



RUTGERS

Robert Wood Johnson
Medical School



DEPARTMENT OF PEDIATRICS

Annual Report

2020-2021

Annual Report 2020-2021



RUTGERS

Robert Wood Johnson
Medical School
DEPARTMENT OF PEDIATRICS

The Department of Pediatrics' mission is to protect and ensure the health and well-being of all children. We are dedicated to advancing the field of pediatrics through patient services, research, education, and advocacy. We are committed to providing multi-disciplinary family-centered care with respect, compassion and the highest standards of excellence. The faculty and staff in the Department of Pediatrics conduct clinical, research, educational and outreach activities, which directly and indirectly impact the lives of children and their families in central New Jersey, throughout the state and regionally.

In Memory of Suzanne Anderson

This report is dedicated to our dear colleague and friend, Suzanne. Suzanne was an invaluable member of our Administrative team. She will be missed more than words can express.

In tribute to her memory, The Rutgers flag in front of the Old Queens Building was flown at half-staff on June 8 and 9, 2022.

A Special Thank You to our Photographer: Jason Martin/J Martin Studio



Table of Contents



Department of Pediatrics Chair.....	2
Chair's Message.....	3
Department Leadership.....	4
Department/Administration.....	6
Department of Pediatrics.....	8
Covid-19 Pandemic.....	9
Allergy, Immunology and Infectious Diseases.....	10
The Boggs Center on Developmental Disabilities.....	12
Cardiology.....	14
Critical Care Medicine (PICU).....	16
Education	
Residency Program.....	18
Student Programs.....	20
Developmental and Behavioral Pediatrics (DBP)	
Fellowship Program.....	21
Endocrinology Fellowship Program.....	22
Neonatal-Perinatal Medicine Fellowship Program.....	23
Emergency Medicine.....	24
Endocrinology.....	26
Faculty Practice.....	27

Gastroenterology and Nutrition.....	28
Medical Genetics.....	30
Patient Testimonials.....	31
Hematology/Oncology	
Rutgers Cancer Institute of New Jersey.....	32
Pediatric Hospital Medicine.....	34
Immunobiology.....	36
The Institute for the Study of Child Development.....	38
Neonatology (NICU).....	40
Nephrology and Hypertension.....	42
Child Neurology and Neurodevelopmental Disabilities.....	44
Population Health, Quality and Implementation Sciences	
(PopQuIS).....	46
Pulmonary Medicine and Cystic Fibrosis Center.....	54
Rheumatology.....	56
Pediatric Clinical Research Center.....	58
Laboratory of Human Growth and	
Reproductive Development.....	60
The SIDS Center of New Jersey.....	62
Graduation and Awards.....	63
Events.....	65

Department of Pediatrics Chair



Sally Radovick, MD, is the professor and Henry Rutgers Term Chair of the Department of Pediatrics at Rutgers Robert Wood Johnson Medical School and physician-in-chief at Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital in New Brunswick, part of the RWJBarnabas Health System. Dr. Radovick is also a Chancellor Scholar, a designation awarded by Rutgers Biomedical and Health Sciences. As a physician-scientist, Dr. Radovick's well-funded research program focuses on developmental endocrine disorders in children, specifically on the regulation of hypothalamic-pituitary function. Dr. Radovick is a specialist in growth and development, and pubertal disorders in children. Her laboratory has elucidated some of the factors that control the onset of puberty in children and defined the pathways which link nutrition and growth with pubertal development and reproduction. Her laboratory has shown the critical requirement for kisspeptin signaling in the neuroendocrine control of pubertal onset. Another major area of her research has been to characterize the factors important for normal pituitary development. Her initial studies provided the first description of the molecular genetic mechanism for combined pituitary hormone deficiency in children.

Dr. Radovick has been continuously funded by the NIH since 1992 and has served on numerous study sections and is the chair of the Integrative and Clinical Endocrinology and Reproduction (ICER) Study Section. Dr. Radovick has authored or co-authored more than 100 peer-reviewed scientific publications and has been invited to write a dozen book chapters in her field. She is an author of "Puberty in the female and its disorders" in Sperling's textbook, *Pediatric Endocrinology* and "Normal and aberrant growth" in *Williams Textbook of Endocrinology*. She serves as the associate editor of *Pediatric Endocrinology*, and Editor of *Pituitary* and the editor in *Current Opinion in Pediatric Endocrinology*. Dr. Radovick served as the president of the Pediatric Endocrine Society. Dr. Radovick participates in teaching of undergraduates, medical students, residents, and endocrinology fellows. She actively participates in clinical activities, focusing on children with disorders of growth and puberty and precepts the teaching clinics in pediatric endocrinology. She spearheaded the approval of the first pediatric endocrinology fellowship training program in New Jersey.

