.** Professor of Clinical Pediatrics The George E. Batchelor Endowed Chair in Pediatrics Director, Pediatric Gastrointestinal Motility Program

# FACULTY

Montserrat Antonieta Corbera-Hincapie, M.D., FAAP Assistant Professor of Clinical Pediatrics

**Stefany Benabe, M.D.** Assistant Professor of Clinical Pediatrics

#### Amanda Fifi, M.D.

Associate Professor of Clinical Pediatrics Director of the Nutrition Program Associate Director, Cystic Fibrosis Program Associate Director of the Fellowship Program

### Jennifer Garcia, M.D.

Associate Professor of Clinical Pediatrics Medical Director of Pediatric Transplant Services, Miami Transplant Institute

### Amber Langshaw, M.D.

Associate Professor of Clinical Pediatrics Medical Director, Pediatric Gastroenterology, Hepatology, and Nutrition Director of the Fellowship Program UHealth Deputy Medical Director for Child Health and Chief of Service

### Jessica Hochberg, M.D.

Assistant Professor of Clinical Pediatrics

**Fatima Hussain, M.D.** Assistant Professor of Clinical Pediatrics

# NURSING LEAD AND TEAM

**Christy Nicolle Figueredo, M.S., RD, LD/N** Clinical Dietician

**Celine Forges-Voight, ARNP** Lead Nurse Practitioner at Holtz Children's Hospital

Lisa Arbach, ARNP Amber Balda, MPH Ann Britt Bennett, ARNP Sandra Herrera, ARNP Michelle Schmidt, ARNP



# SECTION OF

# **Community Pediatrics**

The Section of Community Pediatrics is dedicated to providing comprehensive and preventive care for children and adolescents in the community. The Section focuses on promoting health, as well as preventing, diagnosing, and treating acute and chronic conditions. In addition to providing medical services, such as screenings, vaccinations, and chronic disease management, our pediatricians focus on promoting family-centered care. They help parents understand their child's unique needs by developing relationships with them over time. Our pediatricians are dedicated to making a difference in the lives of children and families in the communities in which they live.

We experienced 4,252 visits in 2024.



# SECTION CHIEF

Lisa Gwynn, D.O., M.B.A., MSPH, FAAP Professor of Clinical Pediatrics Associate Chair, Population Health and Advocacy, Department of Pediatrics Medical Director, Pediatric Mobile Clinic, School Health and Pediatric Comprehensive Care Clinic at Holtz Children's Hospital

# FACULTY

**Andrea Assantes, M.D., FAAP** Assistant Professor of Clinical Pediatrics Medical Director, Kendall Primary Care Practice

#### Julie Belkowitz, M.D., MPH, FAAP

Associate Professor of Clinical Pediatrics Associate Dean for Student Affairs, University of Miami Miller School of Medicine

Carly Brand-Levine, M.D., MPH, FAAP Assistant Professor of Clinical Pediatrics

**Oneith Cadiz, M.D., FAAP** Assistant Professor of Clinical Pediatrics Director, Injury Free Mobile Program Wendy De La Rua, M.D., FAAP

Assistant Professor of Clinical Pediatrics Lead Pediatrician, Pediatric Mobile Clinic

#### Lourdes Quintaña Forster, M.D., FAAP

Associate Professor of Clinical Pediatrics Associate Chair, Clinical Operations, Department of Pediatrics Medical Director, Desai Sethi Primary Care Practice

Shani Jones, M.D., MPH, FAAP Assistant Professor of Clinical Pediatrics

Catherine McConnell-Kramer, M.D., FAAP Assistant Professor of Clinical Pediatrics

**Cecilia Valdes Morales, M.D., FAAP** Assistant Professor of Clinical Pediatrics

**Arielle Rigaud, M.D., FAAP** Assistant Professor of Clinical Pediatrics

### Payal Shah, M.D., FAAP

Assistant Professor of Clinical Pediatrics Associate Program Director, Pediatric Residency Program Director, Resident Continuity Clinic

### Sarah Sukkar, M.D., FAAP

Assistant Professor of Clinical Pediatrics Lead Pediatrician, Dr. John T. MacDonald Foundation School Health Initiative

**Sujata Tipnis, M.D., MPH, FAAP** Assistant Professor of Clinical Pediatrics

**Nicole Torres, M.D., FAAP** Assistant Professor of Clinical Pediatrics

**Donna Wiener, M.D., FAAP** Assistant Professor of Clinical Pediatrics Associate Program Director, Pediatric Residency Program Holtz Children's Hospital

**Gwen Wurm, M.D., MPH, FAAP** Assistant Professor of Clinical Pediatrics

**Stacy Zide, M.D., FAAP** Assistant Professor of Clinical Pediatrics

# UMCPT Child Protection Team

The UM Child Protection Team (CPT) was established in January 1980. CPT is a medically directed, multidisciplinary program that works with local law enforcement and the Department of Children and Family Services in cases of suspected child abuse and neglect to supplement investigation activities.

We experienced 1,124 cases in 2024.

# What We Do

CPT supplements child-protective services investigations by providing expertise in evaluating alleged maltreatments of abuse and neglect, assessing risk factors, and providing recommendations for interventions to protect children and enhance families' capabilities to provide a safer environment. This multidisciplinary team is comprised of pediatricians, nurses, nurse practitioners, psychologists, and social workers, who conduct medical examinations, specialized/forensic interviews, psychosocial evaluations, and psychological evaluations, and provide training in the community and expert-witness court testimony.

In addition, CPT staff provide training services, including training:

- Child-protection investigators and other community providers of child welfare services
- Emergency department staff and other medical providers in the community
- University of Miami medical and psychology students, interns, and residents regarding child maltreatment



# SECTION CHIEF

**Walter F. Lambert, M.D.** Associate Professor of Clinical Pediatrics Director, Child Protection Team

# FACULTY

**Susan Dandes, Ph.D.** Associate Professor of Clinical Pediatrics Associate Director, Child Protection Team

# NURSING LEAD AND TEAM

Amy Weeks, APRN Jose Martinez, APRN Stefanie Joseph, APRN



# **Developmental and Behavioral Pediatrics**

Developmental/behavioral pediatrics (DBP) is a subspecialty that identifies and manages various developmental and behavioral challenges in children and youth. We are experts on the complex influences that impact development and behavior, and ensuring a collaborative approach to achieve optimal outcomes for all children and youth. Our strong partnerships within the Mailman Center for Child Development and other subspecialties in the Department of Pediatrics propel the DBP Section to envision:

- Ideal clinical care for all children
- Innovative education for learners at all levels
- Inspiring DBP scholarly activity

We experienced 1,478 outpatient visits in 2024.



## SECTION CHIEF

Jennifer Walton, M.D., MPH, FAAP Associate Professor of Clinical Pediatrics

## FACULTY

Janellie Azaret, M.D., LMHC Assistant Professor of Clinical Pediatrics Director of Elective for Medical Students: MDR1035 ACE: Maternal/Child Health Research, Advocacy, and Leadership

Jeffrey Brosco, M.D., Ph.D. Professor of Pediatrics Director, Division of Services with Special Health Needs, Maternal Child Health Bureau



# SECTION OF

# Pediatric Hospital Medicine

The Section of Pediatric Hospital Medicine provides services to hospitalized children with all types of diseases, and helps coordinate inpatient care for patients with complex health care needs. We work closely with the Divisions of Pediatric Emergency Medicine and Pediatric Critical Care Medicine, as well as with all other Department subspecialists. In addition, faculty in our group are intimately involved in both resident and medical-student education.

We cared for 14,170 admissions in 2024.



### INTERIM SECTION CHIEF

Luis Garcia-Chacón, M.D., Ph.D. Assistant Professor of Clinical Pediatrics Associate Pediatric Residency Program Director

## FACULTY

#### Patricia G. Alvarez, M.D.

Assistant Professor of Clinical Pediatrics Director, Women and Children's Health Integrated Clerkship Discipline Director of Pediatrics Co-Director, Phase 3

#### Ashwini Ajjegowda, D.O.

Assistant Professor of Clinical Pediatrics

#### Liz Bayes-Santos, M.D., MS

Associate Professor of Clinical Pediatrics Chair, ABP Designated MOC Portfolio Sponsor for Quality Improvement Co-Director, Quality Improvement Project Support (QuIPS) Director, Longitudinal Quality Improvement Curriculum

#### Laura Chamorro-Dauer, M.D., FAAP

Assistant Professor of Clinical Pediatrics

#### Gabrielle Fisher, M.D., M.S.

Assistant Professor of Clinical Pediatrics Associate Discipline Director of Pediatrics Course Director – Underrepresented in Medicine Pediatrics Visiting Scholar Program

#### **Robin Harrison, M.D.** Assistant Professor of Clinical Pediatrics

**Taylor Rosenbaum, M.D., FAAP** Assistant Professor of Clinical Pediatrics



# Pediatric Hematology-Oncology

The Division of Pediatric Hematology-Oncology is comprised of a multi-disciplinary team of skilled pediatric hematologist/ oncologists, nurses, psychologists, social workers, and other team members who provide comprehensive, state-of-the-art medical care and psychological support for infants, children, adolescents, and young adults with all types of cancers, and non-malignant blood disorders, including sickle cell disease, hemostatic and thrombotic disorders, bone marrow failure, and congenital immune deficiencies.

We experienced 5,330 outpatient visits and 5,606 inpatient admissions in 2024.

Our pediatric cancer and hematopoietic stem-cell transplant programs are Sylvester Comprehensive Cancer Center Programs, the only NCI-designated cancer center in the region, and our specialists are among America's finest pediatric hematologists/oncologists and stem-cell and cellular therapy specialists. Our Pediatric Stem Cell and Cellular Program is FACT (Foundation for Accreditation of Cellular Therapy)accredited, and performs all types of transplants (autologous, allogeneic from match sibling donor, unrelated donor, and haploidentical donors), as well as CAR-T cell and other innovative cellular therapies, including gene therapy for sickle cell disease.

Our Program is nationally and internationally recognized as both sickle cell and hemophilia and thrombosis centers of excellences. We provide comprehensive care to our patients in a multidisciplinary, compassionate, family-friendly manner, and patients are assured of receiving the most advanced therapies.

As the only Pediatric Early Phase Clinical Trials Program in South Florida, we make available novel clinical trials for patients with relapsed, refractory, and advanced cancers. Our approach allows children with hematologic and oncologic disorders, as well as those with immune deficiencies, to reach their fullest potential, while being treated in their own community by a team of nationally and internationally recognized pediatric hematologist-oncologists.

As part of the University of Miami Miller School of Medicine and the NCI-designated Sylvester Comprehensive Cancer Center, our physician/scientists are committed to advancing current therapies through research and clinical trials. Children from all over the United States and around the world come to us for comprehensive treatment of childhood cancers, sickle cell disease, congenital immune deficiencies, hemophilia, and other congenital bleeding thrombosis disorders and to participate in exciting research that is being conducted here.

# The comprehensive Pediatric Hematology-Oncology and Stem Cell Transplant team is comprised of:

- · Pediatric hematology-oncology physicians
- · Pediatric stem cell transplant physicians
- Pediatric psychologist
- · Pediatric hematology-oncology fellows
- Pediatric residents
- APON certified nurses
- · Pediatric hematology-oncology advanced practice nurses
- Clinical pharmacists
- Nutrition specialists
- Child life specialists
- Social workers
- · Physical therapists

All Division physicians are board certified/eligible in pediatric hematology-oncology, and are consistently listed in Best Doctors in America, Castle Conolly Top Doctors, America's Top Doctors for Cancer, International Who's Who of Professionals, and Florida Super Doctors. Physicians are members and hold leadership positions in the Children's Oncology Group, Treatment Advances for Childhood Leukemia & Lymphoma (TACL), Sunshine Project Consortium through National Pediatric Cancer Foundation (NPCF), and Sylvester Comprehensive Cancer Center, and participate in national and state advisory committees for pediatric cancer and chronic hematological disorders. Physicians are invited on a regular basis as speakers to national and international scientific meetings and have published state-of-the-art approaches that have in many instances changed existing treatment paradigms.

# Pediatric Hematology-Oncology



# DIVISION CHIEF

Julio Barredo, M.D. Professor of Pediatrics, Medicine and Biochemistry and Molecular Biology Associate Chair of Research

# FACULTY

Warren Alperstein, M.D. Assistant Professor of Clinical Pediatrics

**Ofelia Alvarez, M.D.** Professor of Pediatrics Director, Pediatric Sickle Cell Program

Daniel Armstrong, Ph.D. Professor of Pediatrics and Psychology

#### Fernando Corrales-Medina, M.D.

Associate Professor of Clinical Pediatrics Director, University of Miami-Hemophilia Treatment Center Medical Director, Pediatric Hemophilia Program Director, Pediatric Hematology-Oncology Fellowship Program

#### Jennifer Coto, Ph.D. Assistant Professor of Clinical Pediatrics

**David Crawford, M.D.** Associate Professor of Clinical Pediatrics

#### Aditi Dhir, M.D.

Assistant Professor of Clinical Pediatrics Director, Pediatric Genetic Predisposition Clinic

**Bradley Gampel, M.D.** Assistant Professor of Clinical Pediatrics

Rachel Kronenfeld, M.D. Assistant Professor of Clinical Pediatrics

Meghan McCormick, M.D. Assistant Professor of Clinical Pediatrics

**Edward Ziga, M.D.** Assistant Professor of Clinical Pediatrics

# **Clinical Services**

#### Hematology

Pediatric Sickle Cell Program

- Hemoglobin and red cell disorders
- White blood cell disorders
- Platelet disorders

#### Hemostasis and Thrombosis

Federally Funded and Lifespan Comprehensive Hemophilia Treatment Center Multidisciplinary Pediatric Hemophilia Program

Congenital Bleeding Disorders Program
Thrombosis and Congenital Thrombophilias Program
Multidisciplinary Clinic for Adolescents with Heavy Menstrual
Periods (CYCLE Clinic)
Pediatric Anticoagulation Stewardship Program

#### Oncology

Hematological Malignancies Program Solid Tumor Program Pediatric Sarcoma Program

Pediatric Neuro-Oncology Program

AYA Program

Survivorship Program

Pediatric Phase 1 Program

- PTLD clinic at Miami Transplant Institute (MTI)
- Pediatric Cancer Genetics Clinic

# Hematopoietic Stem Cell (Bone Marrow) Transplant

Stem Cell Transplant

 Cellular Therapy (CAR-T cells: clinical trials and Novartis CAR-T cell center; gene therapy for sickle cell disease and beta thalassemia)

#### **Survivorship Program**

• Adolescent and Young Adult Program (AYA)

# Programs

#### Hematology: >350 active patients

Pediatric Sickle Cell Program General Hematology

- · Anemias and red blood cell disorders
- White blood cell disorders
- · Platelet disorders

#### Hemostasis and Thrombosis Program:

#### > 400 active patients

Multidisciplinary and Lifespan Hemophilia Treatment Center

- CYCLE CLINIC: Multidisciplinary Program in collaboration with the Division of Adolescent Gynecology, focused on adolescents and young adults with heavy menstrual periods and congenital bleeding disorders.
- Anticoagulation Stewardship at Holtz Children's Hospital
- Thrombosis and Congenital Thrombophilias Program

### **Oncology: 75 new diagnoses**

Hematological Malignancies Program Solid Tumor Program

Pediatric Sarcoma Program, weekly

- Multidisciplinary Pediatric Cancer predisposition clinic, monthly
- Pediatric Neuro-Oncology Program

AYA Program Survivorship Program Pediatric Phase 1 Program

### Hematopoietic Stem Cell (Bone Marrow) Transplant:

27 new BMT; over 100 patients followed by program Stem Cell Transplant, 27 transplants Cellular Therapy

#### **Dr. Alperstein**

- BMT program
- AYA program
- PTLD clinic at MTI
- Lymphoma
- Pediatric Hem/Onc Simulation program

### Dr. Barredo

- Leukemia
- Lymphoma
- AYA program
- HSCT and Cellular Therapy program

#### **Dr. Corrales**

- Comprehensive Hemophilia Treatment Center: currently >400 active patients.
- Multidisciplinary program for children with congenital bleeding disorders including hemophilia A, hemophilia B, Von Willebrand disease, and other rare bleeding disorders.
- CYCLE CLINIC: Multidisciplinary Program in collaboration with the Division of Adolescent Gynecology focused on Adolescents with heavy menstrual periods and congenital bleeding disorders. Once session per month, with an average of 6-8 patients per session.

- Pediatric Thrombosis Program: currently >100 active patients. The Program has ongoing collaborations with the Miami Transplant Institute (kidney and GI liver/ intestine transplant programs).
- Anticoagulation Stewardship: ongoing QI initiative that aims to enhance patient safety and facilitate transition of care for inpatient pediatric patients receiving anticoagulation at Holtz Children's Hospital.

### Dr. Coto

All clinical programs - approximately:

- 65 consults
- 40 patients/families seen for ongoing intervention
- 24 pre-bone-marrow-transplant psychosocial evaluations

#### **Dr. Alvarez**

- Pediatric Sickle Cell Program: 370 patients
- Sickle Cell Transition Program: 68 patients
- Sickle Cell Newborn Screening Program: 36 referrals
   per year

### Dr. Dhir

- Pediatric Sarcoma
- Pediatric Phase I research program
- Multidisciplinary Pediatric Cancer Genetic Predisposition clinic, 3-4 patients monthly

#### **Dr. Davis**

- Clinical Programs within Hemostasis and Thrombosis
- Pediatric Hemophilia Treatment Center Medical co-Director of the Pediatric Hemophilia Treatment Center current pediatric enrollment 300-400 patient encounters
- Cycle Clinic, dedicated clinic for girls under 18 years of age with heavy menstrual bleeding
  - Held twice a month with adolescent GYN, average 4–6 patients/session
- UHealth Plantation pediatric coagulation clinic, held once a month, 2–6 patients /session

### Dr. Crawford

- Director of Pediatric Stem Cell Transplantation
- Institutional PI Kymriah CAR-T cell therapy for relapsed and refractory pediatric and young adult acute lymphoblastic leukemia
- Institutional co-PI Massive Bleeding in Children with Cancer or Hematopoietic Stem Cell Transplant: A Multicenter Retrospective Study

### Dr. Kronenfeld

- Comprehensive Hemophilia Treatment Center: Currently >300 active patients
- Pediatric Thrombosis Program: Currently >100 active patients with ongoing collaborations with the Miami Transplant Institute
- Anticoagulation Stewardship Program: Ongoing Quality Improvement initiative that aims to enhance patient safety and facilitate transition of care for inpatient pediatric patients receiving anticoagulation at Holz Children's Hospital
- UHealth Plantation Pediatric Coagulation Clinic: Held one half day/month

#### Dr. Ziga

- Allo- and Haplo-identical transplantation for patients with non-malignant hematological disorders
- · Stem Cell Transplantation and Cellular Therapy program
- Gene Therapy program
- Sickle Cell Disease program

#### Dr. Gampel

- Pediatric Neuro-Oncology
- AYA Neuro-Oncology
- AYA Cancer program

#### Dr. McCormick

- Pediatric Solid Tumors
- Retinoblastoma
- Vascular Malformations

# Teaching

- Pre-Medical Student Education: Pre-med students rotate within both the inpatient and outpatient units alongside different faculty members in the division.
- Medical Student Education: Medical students mandatorily rotate on the pediatric hematology-oncology inpatient unit during their General Pediatrics Clerkship module.
- Pediatric Resident Education: "Orange team" resident rotation, which is mandatory for all interns and second-year residents. Second-and third-year pediatric residents are also offered elective rotations in the outpatient clinic at Sylvester Cancer Center-Alex's Place and/or the bone marrow team.
- Faculty members serve as members of the Clinical Competency Committee (CCC) and the Program Evaluation Committee (PEC). Faculty members also serve as resident primary mentors. Fellows and faculty actively participate

as instructors in the "Simulation Program/Curriculum" for general pediatric residents.

- Pediatric Hematology-Oncology Fellowship: Three fellowship positions, one per year: Dr. Corrales-Medina is the Fellowship Program Director. The program has recently received ACGME continued accreditation for another five years. For the most recent ABP certifying examination, the pass rate for the program's graduates (first time takers) was 100%.
- Von Willebrand Academy for Latin America, led by Dr. Corrales-Medina at the Hemophilia Treatment Center, has an active educational grant to run an educational program focused on Von Willebrand disease diagnosis and treatment in hematologists from Latin America come once year to participate in a 1.5 day workshop at UM. The grant has now been renewed until 2030.
- VWDtest.com: Educational Website and Global Initiative Educational grant agreement between Octapharma Inc. and Dr. Corrales-Medina at the University of Miami. This website serves as a resource to support individuals who suspect that they might have von Willebrand disease and their physicians, including an online assessment tool that can be used to detect whether a bleeding disorder may be present and additional content and resources to support identification of VWD symptoms.
- Graduate Students/Post-Doctoral PhD Trainees: Dr. Barredo's laboratory trains graduate students and post-doctoral PhD fellows in the field of cancer biology. Dr. Barredo is a member of the graduate faculty in the SOM.
- Dr. Dhir meets frequently with and mentors oncology pathway medical students at SCCC. She is also a member of the Sarcoma Investigation Group, which meets biweekly to discuss potential research opportunities for undergraduate students, medical students, residents, and fellows. Dr. Dhir also conducts monthly board review practice for the pediatric hematology-oncology fellows.
- Dr. Crawford teaches pediatric critical fellows and PICU nurses about stem-cell transplant.
- Pediatric Hem/Onc Simulation program for residents and fellows is a 3–4-week program consisting of teaching and simulation training for bone marrow biopsy and lumbar punctures, shock and code case simulations and a breaking bad news curriculum. Developed and overseen by Dr.
   Alperstein. Dr. Coto provides support for the "Breaking Bad News" simulation. Fellows and faculty actively participate as instructors in the "Simulation Program/Curriculum" for general pediatric residents.
- Dr. Coto provides clinic training to psychology residents and practicum students who rotate yearly through hematology/oncology.

- Fellows Board Review: Faculty provide monthly board review educational sessions to current fellows.
- Dr. Gampel established a Pediatric Neuro-Oncology Rotation for Pediatric Hematology/Oncology fellows.
- Dr. Gampel provides service to National Committees:
  - Society of Neuro-Oncology 2024 Scientific Committee: Co-Chair of the Pediatrics Special Interest Track
  - Society of Neuro-Oncology Adolescent Young Adult Committee
  - Children's Oncology Group Brain Tumor Long-Term Follow-Up Guidelines Committee
  - Neuroscience Responsible Investigator, COG Neuroscience Discipline Committee

# Overview/Research Interests

The Division of Pediatric Hematology-Oncology Medicine is active in clinical and basic science research projects and participates in multi-institution clinical studies.

# Honors and Awards

#### Dr. Kronenfeld

Awarded the 2024 Hemostasis and Thrombosis Research Society/Novo Nordisk Inc. 2024 Clinical Scholars Award. This award provides funding for one year of intensive clinical training and research focused on hemophilia or other rare bleeding disorders (September 2024-September 2025).

#### Dr. Dhir

Micah Batchelor Scholar Award: \$50,000 (Jan 2023-24) Title: Inhibition of Carbonic Anhydrase IX to potentiate response to Immunotherapy in relapsed/refractory Osteosarcoma"

#### Dr. Gampel

Received a \$25,000 donation from a patient's family as part of Miami Giving Day to fund Pediatric Brain Tumor Research. Funds: ASH Medical Educators Institute (MEI) helps develop future leaders in hematology education.

# **Faculty Research Interests**

- Julio Barredo, M.D.: As a full member of the Sylvester Comprehensive Cancer Center, he leads the cancer center efforts in the Adolescent and Young Adult (AYA) Program. He continues to mentor Ph.D. investigators and physician scientists, and as a member of the graduate school, teaches students enrolled in the Cancer Biology Program. His laboratory and clinical research are funded by federal, state, national and international foundations, and industry. His laboratory and translational research focus in in understanding the role of energy metabolism in resistant/ refractory acute leukemia and his lab uncovered the role of AMP-activated protein kinase (AMPK) as a therapeutic target in acute leukemia and other cancers. His clinical research focuses on refractory/resistant acute lymphoblastic leukemia (ALL) and has developed national protocols for the Children's Oncology Group (COG), TACL, the Sunshine Project, as well as investigator-initiated studies (IIS) for the treatment of relapsed/refractory acute leukemia.
- Ofelia Alvarez, M.D.: Dr. Alvarez's research interests are in sickle cell disease and global health. In the sickle cell disease field, she has performed clinical research in sickle cell nephropathy, demonstrating the importance of cystatin C as a marker of renal function, and evaluating markers of acute kidney injury. She has participated in several federally funded hydroxyurea and stroke prevention studies, including BABY HUG, STOP, STOP2, POST STOP, SWITCH, TWITCH, and DISPLACE. In addition, she has been center investigator for new drug safety and efficacy trials (placebo-controlled clinical trial for crizanlizumab and voxelotor among others), which have resulted in new FDA-approved drugs for the management of patients with sickle cell disease. Over the last six years, Dr. Alvarez has established partnerships with pediatricians in Haiti and started a sickle cell newborn screening program, validating a point-of-care for the early identification of newborns with sickle cell disease. Currently, she has an NIH grant to compare populations of children with sickle cell disease in four Haitian sites with the University of Miami cohort, with the implementation of newborn screening and transcranial Doppler ultrasound screening for children with sickle cell anemia, who may be at risk of developing a stroke. Dr. Alvarez also has two HRSA grants to work in Florida as the state lead of sickle cell newborn screening follow up and sickle cell center demonstration project. She received the CDC grant to create a surveillance program at the state levels for individuals living with sickle cell disease in Florida. She is working closely with the Department of Public Health Sciences for this grant. She also leads a quality improvement project along with four other Florida pediatric hematology centers working to improve the

# Pediatric Hematology-Oncology

implementation of sickle cell transition of care from pediatrics to adult care. This is a CMS/Department of Health and NICHQ quality improvement project.

- Warren Alperstein, M.D.: Dr. Alperstein's area of focus includes bone marrow transplant and cellular therapies, with an interest in graft-vs-host disease (GVHD) and haploidentical transplants. His expertise also includes posttransplant lymphoproliferative disorder, and he is a member of the Sylvester Comprehensive Cancer Center's Adolescent and Young Adult (AYA) Program and conducts clinics at SCCC Alex's Place and SCCC at Deerfield Beach. He was awarded the 2019 Hyundai Hope Scholar Grant for collaborative work on High-throughput drug screen for pediatric sarcomas. This led him to receive the 2023 LLB grant to try transition the drug screen for GVHD. He is involved in clinical trials through the PTCTC, in addition to investigator driven protocols. He participates in immunotherapy clinical trials with engineered cytotoxic T cells (CTLs) against EBV positive PTLD/lymphoma, and he is an active educator with the Miller School of Medicine.
- Daniel Armstrong, Ph.D.: Dr. Armstrong's primary focus is on mechanisms of neurocognitive impairment in children treated for ALL and CNS tumors using chemotherapy and/or radiation therapy and on approaches to prevent or lessen the severity of impairment following successful treatment. He also conducts interdisciplinary investigations of relationships between neuroimaging findings of CNS structural changes, biochemical pathways, and functional outcomes. Additionally, a recent focus concerns the potential linkage between high dose methotrexate in treatment of ALL and late onset of autism spectrum symptoms.
- Fernando Corrales-Medina, M.D.: Dr. Corrales-Medina's primary interests are von Willebrand disease (VWD), women with bleeding disorders, novel hemostatic therapies, and the use of point-of-care musculoskeletal ultrasound in hemophilia. He is the director of the University of Miami-VWD Academy for Latin America and the co-principal investigator for the global initiative "VWDtest.com" and ATHN Transcends-Hemophilia Natural History Study.

He is also the national principal investigator of several investigator-initiated clinical studies to evaluate the use of point-of-care ultrasound to evaluate the presence and progression of joint disease in pediatric patients with hemophilia and women with bleeding disorders. Dr. Corrales-Medina additionally has also received grants to support investigator-initiated studies to evaluate the natural progression of joint disease in hemophilic toddlers and young children, and another to clarify the etiology of cardiovascular disease and hypertension in young people affected by hemophilia. He constantly participates in industry-sponsored phase I-II and III clinical trials to evaluate the efficacy and safety of new factor VIII recombinant concentrates as well as other novel hemophilia therapies, including the use of humanized, recombinant bispecific immunoglobulin monoclonal antibodies for the treatment of patients with hemophilia. He is also the on-site principal investigator for phase III randomized clinical studies that evaluate the efficacy and safety of novel oral anticoagulants in children with acute thrombosis and those in need of thromboprophylaxis.

- David Crawford, M.D.: Dr. Crawford has diverse clinical interests in hematopoietic stem-cell transplantation. One of his major focus is use of transplants to treat many different debilitating or lethal non-malignant conditions, such as mucopolysaccharidoses, hemoglobinopathies, conditions with defective or dysregulated immunity, and other genetic disorders. Another focus has been the prevention and treatment of transplant-related complications, such as sinusoidal obstruction syndrome, transplant-associated thrombotic microangiopathy, life-threatening infections, and graft-versus-host disease. The development of CAR-T and other cellular therapies, as well as gene therapy for genetic disorders, will be foci in coming years.
- Joanna Davis, M.D.: Dr. Davis established the Pediatric Hemophilia Treatment Center in 1987 and has a particular interest in women with bleeding disorders. She is committed to education and outreach to the patient community, as well as to health care providers, and has established several educational initiatives which are nationally implemented.
- · Aditi Dhir, M.D.: Dr. Dhir's primary focus is sarcomas, cancer genetics, and early-phase clinical trials. She is a member of the translational and clinical oncology program at SCCC, and is also a part of the adolescent and young adults (AYA) Sarcoma Program. She is actively involved in the Phase I clinical trial program and represents UM as the vice-PI (Primary Investigator) for the multi-institutional TACL and PI for the Sunshine project collaborations. She is now also going to take over the institutional PI role for COG. Her research and clinical interests include better identification of germline predispositions to improve cancer surveillance as well as discovery of new molecular targets in sarcomas to develop more individualized therapy in this era of precision oncology. She conducts funded translational research in collaboration with adult sarcoma colleagues with the goal of developing novel investigator-initiated trials. In addition, Dr. Dhir supervises various trainee research projects and is the primary research mentor for the current third year pediatric hematology oncology fellow.
- Jennifer Coto, Ph.D.: Dr. Coto's research focus is the cognitive and psychosocial effects of cancer, bleeding disorders, and bone-marrow transplants.

- Edward Ziga, M.D.: Dr. Ziga's clinical research focuses on improving options for pediatric and adolescent patients who need hematopoietic stem-cell transplantation (HSCT) by developing new regimens that use HLA mismatched first-degree relatives as donors. His team has demonstrated the safety of this therapy through an initial pilot study of 10 patients who remain asymptomatic and disease free for a median of 12 months follow up since HSCT. He collaborates with industry and is the site principal investigator for an ongoing chimeric antibody receptor (CAR) T-cell therapy study to treat children and adolescents with relapsed or refractory leukemia and lymphoma and most recently the gene therapy trial for sickle-cell disease sponsored by BEAM Therapeutics. With an interest in global health, he has helped developed a pediatric stem-cell transplant program in Accra, Ghana, and led the team ton perform the first-ever bone-marrow transplant in a patient with sickle cell disease in Ghana.
- Rachel Kronenfeld, M.D.: Dr. Kronenfeld's research interests include hemophilia, rare bleeding disorders, women and girls with bleeding disorders, and pediatric anticoagulation. She was recently awarded the 2024 Hemostasis and Thrombosis Research Society/Novo Nordisk Inc. Clinical Scholars Award to further her research endeavors. She is currently studying the correlation between the genotype and phenotype profile in children with congenital FVII deficiency. She is also assessing the risk factors associated with cancer associated thrombosis in children, adolescents, and young adults with cancer. Dr. Kronenfeld is leading a quality-improvement project, Anticoagulation Stewardship, which aims to enhance patient safety enhance patient safety and facilitate transition of care for pediatric patients receiving anticoagulation at Holz Children's Hospital.
- **Meghan McCormick, M.D., M.S.**: Dr. McCormick's research activities center on improving supportive-care practices through cost-effectiveness model, administrative databases research, and quality-improvement studies.

# Inspiring patient State-of-the-art treatment, close to home

**Noe Hernandez-Orrego** is a 9-year-old boy with severe hemophilia A. He was born and raised in Guatemala, where due to limited local resources, was not able to receive standard prophylaxis therapy and developed moderate hemophilic arthropathy in his joints at this early age. After he was referred to our Hemophilia **Treatment Center and** in combined joint effort between all members of the multidisciplinary team,



he is now receiving state-of-the-art treatment for his hemophilia. This has allowed him to return to his regular activities both inside and outside his school in where he is able to participate and compete with his school's soccer and volleyball teams.

# Major Awards and Honors

#### **Dr. Alvarez**

Humanitarian Award, given by the Advancing Sickle Cell Advocacy, Inc, June 23, 2024

### Dr. Corrales-Medina

Inducted into The American Pediatric Society (2025)

This prestigious membership is reserved for individuals in the United States, Canada, Mexico, or the Caribbean who have distinguished themselves as leaders, teachers, scholars, policymakers, and clinicians in child health, with contributions recognized nationally or internationally.

# Physician Hero

**Dr. Aditi Dhir** is the ultimate teammate and collaborator. Always willing to discuss a challenging patient or a research proposal, always available to change shifts when needed, and always there to be a doctor and a friend. Her ability to get things done for her patients and in her research is inspiring.



# **Pediatric Infectious Diseases**

The Division of Pediatric Infectious Diseases is comprised of a multi-disciplinary team of skilled subspecialists, nurses, psychologists, social workers, and other team members who provide a medical home that provides comprehensive, stateof-the-art medical care and psychological support for infants, children, adolescents, and young adults for several infectious diseases that includes HIV. The Division is recognized globally for its pioneering research in the management and care of women, children, and adolescents living with or exposed to HIV.

We experienced 1,147 outpatient visits and 1,701 inpatient consults in 2024.

Our specialists provide expert outpatient clinical care in all areas of pediatric infectious diseases at the Ambulatory Care Clinic in Jackson Memorial Hospital, U Health in the Batchelor Children's Institute, and the Miami Transplant Institute. The Division provides 24-hour clinical coverage at Holtz Children's Hospital on the in-patient service, receiving referrals from the state, nationally, and internationally. Our faculty provides education to the next generation of physicians at our clinics and on our inpatient service.

Division faculty participate in national and international committees and are regularly invited to lecture at national and international conferences. The Division participates in multiple cutting-edge multicenter trials and investigator-initiated projects, including lab-based and global research funded through the NIH.

All members of the Division are committed to advancing the understanding and treatment of infectious diseases in children, training the next generation of health care professionals, and contributing to the broader scientific community's knowledge base. This approach will ensure highquality patient care, education, and research advancements in the field for years to come.



## **DIVISION CHIEF**

Rana Chakraborty, M.D., M.Sc., FAAP FRCPCH, D.Phil. (Oxon), FPIDS, FIDSA Professor of Clinical Pediatrics Adrienne Arsht Endowed Chair in Pediatric Clinical Research

## FACULTY

**Cecilia Banda Hibjan, M.D.** Assistant Professor of Clinical Pediatrics

#### Aida I. Chaparro, M.D.

Assistant Professor of Clinical Pediatrics Associate Outpatient Medical Director

### Ivan A. Gonzalez, M.D., DTM&H

Associate Professor of Clinical Pediatrics Director, Pediatric Infectious Diseases Training Program

**Charles D. Mitchell, M.D.** Professor of Clinical Pediatrics

### Marisa Orbea, M.D.

Assistant Professor of Clinical Pediatrics Antibiotic Stewardship Co-Director/Lead

# **Research Summary**

Dr. Chakraborty's NIH-funded laboratory investigates the impact of maternal infection on exposed infants, specifically at the maternal-fetal interface. Pathogens of interest include HIV, cytomegalovirus, Zika virus, and more recently, SARS-CoV-2. His funded research portfolio also includes examining the impact of structural racism and discrimination on placental epigenetics, in collaboration with Dr. Erica Johnson at Morehouse School of Medicine. In collaboration with Dr. Clive Gray at Stellenbosch University in South Africa, Dr. Chakraborty is funded as an MPI through the NIH Fogarty Institute on a unique HIV training program: NexT generation traininG in HIV Research: Immunity in the First 1,000 days in mother-infant dyadS" (TIGRIS). The program leverages existing NIH funding to investigate specific hypotheses related to how HIV infection in the pregnant woman leads to adverse birth outcomes and ensuing pediatric immune dysfunction through rigorous clinical and basic science laboratory training of graduate students in South Africa, Benin, Kenya, Malawi, and Uganda. The program will enhance HIV scientific research capacity in these countries.

Dr. Chakraborty previously chaired the Population Research in Infectious Diseases Study Section at the NIH and recently rolled off the Board of Directors at the Infectious Diseases Society of America.

# Mailman Center for Child Development

Funded by a federal training grant in 1967, the Mailman Center opened in 1971 as a University Center and division of the Department of Pediatrics. Designated as a University Center of Excellence in Developmental Disabilities (UCEDD), the Mailman Center includes faculty from most specialty areas of child health across the Department of Pediatrics, Miller School of Medicine, and many colleges and schools of the University of Miami.

#### We experienced 2,725 outpatient visits in 2024.

The Mailman Center is organized around five interprofessional collaboratives working on the themes of promoting behavioral health, community wellness, neurodevelopmental discovery science, neurodevelopmental intervention, and lifespan each focused on children with neurodevelopmental disabilities and other special health care needs. Leveraged funding across Mailman Center programs and collaborative research totaled \$47M. Its interdisciplinary clinical programs serve more than 13,000 children each year, over half in community settings and more than 75% from underrepresented minority backgrounds. Our Family Navigator Programs provided more than 600 families with access to services and community supports. More than 100 graduate trainees from over 15 different disciplinary specialties receive training through the Mailman Center Leadership Education in Neurodevelopmental Disabilities (LEND) Program, along with community professionals, self-advocates, and high-school students who participate in leadership pipeline programs. Community education programs reached more than 7,700 individuals in 2024. The research program at the Mailman Center includes a spectrum of projects ranging from basic science to community implementation research — with 23 new projects, 104 funded grants and contracts, 73 published papers, and 72 conference presentations in 2024.

The Mailman Center focus on the interface of disability and diversity has led to strong partnerships with three larger minority, low-income communities, as well as affiliations with more than 120 community, state, national and international organizations. Examples of innovation at the Mailman Center include implementation and expansion of a primary care clinic for older adolescents and young adults with developmental disabilities; an awareness and sensitivity training program for health care providers in acute care settings; apps to expand access to services; and a national collaboration between the Clinical and Translational Science Awards programs (NCATS) and the Association of University Center on Disability (AUCD). Mailman Center disciplines include: Developmental and Behavioral Pediatrics; Clinical Child, Adolescent, and Pediatric Psychology; Social Work; Audiology; Speech; Physical Therapy; Occupational Therapy; Genetics; Nursing; Nutrition; Child and Adolescent Psychiatry; Child Neurology; Special Education and Early Special Education; Assistive Technology; Dentistry, and Physical Medicine and Rehabilitation. Mailman Center clinical programs include:

- Interdisciplinary Evaluation Service (IDES)
- South Florida Fragile X Clinic
- Down's Clinic
- Debbie School MDCPS, Ear Institute
- PCIT Clinic
- Child Protection Team
- Early Steps
- Augmentative and Assistive Technology Clinic
- Audiology Clinic
- Speech and Language Therapy
- Pediatric Psychology Clinic
- Psychological Assessment Service
- Integrated Behavioral Health Clinics- Hem/Onc, Cystic Fibrosis, Endocrinology, Primary Care, HIV/AIDS
- School Health Program
- Pediatric Mobile Clinic
- Jackson Newborn Hearing Screening
- Healthy Steps
- Jump Start
- Florida Healthy Start
- Moving Beyond Depression
- Connect-Coordinated Intake and Referral
- Jasmine Project
- Families First
- Parent Club
- Team COACH
- Early Discovery
- VOCA Children
- Project THRIVE
- Auditory Oral Program-Debbie School



# DIRECTOR

### F. Daniel Armstrong, Ph.D.

Director, Mailman Center for Child Development Professor of Pediatrics and Psychology Special Senior Advisor to the Chair of Pediatrics

# Mailman Center for Child Development

## MAILMAN CENTER EXECUTIVE LEADERSHIP

#### **Glenn Flores, M.D., FAAP**

Chair of Pediatrics Associate Director, Mailman Center for Child Development Senior Associate Dean of Child Health Professor of Pediatrics and Public Health Sciences George E. Batchelor Endowed Chair in Child Health University of Miami Miller School of Medicine Physician-in-Chief Holtz Children's Hospital, Jackson Health System

**Michelle Schladant, Ph.D.** Associate Professor of Professional Practice Associate Director, Mailman Center

**Jason Jent, Ph.D.** Associate Professor of Clinical Pediatrics Assistant Director, Mailman Center

**Aja Levine, M.B.A.** Mailman Center Administrator and Director, Clinical Programs

## INTERPROFESSIONAL COLLABORATIVE LEADS

Ruby Natale, Ph.D., Psy.D.

Professor of Clinical Pediatrics Lead, Community Wellness IPC Associate Director of Research

#### Maite Schenker, Ph.D.

Assistant Professor of Clinical Pediatrics Co-Lead, Community Wellness IPC

#### Elizabeth Pulgarón, Ph.D.

Associate Professor of Clinical Pediatrics Lead, Promoting Behavioral Health IPC

#### Julieta Hernandez, Ph.D.

Assistant Professor of Clinical Pediatrics Co-Lead, Promoting Behavioral Health IPC Discipline Chief, Social Work

#### Lawrence B. Friedman, M.D.

Professor of Clinical Pediatrics Lead, Lifespan IPC Director, Section on Adolescent Medicine Lead, Lifespan IPC

**Rochelle Baer, M.S.W.** Co-Lead, Lifespan IPC

### Daniel Messinger, Ph.D.

Professor of Psychology Lead, Neurodevelopmental Discovery Science IPC

#### Robert Fifer, Ph.D.

Associate Professor of Clinical Pediatrics. (Retired 5/31/2024) Co-Lead, Neurodevelopmental Discovery Science IPC Discipline Chief, Audiology and Speech Pathology

#### Jennifer Coto, Ph.D.

Assistant Professor of Clinical Pediatrics Co-Lead, Neurodevelopmental Discovery Science IPC

### Michelle Berkovits, Ph.D., IMH-E

Associate Professor of Clinical Pediatrics Lead, Neurodevelopmental Intervention IPC Director, Early Steps Program

### Lynn Miskiel, M.S.

Co-Lead, Neurodevelopmental Intervention IPC

## CROSS-INTERPROFESSIONAL AREA DIRECTORS

Alan Delamater, Ph.D. Professor of Pediatrics and Psychology Director of Research, Mailman Center Discipline Chief, Pediatric and Clinical Child Psychology

**Eileen Davis, Ph.D.** Assistant Professor of Clinical Pediatrics Director of Clinical Services, Mailman Center

**Dainelys Garcia, Ph.D.** Associate Professor of Clinical Pediatrics Director of Innovation and Community Engagement, Mailman Center Director, Data Squad

**Elana Mansoor, Ph.D.** Assistant Professor of Clinical Pediatrics Director of Training, Mailman Center

Jennifer Walton, M.D. Associate Professor of Clinical Pediatrics Director of Social Justice and Health Equity in Disability Section Chief, Division of Developmental and Behavioral Pediatrics

# MAJOR PROGRAM DIRECTORS

Kathleen Vergara, M.A., CED Instructor of Pediatrics Director, Debbie School

**Walter Lambert, M.D.** Associate Professor of Clinical Pediatrics Director, Child Protection Team

**Daniel Messinger, Ph.D.** Professor of Psychology Director, Linda Ray Intervention Center

**Michelle Berkovits, Ph.D.** Associate Professor of Clinical Pediatrics Director, Early Steps Program

## MAILMAN CENTER FACULTY WITH PRIMARY APPOINTMENTS IN PEDIATRICS

Juliana Acosta Lievano, Ph.D. Assistant Professor of Clinical Pediatrics

**Pankaj Agrawal, M.D.** Professor of Clinical Pediatrics Chief, Division of Neonatology

Janielle Azaret, M.D. Assistant Professor of Clinical Pediatrics

**Emmalee Bandstra, M.D.** Professor of Clinical Pediatrics

**Anai Cuadra, Ph.D.** Assistant Professor of Clinical Pediatrics

**Tiffany Field, Ph.D.** Research Professor

Lisa Gwynn, D.O., M.B.A., MSPH, FAAP Professor of Clinical Pediatrics and Public Health Sciences Associate Chair, Population Health and Advocacy Director, Section of Community Pediatrics Medical Director, Pediatric Mobile Clinic and School Health

**Carly Brand Levine, M.D.** Assistant Professor of Pediatrics

**Ana Londono, M.D.** Assistant Professor of Pediatrics

**Luiza Mali, Ph.D.** Assistant Professor of Clinical Pediatrics

**Connie Morrow, Ph.D.** Associate Professor of Clinical Pediatrics

**Ignacio Tapia, M.D.** Professor of Clinical Pediatrics Chief, Division of Pediatric Pulmonary Medicine

Karina Paula Perez, Psy.D. Assistant Professor of Clinical Pediatrics

Jean Sherman, Ed.D. Research Assistant Professor Mailman Center Liaison to the Florida Developmental Disabilities Council, Inc.

**Allison Weinstein, Ph.D.** Assistant Professor of Clinical Pediatrics

Shu Wu, M.D. Professor of Clinical Pediatrics

## Mailman Center for Child Development

## MAILMAN FACULTY WITH PRIMARY APPOINTMENTS OUTSIDE PEDIATRICS

Jonathan Tolentino, M.D. Department of Medicine-Pediatrics

Victor Cueto, M.D. Department of Medicine-Pediatrics

**Anjoli Saxena, M.D.** Department of Medicine-Pediatrics

Martha Bloyer, Ph.D. Department of Physical Therapy

Hudson Santos, Ph.D. School of Nursing (Dean)

Yui Matsuda, Ph.D. School of Nursing

Ashley Falcon, Ph.D. School of Nursing

**Batya Elbaum, Ph.D.** Department of Teaching and Learning

**Ivette Cejas, Ph.D.** Department of Otolaryngology

Adrien Eshraghi, M.D. Department of Otolaryngology

**Chrisanda Sanchez, AuD** Department of Otolaryngology

Jordan McNair, AuD Department of Otolaryngology

**Barbara Coffey, M.D.** Department of Psychiatry and Behavioral Sciences (Chair)

**Garauv Saigal, M.D.** Department of Radiology

**Mustafa Tekin, M.D.** Department of Human Genetics (Chair)

**Deborah Barbouth, M.D.** Department of Human Genetics

Willa Thorsen, M.D. Department of Human Genetics **Roberto Lopez, M.D.** Department of Neurology

**Michael Benatar, M.D.** Department of Neurology

**Michael Paidas, M.D.** Department of Obstetrics, Gynecology and Reproductive Medicine (Chair)

**JoNell Potter, Ph.D.** Department of Obstetrics, Gynecology and Reproductive Medicine

**Rodrigo Ruana, M.D.** Department of Obstetrics, Gynecology and Reproductive Medicine

**Joslyn Gober, M.D.** Department of Physical Medicine and Rehabilitation

**Brian Grottkau, M.D.** Department of Orthopedics

**Xavier Cortada** Department of Art History

**Kenneth Goodman, Ph.D.** Department of Medicine Director, University of Miami Bioethics Institute

Jennifer Durocher, Ph.D. Department of Psychology

**Rebecca Shearer, Ph.D.** Department of Psychology

**Jill Ehrenreich-May, Ph.D.** Department of Psychology

Meghan Parlade, Ph.D. Department of Psychology

Yanerys Leon, Ph.D. Department of Psychology

**Michael Allesandri, Ph.D.** Department of Psychology

Sara St. George, Ph.D. Department of Public Health Sciences

Viviana Horrigan, Ph.D. Department of Public Health Sciences

# Honors and Awards

**Jairo Arana**: Elected to Association of University Centers on Disabilities Board of Directors

**Shelly Baer, M.S.W., LCSW**: 2024 University of Miami Miller School of Medicine Community Partner Award

**Xavier Cortada**: National Academy of Sciences Climate Science Art Exhibition

**Glenn Flores, M.D.**: 2024 AcademyHealth Reinhardt Distinguished Career Award

**Glenn Flores, M.D.**: 2024 American Pediatric Society David Nichols Health Equity Award

**Dainelys Garcia, Ph.D.**: 2024 Parent Child Interaction Therapy Trailblazer Advocacy Award

Jason Jent, Ph.D.: 2024 Dean's Award for Inclusive Excellence

**Jason Jent, Ph.D.**: 2024 Micah Batchelor Award for Excellence in Children's Health Research

**Jumpstart Program**: The Children's Trust 2024 Program of the Year Award

**Walter Lambert, M.D.**: Florida Department of Children and Families Lifetime Achievement Award

**Mailman Center Step-Up AT Program**: 2024 Head Start Very Important Partner Award

**Ruby Natale, PhD, Psy.D.**: 2024 Dean's Community Engagement Award

Jennifer Walton, M.D.: 2024 Society for Developmental and Behavioral Pediatrics Mid-Career Award

# Mailman Center Hero

Cameron Hope Tovin, a first-

year M.D./M.P.H. student at the University of Miami Miller School of Medicine, might not recall the exact moment she decided to become a physician. But she'll never forget where her motivation originated: her older brother, Zachary, "the best brother I could ever ask for," she said.



Zachary Tovin, 27, has high-functioning autism. Thanks to early intervention, a devoted family, and a supportive community, he is flourishing. Zachary attends culinary school, works part-time, enjoys cooking for his family, and looks forward to independent living. Along the way, he inspired his sister to commit to a career helping individuals like him.

But at first, she wasn't sure what sort of career it would be.

Growing up in Fort Lauderdale and the child of two physical therapists, Tovin was surrounded by the disability community. She volunteered for the Special Olympics and her mother ran a Special Olympics team. She explored disability law but decided that it wasn't for her.

"I wanted a career advocating for people with disabilities," she said.

But she wanted to be involved personally and work with families. In high school she joined the health science club.

"When I learned about research," she explained, "I felt excited about the possibility of contributing to new information and data that can help improve the lives of those with disabilities."

...continued on next page

# Mailman Center Hero

As a University of Miami undergraduate majoring in neuroscience and medical anthropology, Tovin explored her options by learning about medical specialties. She had some outstanding mentors and role models. When Tovin was about to embark on a semester in Rome, her psychology professor, Debra Lieberman, Ph.D., suggested she find a museum job there.

"It was a paleoarchaeology museum internship, which furthered my anatomical understanding of the human body and matched my research interests in medical anthropology," she said.

Volunteering at the Mailman Center for Childhood Development at the Miller School, Tovin met two inspirational individuals who helped her connect with people with disabilities: Shelly Baer, Director of Leadership Training Initiatives at the Mailman Center, and Jairo Arana, Clinical Program Coordinator at the University of Miami.

Tovin still volunteers as a LEND (Leadership Education in Neurodevelopmental Disabilities) trainee at the Mailman Center, where she teaches high schoolers about disability advocacy and leadership. She also volunteers at the University of Miami's PATH (Progression Across Transition in Healthcare) Clinic, which provides coordinated care for patients with developmental disabilities transitioning from pediatric to adult care. And she recently began helping medical residents learn how to interact with individuals with intellectual and developmental disabilities.

Learning about transition medicine piqued Tovin's interest in public health. There are a lot of programs for young people with developmental disabilities and autism, she said. But when they become adults, there are fewer resources available.

"They're falling off the services cliff," she said. "It's the same with pediatrics. For people with developmental and intellectual disabilities, the transition is more difficult because not all adult primary caretakers fully understand the unique health conditions or how to interact with them."

Tovin watched her brother struggle with this transition.

"It was difficult for him after he aged out as a pediatric patient," she said. "Primary care physicians need to understand the unique health needs and risk factors that typical individuals don't face."

With her brother's challenging transition in mind, Tovin hopes to enter an internal medicine/pediatrics residency program after graduation. Meanwhile, her M.P.H. capstone project will focus on the transition period for individuals with developmental and intellectual disabilities.

"The medical curriculum in general should be geared toward public health," said Tovin. "The patient in front of you is part of a larger population. This person has a background. There are social determinants of health."

In the future, she sees herself involved in teaching, practicing and research.

"With everything going on in the world," said Tovin, "protecting people with disabilities is really important."
### **Inspiring Patient**

# Just another child exploring the universe in their own way

# 66 99

**Picture this:** You're an author setting the scene in your first novel. Anything is possible: you can break physics, logic, and even causality. Now, imagine if the author was simultaneously able to create and be part of the created. This is my own scenario: something that I experienced while creating my first at-scale computer program.



These are the words of **Pierre De Agostini-Frometa** an 11th grade student enrolled at the School for Advanced Studies – Wolfson, a prestigious program within Miami-Dade County Public Schools where he is earning an Associate of Arts degree along with his high school diploma. He is majoring in computer science" and "philosophy with the intent of becoming a software engineer.

Pierre was a 2-year-old boy with bilateral hearing loss when his parents came to the University of Miami Miller School of Medicine Mailman Center for Child Development Debbie Institute (School) looking for support for Pierre to learn to listen and talk. He was getting cochlear implants at the Miller School of Medicine Department of Otolaryngology and needed intensive support to develop his language skills. In addition to the educational, audiological, and otolaryngological interventions Pierre's team included Miller School of Medicine specialists in general pediatric medicine, pediatric cardiology, and pediatric gastroenterology.

Pierre's father, Pierre De Agostini, describes being devastated when they were told that Pierre had hearing loss. Without early diagnosis and intervention, hearing loss negatively impacts speech and language acquisition, academic achievement, and social and emotional development. The auditory neural development of children born with hearing loss does not progress at the same rate as children born with hearing and it is well documented that the first years of a child's life are the key to language development. The Debbie School's Auditory Oral Education Program provides families with the opportunity to enroll their children in a high-quality listening and spoken language program to provide the foundation for them to live their lives without limits. Mr. De Agostini is immensely grateful for the Miller School of Medicine team who gave them hope for Pierre.

With access to sound through his cochlear implants, the Debbie School's expertise in listening and spoken language, and the support for his physical health Pierre thrived and developed into a young person able to share his perception of the universe. Among the many community activities that Pierre participates in he was selected to be the student representative on the Miami-Dade County Public School's Superintendent's District Advisory Panel for Exceptional Student Education and now is using his own voice to advocate for other students with special needs.

The opportunity to be just another child exploring the universe in their own way is the outcome everyone at the Department of Pediatrics works for every day for every child.

# **Pediatric Mobile Clinic**

The Pediatric Mobile Clinic offers free comprehensive medical care to local uninsured children. We accept patients who have never received basic preventive care, and provide health screenings, including physical exams, eye exams, hearing testing, and bloodwork. The Clinic bus parks near Miami-Dade public schools, houses of worship, and community centers, making medical services more accessible to families under-served.

Number of patients served in 2024 were 13,317.

The Mobile Clinic offers the same services and quality of care provided in a traditional pediatrician's office. For children requiring emergency care or evaluation by a specialist, we offer referrals to the UHealth Jackson Children's Care system. The Mobile Clinic team also connects families with free community-based resources for social and psychological services.

Lisa Gwynn, D.O., M.B.A., MSPH, FAAP, a UHealth pediatrician, is Director of the Pediatric Mobile Clinic. The entire staff is committed to offering culturally-sensitive care to patients from around the world, with extensive experience serving local families from Latin America and the Caribbean. To address families' medical, psychological, and social service needs, the Mobile Multidisciplinary Care team includes bilingual and some tri-lingual physicians, nurses, a social worker, and a psychologist.



#### MEDICAL DIRECTOR

Lisa Gwynn, D.O., M.B.A., MSPH, FAAP

Associate Professor of Clinical Pediatrics Medical Director of the Pediatric Mobile Clinic

#### FACULTY

**Wendy De La Rua, M.D.** Assistant Professor of Clinical Pediatrics

# Neonatology

The Division of Neonatology consists of 27 full-time academic neonatologists and pediatricians who provide specialized care to hospitalized infants at Holtz Children's Hospital, Jackson North, and Jackson South each day, as well as antenatal consultation for complex problems referred to our perinatal center. Several of our clinical faculty are involved in cuttingedge bench and bedside research aided by our four PhD faculty and several research associates in the Division. As a university-based program, we are at the forefront of leading NIH and philanthropy-funded projects in basic science, genomics, and various clinical studies. As a result of the excellent clinical work, quality-improvement efforts, and the research conducted by our faculty and our teams, our outcomes are excellent, and we are proud of our high survival and low complication rates.

We experienced 34,976 inpatient admissions in 2024.



#### **DIVISION CHIEF**

Pankaj Agrawal, M.D., MBBS, MMSc Professor of Clinical Pediatrics Project Newborn Distinguished Chair in Neonatology Professor of Pediatrics and Genetics Chief, Newborn Services

#### FACULTY

**Susana Agudelo Uribe, M.D.** Assistant Professor of Clinical Pediatrics

**Eduardo Bancalari, M.D.** Professor Emeritus (Pediatrics and Obstetrics and Gynecology)

**Emmalee Bandstra, M.D.** Professor of Pediatrics and Obstetrics and Gynecology Director, UM Perinatal CARE Program

Merline Benny, M.D. Assistant Professor of Clinical Pediatrics

Laura Chavez, M.D. Assistant Professor of Clinical Pediatric

**Teresa Del-Moral, M.D., MPH** Professor of Clinical Pediatrics Associate Director, Newborn Intensive Care Unit

Jo Duara, M.D., MPH Assistant Professor of Clinical Pediatrics **Shahnaz Duara, M.D.** Professor of Pediatrics and Obstetrics and Gynecology

**Dora Fernandez, M.D.** Assistant Professor of Clinical Pediatrics

**Tania Fontanez-Nieves, M.D.** Assistant Professor of Clinical Pediatrics

**Grisel Galarza, M.D., IBCLC** Assistant Professor of Clinical Pediatrics

Hernando Lluberes, M.D. Assistant Professor of Clinical Pediatrics

**Cristina Navarrete, M.D.** Assistant Professor of Clinical Pediatrics

Maria Peinado, M.D. Assistant Professor of Clinical Pediatrics

**Augusto Schmidt, M.D.** Associate Professor of Clinical Pediatrics

Ilene Sosenko, M.D. Professor of Pediatrics Associate Director, Clinical Development and Outreach Associate Director, Neonatal-Perinatal Medicine Fellowship Program Medical Director, Newborn Services, Jackson North Medical Center

**April W.J. Tan, M.D.** Assistant Professor of Clinical Pediatrics

**Marcus Tauscher, M.D.** Assistant Professor of Clinical Pediatrics

**Zenaida Tauscher, M.D.** Assistant Professor of Clinical Pediatrics

Jose Tolosa, M.D. Assistant Professor of Clinical Pediatrics

Maritza Torres, M.D. Assistant Professor of Clinical Pediatrics

**Lilliana Villegas, M.D.** Assistant Professor of Clinical Pediatrics

**Melissa Vick, M.D.** Assistant Professor of Clinical Pediatrics

**Shu Wu, M.D.** Professor of Clinical Pediatrics Director, Neonatal Developmental Biology Lab

Karen Young, M.D., M.S., FAAP Professor of Clinical Pediatrics Director, Neonatal-Perinatal Medicine Fellowship Program Medical Director, Newborn Intensive Care Unit

#### Neonatology

#### **RESEARCH FACULTY**

**Nelson Clauré, MSc, Ph.D.** Research Professor Director, Neonatal Respiratory Physiology Laboratory

**Qifei Li, Ph.D.** Research Assistant Professor

**Shiyu Lu, Ph.D.** Research Assistant Professor

Klaus Schmitz-Abe, Ph.D. Research Associate Professor

# **Clinical Services**

With 126 level II, III, & IV intensive care beds, the Schatzi and Stanley Kassal Project: Newborn Neonatal Intensive Care Unit (NICU) at Holtz Children's Hospital at the University of Miami/Jackson Memorial Medical Center is one of the largest neonatal centers in the country. Clinical care is provided by UM faculty in the Division of Neonatology and subspecialty pediatric medical and surgical consultants. The NICU is designated as a Regional Perinatal Intensive Care Center by the State of Florida and has excellent outcomes. The Level 4 NICU at Holtz Children's Hospital is contiguous to the OB Triage, the Labor Suites and the OB operating rooms, all part of the maternity areas of Holtz Women's Hospital. The extremely busy maternal-fetal medicine program is a growing fetal surgery program, and a regional center for multidisciplinary care of babies diagnosed with fetal cardiac disease, fetal surgical anomalies, fetal diseases of the kidneys, ureters and bladder, and a spectrum of dysmorphologies diagnosed in utero and referred to the center for optimal antepartum, intrapartum, and postpartum care. Given this diversity, the inborn service at Holtz rivals the diversity seen in NICUs attached to free-standing Children's Hospitals. Multidisciplinary planning for the day of delivery may begin several months before the due date, depending upon the problems anticipated in either mother or infant (s), and planning covers the timing of delivery, route of delivery, and type of anesthesia indicated. Additional studies, which may include amniotic fluid sampling, fetal blood sampling, and fetal MRI, are routinely done, as well as interventions such as fetal transfusion and fetal interventions. Our NICUbased ECMO program, staffed by a group of specially trained faculty, provides life-saving support to infants at delivery, if needed. Being the only Level 1 Trauma Center with all subspecialty care available for critically ill pregnant women in this region, our NICU cares for some of the smallest and sickest patients admitted for care. The expertise of our pediatric

sub-specialties also brings requests for transfers from other regional Level III NICUs for targeted NICU care of complex patients. Our faculty also provide care for infants born at two satellite hospitals, Jackson North, and Jackson South, that are part of the Jackson Health System.

# Teaching

At the heart of our program is the educational mission of the Division, reflected in a most successful neonatal training program that over the last 50 years has trained close to 150 neonatologists who practice in units around the world. We strive to provide our fellows with the highest quality clinical education. Fellows train in a robust learning environment conducting research in clinical and basic science projects. In this way, our Division continues to contribute to the neonatology workforce by training future leaders in neonatal clinical and academic medicine. More than 50% of graduates embark on academic careers.

#### Programs/accolades developed over the past year include:

- Training in POC ultrasonography for fellows
- Training in genomics for fellows
- Establishment of the Fetal Care Center is helping fellows with prenatal care and consults
- Implementation of a cardiac intensive-care rotation for neonatology fellows

#### Program (volumes, specific programs)

- Average # NICU admissions/year to Level II, III-IV over past 5 years (2020-2024): 1,490
- Average survival of babies < 29 weeks over the past 5 years (2020-2024): 80%

#### Miami Neonatology Annual International Conference

The 48th Miami Neonatology International Conference was a resounding success, attracting over 1,000 attendees from 39 countries. The event featured a Pre-Conference Workshop, a Keynote Lecture in recognition of the late Dr. Charles Bauer (co-founder of this conference), and a series of lectures and panel discussions that included recognized experts in the different topics addressed.

With its diverse international audience, the Conference fostered meaningful networking and collaboration, making it a key event for professionals dedicated to improving neonatal health worldwide. The success of this year's Conference underscores its continued preeminence as a platform for global exchange in neonatology.

# Physician Hero: Dr. Marta Grisel Galarza

Dr. Galarza's journey in

neonatology is truly inspiring. Her dedication to improving neonatal outcomes is evident not only through her clinical care, but also through her innovative approaches. After completing her fellowship at St. Louis University, she joined the University of Miami's neonatology faculty, where she



provides exceptional care to sick neonates and their families.

Her introduction of Kangaroo Care in our NICU is a testament to her innovative approach and dedication to improving neonatal outcomes. By allowing mothers and fathers to hold their tiny, ventilator-dependent neonates skin-to-skin, she has created a comforting and healing environment for both parents and babies. Her willingness to explore and implement such methods beyond classical clinical care highlights her commitment to holistic and family-centered care.

Dr. Galarza's contributions to the Baby Friendly initiative and her efforts to secure this prestigious designation for the entire Jackson Health System are truly commendable. This initiative emphasizes the importance of breastfeeding and mother-infant bonding, aligning perfectly with her commitment to improving neonatal outcomes. By introducing a lactation curriculum for medical students, pediatric residents, and NICU fellows at the University of Miami/Jackson Memorial, Dr. Galarza has ensured that future health care providers are well-versed in the critical role of breastfeeding. This curriculum covers the benefits of breast milk, techniques for successful breastfeeding, and ways to support lactating mothers, thereby enhancing overall care provided to neonates.

Dr. Galarza's initiative to develop a NICU-specific Palliative Care Program at Holtz Children's Hospital is another testament to her comprehensive approach to neonatal care. By addressing the need for palliative care, she has ensured that both neonates and their families receive compassionate and holistic support during challenging times. Her addition of a palliative care curriculum for neonatal and MFM fellows further underscores her commitment to education and the continuous improvement of care standards. This program not only benefits current patients, but also trains future health care providers to deliver empathetic and specialized care.

Dr. Galarza's dedication to neonates and their families extends well beyond the hospital setting. As a founding board member of the nonprofit organization NICU Alumni, she has played a crucial role in providing ongoing support to families after they leave the NICU. This organization offers a variety of resources, including:

- Peer Support Groups: These groups connect families who have experienced similar challenges, providing a sense of community and shared understanding.
- Educational Podcasts: NICU Alumni produces podcasts that cover a range of topics relevant to families with NICU graduates, offering valuable information and insights.
- Interactive Website: The organization's website serves as a hub for resources, including articles, guides, and tools to help families navigate life after the NICU

Dr. Galarza's involvement in NICU Alumni demonstrates her commitment to supporting families through every stage of their journey, ensuring they have the resources and support they need to thrive.

It's clear that Dr. Galarza's efforts have made a profound impact on the lives of many families and their vulnerable infants. Without a doubt, Dr. Galarza represents a true HERO for our NICU families.

# **Research Summary**

#### **New Research Endeavors in Neonatology**

We are building a first-of-its-kind "Neonatal Genomics and Multiomics Center" with the overarching goal of advancing genomics and multiomics approaches to improve the care of newborns. The goals include: i) achieve molecular diagnosis in our NICU babies using rapid genome sequencing, aided by the Virtual Genome Center (VIGOR) project, R01-funded by NHGRI/ NIH, ii) establish a biobank to collect, store, and process DNA and RNA samples from infants in the NICU for future genetic and molecular studies, iii) determine the underlying molecular basis of various prematurity-related disorders including bronchopulmonary dysplasia, necrotizing enterocolitis, intraventricular hemorrhage, iv) determine how genomic sequencing technologies may aid in newborn screening, and how that approach will impact families and physicians (ethical, legal and social implications), and the associated costs, and v) develop precise therapies in the NICU in collaboration with researchers and private organizations. In addition, we are building a "Center for orphan diseases (CODe)" with the goal of finding the genetic and molecular basis of various orphan diseases that remain undiagnosed despite extensive clinical testing. Previously, we have published >100 papers related to

novel gene discoveries. We are utilizing various technologies, including whole genome, and/or RNA sequencing, modeling of variants in various cellular and animal models, and determining therapeutic options when a causative genetic variant is identified. Another area of our research is to determine the genetic basis of various congenital myopathies. We have identified several genes, including cofilin-2 (CFL2), titin (TTN), and striated preferentially expressed gene (SPEG), to be mutated in those conditions. Currently we are utilizing mouse models of SPEG deficiency and utilize multiomic approaches to determine molecular functions of SPEG. We are also exploring various therapeutic approaches including antisense oligonucleotides and cell-based therapies against SPEG-related phenotypes. To achieve our goals described above, we have built a team of bioinformaticians, research scientists, genetic counselor, and several research associates and clinical coordinators.



## **Inspiring Patient**

Phoenix Stoute was born to Lauren Stoute at 27-weeks gestation, weighing 1 pound, 11 ounces. She was immediately whisked off to the (NICU) to be cared for, as her lungs were very immature, and she needed to be intubated right after birth and put on an oscillator ventilator within a few days. The team was very worried about Phoenix's health, not only because of her very immature lungs but also other organ systems including gastrointestinal system, and heart, which needed a lot of critical support over several weeks.

During her time in the NICU, she overcame a host of challenges that included severe lung disease, poor feeding, patent ductus arteriosus, anemia, and pneumonitis. Phoenix went home 16 weeks later, breastfeeding and breathing fully on her own, a testament to the amazing care provided by the NICU team, and Lauren's dedication to her baby. "Lauren was a critical ally in Phoenix's care. She was extremely thoughtful, always available, and provided breast milk without interruption, all of which really contributed to Phoenix's success," said Dr. Agrawal, member of the NICU team. "She had great questions and ideas and continues to work with us closely as she becomes a great advocate and partner for us." Meanwhile, Lauren has also become a member of the Family Advisory Council to advocate and support families, especially those who go through the NICU journey. Now 1 year old, Phoenix is doing great, as she continues to amaze everyone.

# Pediatric Nephrology and Hypertension

The Division of Pediatric Nephrology and Hypertension has a long and prestigious history of caring for children with kidney disease since its beginning over 60 years ago by Dr. Jose Strauss as a founding father of the International Pediatric Nephrology Association. This legacy has endured and been sustained through the annual Miami Pediatric Nephrology Seminar. The Division has maintained expertise in the diagnosis and treatment of all forms of kidney disease throughout the life course including prenatal consultations and therapeutic interventions, neonatal and critical care nephrology, dialysis and transplantation as well as more common disorders of voiding dysfunction, urinary tract infections and childhood hypertension. We are among 3 centers of excellence in the state of Florida for treatment of chronic kidney disease in children (CCKFC). The Miami Transplant Institute is consistently ranked among the top 5 in the nation for the number of successful solid organ transplants. Our mission is three-fold including service to patients and families, the education of the next generation of physicians and the promotion of scientific research to cure disease. Our ACGME accredited fellowship program is world renowned and is represented by its exceptional graduates. We were among the top 10% of the programs in the country to fill all available slots during the match. We also offer a joint Med-Peds Nephrology fellowship and a post-graduate one year Transplantation specialty fellowship to suitable candidates. Each of our faculty participates in clinical and academic pursuits to further our mission and maintain the best outcomes internationally.

The Division of Pediatric Nephrology and Hypertension is noted for being one of 3 "Centers of Excellence" in the state of Florida for treatment of children with chronic kidney disease including the largest individual Pediatric Dialysis and Pheresis center in South Florida and one of the top volume Pediatric Renal Transplant centers in the country.

We experienced 2,464 outpatient visits and 2,536 inpatient admissions in 2024.

#### **Pediatric Nephrology Fellowship**

The University of Miami/Jackson Health System Pediatric Nephrology Fellowship Program, in affiliation with the Department of Pediatrics at the University of Miami Leonard M. Miller School of Medicine, includes full-time, board-certified pediatric nephrologists, a transplant nurse practitioner, transplant nurse coordinators, a nurse liaison/case manager, research coordinator, post-doctoral research scientist, dialysis nursing staff, clinical social worker, dietitian, psychologist and administrative staff. The division is the main referral center for children with kidney and urinary tract disorders throughout South Florida, and it covers a total population of more than 4 million inhabitants, which ensures vast and varied clinical exposure for each fellow during the training program. We provide patient care, consultation, dialysis and kidney transplantation and work closely with multispecialty including transplant and urological surgeon, pediatric / neonatal intensive care unit and serve dedicated special clinic for children with spina bifida, chronic kidney disease in multidisciplinary care.



#### **DIVISION CHIEF**

Carolyn Abitbol, M.D., FAAP, FACN Professor of Pediatrics

#### FACULTY

**Jayanthi Chandar, MBBS, M.D., M.S.** Professor of Clinical Pediatrics Director of Pediatric Kidney Transplantation

Marissa DeFreitas, M.D., M.S. Associate Professor of Clinical Pediatrics Associate Director, Pediatric Nephrology Fellowship

**Chryso Katsoufis, M.D.** Associate Professor of Clinical Pediatrics Medical Director, Pediatric Dialysis

**Wacharee Seeherunvong, M.D.** Associate Professor of Clinical Pediatrics Director, Pediatric Nephrology Fellowship

Vaka Sigurjonsdottir, M.D. Assistant Professor of Clinical Pediatrics

**Tara Gavcovich, M.D.** Voluntary Assistant Professor of Clinical Pediatrics

**Wendy Glaberson, M.D.** Voluntary Assistant Professor of Clinical Pediatrics

Shathiyah Kulandavelu, Ph.D. Research Assistant Professor

#### Pediatric Nephrology and Hypertension

#### ASSOCIATED FACULTY PEDIATRIC UROLOGY ASSOCIATES

Alireza Alum, M.D. Andrew Labbie, M.D. Rafael Gosalbez, M.D.

#### MIAMI TRANSPLANT INSTITUTE

**George Burke, III, M.D.** Professor, Transplant Surgery

**Gaetano Ciancio, M.D.** Professor, Transplant and Urological Surgery

Mahmoud Morsi, M.D. Assistant Professor, Transplant Surgery

#### MATERNAL FETAL MEDICINE

**Rodrigo Ruano, M.D., Ph.D.**, Professor of Obstetrics and Gynecology Chief, Maternal and Fetal Medicine

#### PEDIATRIC NEPHROLOGY MAJOR AWARDS AND HONORS

**Carolyn Abitbol**: *Lifetime Achievement Award* in recognition of a distinguished career and outstanding contributions to the field of Neonatal Nephrology; 2024 International Neonatal Nephrology Symposium, September 2024, Birmingham, Alabama

**Marissa DeFreitas**: Oral Abstract Award for Excellence in Research: International Neonatal Nephrology Symposium, September 2024

Chryso Katsoufis: Elected to the American Pediatric Society

**Wacharee Seeherunvong**: Recognition as NephCure Specialist for a non-profit national advocacy organization (NephCure) serving patients and their families with primary glomerular disease, a rare protein-spilling kidney disease, July 2024

# Physician Hero: Dr. Chryso Katsoufis

**Dr. Chryso Katsoufis** is an associate professor and Medical Director of the Pediatric Dialysis Unit at Holtz Children's Hospital. She is a quintessential leader in the Division of Pediatric Nephrology and continues to innovate to improve the care of children with kidney disease. She serves as the site Principal investigator for the PRESERVE study, a



Patient Centered Outcomes Research Institute funded prevent which seeks to provide new knowledge to inform shared decision-making regarding blood pressure management for pediatric chronic kidney disease. She spearheaded the Pediatric and Neonatal Critical Care Nephrology Workshop to allow faculty and trainees to obtain hands-on experience in managing various acute dialysis modalities. Dr. Katsoufis is a part of the Fetal Care Center at our institution led by Dr. Rodrigo Ruano and provides prenatal consultations for expectant mothers with pregnancies complicated by congenital anomalies of the kidney and urinary tract. In addition, Dr. Katsoufis has led the efforts to incorporate our site as part of the Standardizing Care to Improve Outcomes in Pediatric End Stage Kidney Disease Dialysis Collaborative to reduce rates of peritonitis in peritoneal dialysis patients. She is an excellent teacher and has been awarded the Faculty Attending of the month by the pediatric residents. She also provides numerous lecture series for the NICU and PICU, and is highly sought-after to speak at national and international conferences. She was recently elected as a member of the American Pediatric Society, the oldest and most prestigious academic pediatric society. She is committed to service and is an active member of various education committees for residents and fellow trainees. Dr. Katsoufis is beloved by her patients for her exceptional bedside manner and commitment to providing excellent care.

## **Inspiring Patient**

# Meet Olivia, a 9-year-old girl with a one-of-a-kind personality who epitomizes a fighter



**Olivia Taylor** began her life at Holtz Children's Hospital at the University of Miami/Jackson Memorial Medical Center, where she was born via C-section at 34 weeks on October 1, 2015. She was diagnosed prenatally with bladder outlet obstruction, with known kidney, gastrointestinal, vertebral and urologic abnormalities. Most significantly, she required immediate surgeries including a permanent colostomy and gastrostomy as well as relief of the bladder outlet obstruction. She had a prolonged stay in the NICU involving many procedures and stabilization of her kidney dysfunction.

Olivia's first year of life was further complicated by the cancer diagnosis of neuroblastoma, requiring removal of her right adrenal gland when she was 7 months old. Because of her worsening kidney function, she required multiple hospital admissions throughout that first year of life, and then started peritoneal dialysis just a few weeks after her 1st birthday. She has been part of our Pediatric Dialysis family ever since.

After seven years on peritoneal dialysis and multiple hospitalizations, Olivia received an offer for a kidney transplant on November 15, 2023. Her strong will was shown when she was sitting up in a chair and demanding that our team change the channel on the TV the morning just after her transplant.

Olivia has overcome many obstacles — and all from her very first day of life. She recovered from her transplant with the tenacity she has continually demonstrated. Olivia's medical-surgical team has included: Pediatric Nephrology; Nephrology Transplant; Pediatric Dialysis; Pediatric Urology; Neonatal Intensive Care Unit; Pediatric Intensive Care Unit; Oncology; Pediatric Surgery; Infectious Disease; Cardiology; Genetics; ENT; Physical, Occupation and Speech Therapy; and Nutrition.

Olivia is now home, going to sleep every night with her new, functioning kidney instead of being hooked up to a machine. Olivia has grown up at our hospital, and her journey has shown that while the complex care we provide spans years, departments and divisions, our commitment to our patients can change both their lives and ours.

# NATIONALLY ACCREDITED CENTER Poison Control Center

The UM/JMH Florida Poison Control Center is one of only 55 nationally accredited and certified regional poison control centers in the U.S. The Center received the full seven year accreditation through November 1, 2030, by the American Association of Poison Control Centers. The Poison Control Center is a cooperative effort between Jackson Health Systems, University of Miami Miller School of Medicine, the State of Florida Department of Health/Children's Medical Services, CDC, FDA and HHS/HRSA.

The UM/JMH Florida Poison Control Center/Miami provides 24-hours-a-day, 365-days-a-year poison emergency treatment and information resource for health care professionals and the public in South Florida. It is one of three centers comprising the Florida Poison Information Center Network. In 2023, the Center assisted with over 60,000 poisoning exposures and served over 7 million people in Miami-Dade, Broward, Palm Beach, Monroe, Lee, and Collier Counties. The Center, physically located in the Miami Transplant Institute and academically resides in the Department of Pediatrics.

When a child ingests a poisonous or toxic substance, desperate parents need help in an instant. That's why they call the UM/Jackson Medical Center Poison Control Center. We assess the situation in minutes, if not seconds, and guide them through the key steps to effectively manage the situation at home — saving time, money, and, most importantly, young lives. We also provide clinical guidance to any treating hospital when more serious poisonings send families to the nearest emergency department. The Poison Control Center treats approximately 30,000 children each year. And like all of Florida's poison control centers, the center is funded through the Florida Department of Health Children's Medical Services Division.



#### FACULTY

**Richard Weisman, Pharm.D., FAACT** Associate Dean Emeritus Professor of Pediatrics and Medical Education Director, Florida Poison Control – Miami

#### We also provide information on:

- Bites and envenomation from insects, spiders, reptiles, marine life
- · Household and personal products
- · Pesticides and chemicals
- Food poisoning
- Plants and mushrooms
- · Prescription and over-the-counter medicine
- · Herbal and dietary supplements drugs
- Substances of abuse

The Florida Poison Control Centers have been recognized in Congressional reports as one of the most cost-efficient poison center networks in the nation.

FPICN's health educators provide statewide awareness of poisoning trends and risks and offer prevention strategies to the general public and health care providers. Preventing poisonings from occurring is another fundamental costavoidance strategy of the poison center system.



# PUBLIC SCHOOLS PROGRAM The School Health Initiative

The Dr. John T. Macdonald Foundation School Health Initiative (SHI) is a unique program that strives to increase health equity by improving children's health and quality of life, while reducing disparities in health outcomes. Established in 2001, the SHI now provides medical care to over 12,000 children in nine Miami-Dade County public schools.

Number of patients cared for in 2024 were 20,490.

Partnered with school administrators, teachers, and parents who consider our clinic the primary medical providers for their children, SHI provides a rare school-health model that prioritizes psychological intervention for students who have been identified as having mental health or behavioral challenges. In all cases, the program aims to bridge the gap in access to quality medical and mental health care for children from underserved communities.

By focusing our work on the whole child through risk assessment, prevention, wellness, and early diagnosis and treatment, the program's multidisciplinary teams have created a model program for other communities to follow.



FACULTY

Margia Ambroise, M.D. Assistant Professor of Clinical Pediatrics

MEDICAL DIRECTOR

Medical Director, Pediatric Mobile

Associate Professor of Clinical Pediatrics

Lisa Gwynn, D.O., M.B.A.,

Clinic and School Health

M.S.P.H., FAAP

Sarah Sukkar, M.D., FAAP Assistant Professor of Clinical Pediatrics

# a model program for there communities to follow

# Pediatric Pulmonary Medicine

The mission of the Division of Pediatric Pulmonary and Sleep Medicine is to promote outstanding pediatric pulmonary and sleep health while cultivating a diverse, equitable, efficient, technology-oriented, innovative, and collaborative work environment to foster the growth of all members of the Division.

We experienced 1,100 outpatient visits and 442 inpatient admissions.



#### **DIVISION CHIEF**

**Ignacio Tapia, M.D., M.S.** Professor of Clinical Pediatrics

#### FACULTY

**Claudia Aguilar-Velez, M.D.** Assistant Professor of Clinical Pediatrics

Monica Cardenas, M.D. Assistant Professor of Clinical Pediatrics

#### **AFFILIATED FACULTY**

#### Amanda Fifi, M.D.

Associate Professor of Clinical Pediatrics Division of Pediatric Gastroenterology and Hepatology Associate Director, Cystic Fibrosis Center

#### **Clinical services:**

- Cystic Fibrosis Center
- Asthma clinic
- BPD clinic
- Sleep clinic

**Teaching:** Our fellowship's goal is to produce accomplished and well-rounded pediatric pulmonologists, whose training spans clinical excellence, technical skills, and academic productivity as educators and researchers, ultimately providing the flexibility of career choices that balance all of these domains.

**Broad Clinical Experience:** The Pediatric Pulmonology Fellowship provides trainees with a uniquely broad clinical experience in both in- and outpatient realms, combined with technical skills in bronchoscopy and pulmonary function testing and interpretation, preparing them to independently and effectively manage the most complex patients spanning all age groups. Particular emphasis is placed on management of cystic fibrosis, a complex and demanding part of the field. Fellows have access to a pediatric sleep lab and receive training in common sleep diagnoses.

**Location:** Our fellowship program is located in one of the most diverse metropolitan areas of the US, and serves the South Florida region, entire state of Florida, and children from across the US and globally. The fellowship's goals are aligned with the Department of Pediatrics mission to accomplish extraordinary things every day for children of all ages, as well as the mission of the University of Miami Miller School of Medicine to transform lives through education, research, innovation, and service, while providing expert care to our neighboring communities, both locally and internationally. Fellows are trained to function in a multicultural and multilingual milieu, fostering an environment in which trainees progressively achieve

clinical independence that allows them to practice pediatric pulmonology in any environment, including both private or public academic settings.

**Progressive Training:** Our fellowship training is based on progressive delegation of responsibility in clinical care and invasive procedures. Although the fellowship aim is to promote independence and self-sufficiency, tight supervision of trainees by dedicated faculty continues throughout the fellowship. Fellows gradually take on the role of teachers, educating trainees at all levels – from students and residents to observers that the division accepts for advanced training.

A key part of the training is the ongoing and seamless integration of multiple support services in the daily clinical work that the fellows have to navigate and incorporate, including nursing, nutrition, psychology, respiratory therapy, and social work. This is particularly vital in the management of complex cystic fibrosis patients. **Research and Scholarly Activity:** Our division is nationally and internationally renowned for research and scholarly excellence. Fellows are encouraged to foster their intellectual curiosity by engaging in research and scholarly activity. Particular emphasis is placed on developing medical-writing skills, with the aim of publishing an article in a peer-reviewed medical journal. All fellows participate annually in one or more national or international scientific conferences, where they are encouraged to present their own work.

**Research:** Dr. Tapia's main research interests are the pathophysiology of Obstructive Sleep Apnea Syndrome (OSAS) in children, clinical trials focusing on treatment of OSAS in children, health disparities in pediatric sleep, and the consequences of OSAS in individuals with Down syndrome. His research has been funded by the American Heart Association, University of Pennsylvania, the American Sleep Medicine Foundation, and the National Institutes of Health (NIH). He chairs the Career Development Awards for the American Academy of Sleep Medicine, and is a standing member of the NIH Biobehavioral Medicine and Health Outcomes Study Section.

# Physician Hero: Dr. Monica Cardenas

Dr. Cardenas has demonstrated unwavering dedication to advancing pediatric pulmonology care throughout her career, particularly through her leadership of the Cystic Fibrosis (CF) Center. Under her direction, the center has become a beacon of hope for families affected by CF, combining the latest advances with compassionate patient care.



Her comprehensive approach integrates the latest therapeutic innovations with individualized treatment plans, while her commitment to mentoring the next generation of pulmonologists ensures lasting impact in the field. Beyond her work with CF patients, Dr. Cardenas has emerged as a passionate advocate for asthma-care excellence in underserved communities, working tirelessly to address healthcare disparities and ensure that all children, regardless of their socioeconomic background, have access to highquality asthma management and education.

# Inspiring patient

# Living with a disease like CF is akin to living with the constant uncertainty of what tomorrow may bring.

As the most common fatal genetic disease in the United States, cystic fibrosis has been the focus of tremendous advancements in treatment. Multidisciplinary approaches and the introduction of highly effective CF transmembrane conductance regulator (CFTR) modulator therapies have transformed the lives of many patients, offering new hope through remarkable improvements in quality of life and overall life expectancy.



For others like 17-year-old Naomi Granados, this new era of life-changing pharmacotherapy remains out of reach due to genetic ineligibility. Despite this challenging reality, Naomi has chosen to face life with unwavering courage and a spirit that refuses to yield to despair.

Since her diagnosis as an infant, she has been under the excellent care of the Pediatric Pulmonology and Cystic Fibrosis program is the Department of Pediatrics. Naomi's journey has been fraught with adversity from the very beginning as she faced CF-related liver failure and underwent a liver transplant at just nine months old here at Holtz Children's Hospital and Miami Transplant Institute. Today, she continues to battle chronic graft rejection, a daunting challenge compounded by the many other comorbidities associated with CF, including chronic sinusitis and gastrointestinal complications like pancreatic insufficiency, which requires specialized medications to absorb nutrients. On top of these conditions, Naomi endures lengthy and frequent therapies every day to preserve her lung health. Hospitalizations, often occurring every three months, are a routine part of her life as she combats pulmonary bacterial infections associated with her CF.

Despite these immense hurdles, Naomi exemplifies resilience. She is meticulously adherent to her treatment plan established by her managing team, led by Dr. Monica Cardenas, demonstrating a determination that inspires everyone around her. Her joyful spirit, boundless love for her family and friends, and steadfast dedication to life are nothing short of extraordinary. Thanks to her efforts and the trust in her caregivers, she has maintained remarkably good lung function, despite all the adversities.

Naomi's story is a beacon of hope and determination. She reminds us all why we strive to do our best for our patients. She is the embodiment of resilience, love, and duty — a true inspiration to all who have the privilege of knowing her.

Top left: Naomi as a child, and Dr. Munguia at the Pediatric Pulmonology Clinic at the University of Miami Batchelor Children's Research Institute.

Top right: Naomi with her parents.



## Research Summary

Throughout his career, Dr. Ignacio Tapia has maintained a consistent focus on understanding **Obstructive Sleep Apnea** Syndrome pathophysiology in children, conducting clinical trials of OSAS treatments, examining sleep health disparities, and studying the particular challenges faced by individuals with Down syndrome. His work has been funded by several prestigious institutions, including the American Heart Association, the University of Pennsylvania, the American Sleep Medicine Foundation, and the National Institutes of Health.

# R01 HL152454 (PI Tapia): Investigating socio-ecological factors in pediatric sleep-related health disparities

This project delves into the complex relationship between social determinants and sleep-related health disparities in children. This study employs a multi-modal approach, combining objective sleep measurements through polysomnography and multiple sleep-latency testing with biological markers of inflammation and detailed assessments of neurobehavioral function and discrimination experiences. This comprehensive methodology aims to uncover the underlying mechanisms driving sleep health inequities in pediatric populations.



#### R33 HL151253 (PI Tapia): Positive Airway Pressure For The Treatment Of The Obstructive Sleep Apnea Syndrome In Children With Down Syndrome

This project focuses on optimizing positive airway pressure (PAP) therapy for children with Down syndrome who have OSAS. This randomized controlled trial is designed to address critical gaps in clinical knowledge by comparing intensive versus conventional PAP implementation strategies. The study examines not only treatment adherence, but also factors that influence therapeutic success, while measuring outcomes that matter most to families, including neurobehavioral function, quality of life, and health care utilization patterns.



#### R33 HL162839 (MPI Cielo & Tapia): Home sleep apnea testing compared to in-lab polysomnography for the evaluation of obstructive sleep apnea in children

This grant aims to validate home sleep-apnea testing as a potential alternative to traditional in-laboratory polysomnography for children. This investigation evaluates both the diagnostic accuracy of home testing and its practical implications for clinical decision-making, while considering family preferences and feasibility factors.

# Pediatric Transplant Program

The Pediatric Transplant Program, which includes all solid organs, (liver, multi-visceral, kidney, heart, and lung), and bone marrow and hematologic stem-cell transplants, is one of the largest pediatric transplant programs in the U.S. We're recognized for complex surgical procedures and pediatric care that results in outstanding outcomes and survival rates. Today, we're moving forward with existing and new programs, including working with our colleagues in adult pulmonary transplant to advance pediatric pulmonary transplant procedures, as well as finding new and better ways to manage infections in children. Our program continues to grow, with an unwavering commitment to our patients, families, and the community at large.

In 2024 there were 40 pediatric transplants.

#### FACULTY

#### Jennifer Garcia, M.D.

Associate Professor of Clinical Pediatrics Medical Director, MTI Pediatric Solid Organ Transplant Medical Director, Adult/Pediatric Intestinal Transplant and Pediatric Intestinal Rehabilitation Medical Director, Pediatric Liver Transplant

#### Monica Cardenas, M.D.

Assistant Professor of Clinical Pediatrics Pediatric Transplant Pulmonologist

#### Jayanthi Chandar, M.D., M.S.

Professor of Clinical Pediatrics Medical Director, Pediatric Kidney Transplant

## Marissa Defreitas, M.D., M.S.

Associate Professor of Clinical Pediatrics Pediatric Transplant Nephrologist

#### Ivan A. Gonzalez, M.D.

Associate Professor of Clinical Pediatrics Pediatric Infectious Diseases Transplant Liaison

**Jessica T. Hochberg, M.D.** Assistant Professor of Clinical Pediatrics Pediatric Transplant Gastroenterologist

#### **Paolo Rusconi, M.D.** Professor of Clinical Pediatrics Medical Director for the Pediatric Heart Transplant, Heart Failure, and VAD Programs Miami Transplant Program

**Vaka Sigurjonsdottir, M.D.** Assistant Professor of Clinical Pediatrics Pediatric Transplant Nephrologist

#### THE BATCHELOR FOUNDATION

# A Continued Partnership

Since 1991, **The Batchelor Foundation**, **Inc**., has bult a crucial partnership with the Department of Pediatrics at the University of Miami Miller School of Medicine that has improved thousands of children's lives. The late aviator, entrepreneur, and visionary philanthropist George E. Batchelor created the Foundation in 1990 to support non-profit organizations that promote the health, education, and well-being of children, animal welfare, and the preservation of South Florida's natural environment. The relationship between the Batchelor Foundation and the Department of Pediatrics began when George E. Batchelor brought his 14-year-old son, Falcon, to the University of Miami Miller School of Medicine seeking care for cystic fibrosis. Under the care of Robert McKey, Jr., MD, founder and then-director of the University's Cystic Fibrosis Center, Falcon lived 20 more years.

Batchelor always had a deep and abiding love for children. His life's mission was to help sick children in South Florida and around the world. He found the perfect partnership in the Department of Pediatrics, and made a leadership gift of \$10 million to create the Batchelor Children's Research Institute at the Miller School of Medicine.

Later, Batchelor established a \$5 million endowment that yields \$300,000 a year for the Micah Batchelor Award for Excellence in Children's Health Research. This prestigious award is the largest of its kind, and supports medical research to improve the health and lives of children in perpetuity. Much of the Batchelor Foundation's extraordinary generosity has been directed to children's health initiatives in the Leonard M. Miller School of Medicine Department of Pediatrics, beginning with the Batchelor Children's Research Institute (BCRI) — a high-tech laboratory and clinical space for researchers to study pediatric cancer, health services research, gastroenterology, food allergies, immunology and infectious diseases, cystic fibrosis and other pulmonary diseases, and nephrology.



Along with the creation of BCRI, the Foundation launched the Micah Batchelor Award for Excellence in Children's Health Research, named in memory of George Batchelor's cherished grandson, to inspire high-impact discovery and new therapeutics to improve the health of young patients. The Foundation then expanded the research-award program, creating The Batchelor Fellows and Scholars Awards to encourage young and talented investigators, many of whom would otherwise have difficulty securing funding for research early in their careers. The purpose of the Micah Batchelor Award is to support research in the Miller School of Medicine's Department of Pediatrics, including the prevention, cure, and treatment of childhood diseases.

Together, we are truly changing the face of our institution and community, creating a premier experience for those we serve. The Batchelor Foundation's enduring support of patient care, faculty, research, priority programs, and a culturally rich environment is helping us to build a strong Department of Pediatrics that is home to innovative thinking, groundbreaking discoveries, and limitless growth. The impact of the Batchelor Foundation's philanthropic support can be felt every day throughout our communities and across the globe. The Batchelor Foundation's support ensures that the University of Miami's Department of Pediatrics lives on and grows — through the talented faculty that we need to attract and retain, the learning opportunities for our next generation of care givers and scientists, the expert care unique to UM, and the fulfilment of our goal to be a leading pediatric health care and research institution in the nation. The Batchelor Foundation has created a legacy that has helped to advance the University's mission of transforming lives.

George Batchelor's longtime financial commitment to the University of Miami Miller School of Medicine, particularly the Department of Pediatrics, is largely responsible for the establishment of the Batchelor Children's Research Institute, in 2001. George Batchelor believed that this Department of Pediatrics is a great place for children to receive care. The awarding of NIH grants is a key indicator of research quality and competitiveness. With Batchelor's support, the University of Miami Department of Pediatrics has grown into one of the larger academic pediatrics departments in the country, with impressive teaching and educational programs, extensive clinical care activities, and major research efforts.

# To our friends and colleagues,

We cannot express our gratitude enough for the support given to the Department of Pediatrics by individual donors and civic-minded corporations. The reality of medicine is that it is expensive. Research, technology, innovative procedures, treatments, and programs all require substantial capital investments.

To all our wonderful donors, we say, "Make no mistake about it, your support saves young lives. Thank you!"

If you are an individual, company, or foundation interested in helping our physicians, research scientists, nurses, fellows, and staff continue to provide the highest-quality pediatric care, please consider donating.

Your generous gift will make an impact for the children and families who come to the Miller School of Medicine Department of Pediatrics seeking care and support they cannot get at any other research institution.

# **DONATE NOW**

Checks can be be mailed to:

**University of Miami** Attn.: Jennifer Kornreich 1501 NW 9th Avenue, Fl 2, Miami, FL 33136

Please note on the check or a cover letter that the gift is for the Department of Pediatrics.

Please call **305-243-7615** or email at **jdk781@med.miami.edu** with any questions.

# We appreciate your kindness. Thank you.



*Scan the QR code* and put your gift to work immediately.



# Chairman's Office

- 1. Flores G., The Pediatrician's Imperative: The Relentless Pursuit of Equity., Nov 1, 2024
- 2. Flores G., Language Matters: Language Inclusivity in Pediatric Health Care, Sept.-Oct 2024
- Mendoza FS, Woo Baidal JA, Fernandez CR, Flores G., Bias, Prejudice, Discrimination, Racism, and Social Determinants: The Impact on the Health and Well-Being of Latin Children and Youth, Sept.-Oct 2024
- 4. Mendoza FS, Flores G, Fuentes-Afflick E., The Need for Enhancing Funding for Research on Children in Immigrant Families, July 4, 2024
- 5. Parikh K, Hall M lieder JS, Dixon G, Ward MC, Hinds PS, Goyal MK, Rangel SJ, Flores G, Kaiser SV, Disparities in Racial, Ethnic, and Payer Groups for Pediatric Safety Events in US Hospitals, 2024

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# **Pediatrics**



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