Chair's Message

Welcome to the Department of Pediatrics at Rutgers Robert Wood Johnson Medical School in New Brunswick. The department is composed of 141 full-time and more than 200 volunteer faculty members, organized into 17 divisions covering all of the pediatric subspecialties: allergy, immunology, and infectious diseases; cardiology; critical care medicine; education; emergency medicine; endocrinology; gastroenterology; medical genetics; hematology/oncology; pediatric hospital medicine; immunobiology; neonatology; nephrology; child neurology and neurodevelopmental disabilities; population health, quality, and implementation sciences; pulmonary medicine and cystic fibrosis center; and rheumatology. In addition, our centers of excellence include The Boggs Center on Developmental Disabilities, the Pediatric Clinical Research Center, the Institute for the Study of Child Development and the SIDS Center of New Jersey.

The department has undergone a renaissance following the integration of the medical school with Rutgers, The State University of New Jersey nearly a decade ago, the merger of two major health systems to form RWJBarnabas Health and the recent Interprofessional Practice Agreement between RWJBarnabas Health and Rutgers Health, where our physicians provide care for patients.

We are in the process of recruiting additional faculty, allowing us to expand research, education, and clinical programs and enhance care to our patients. Our educational mission is focused on the development of the next generation of multitalented physicians who will become leaders in education, research and patient care. Our Accreditation Council for Graduate Medical Education accredited training programs continue to thrive. We have outstanding pediatric residency and fellowship training programs. Our practice offers exceptional health care services for children from birth to age 21. The programs are designed to provide patients and their families with highly specialized care to manage their child's illness. We are actively expanding the scope and reach of the services available for children so they can receive the highest quality of care as close to home as possible. Our New Brunswick-based clinical programs have achieved Accredited Status for Ambulatory Health Care by The Joint Commission, one of only a small number of academic ambulatory practices to receive this status. Our faculty also provides clinical services at The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital, a five-time Magnet recipient recognized as "One of America's Best Children's Hospitals" by U.S. News and World Report for the sixth time.

During the past two years, our talented and dedicated faculty, staff, residents and fellows were called upon to care for children with COVID-19. While vaccines became available, variants such as Delta and Omicron continued to present challenges. Nonetheless, our health care providers navigated through the COVID-19 pandemic firm in their commitment to provide outstanding clinical service and support. We continue as a pediatric 'family' strengthened in our mission. I am especially proud of their dedication to our children and families.

We hope you will enjoy learning about our department and our many accomplishments.

Sincerely,



Sally Radovick, MD

Chair, Department of Pediatrics



Department Leadership

Vice Chairs



M. Douglas Baker, MD
Professor & Executive Vice Chair
Department of Pediatrics
Division of Emergency Medicine



Lawrence Kleinman, MD, MPH, FAAP
Professor & Vice Chair for Academic Development
Department of Pediatrics
Division Director
Population Health, Quality, and Implementation Sciences
(PopQuIS)
Chair, Pediatric Appointments and Promotions Committee

Deans



Janice Cato-Varlack, MD
Assistant Professor of Pediatrics
Assistant Dean for Student and
Multicultural Affairs



Dayla Chefitz, MD
Professor of Pediatrics
Division Director
Pediatric Hospital Medicine
Assistant Dean for the Clinical
Learning Environment



Vicki L. Craig, MD, FCCM, CPHQ
Associate Professor of Pediatrics
Interim Division Director
Critical Care Medicine
Senior Associate Dean for Safety
Quality and Clinical Affairs



Michael Kelly, MD
Assistant Professor of Pediatrics
Associate Dean for Graduate
Medical Education



Amisha Malhotra, MD
Associate Professor of Pediatrics
Assistant Dean for Ambulatory
Infectious Disease and Infection
Control



Sally Radovick, MD
Professor and Henry Rutgers Term
Chair
Department of Pediatrics
Senior Associate Dean for Clinical
and Translational Research



Patricia Whitley-Williams, MD
Professor of Pediatrics
Division Director
Allergy, Immunology and
Infectious Diseases
Associate Dean for Inclusion and
Diversity

Division Directors

Allergy, Immunology and Infectious Diseases

Patricia Whitley-Williams, MD
Professor of Pediatrics

The Boggs Center on Developmental Disabilities

Deborah M. Spitalnik, PhD
Professor of Pediatrics

Cardiology

Joseph Gaffney, MD
Professor of Pediatrics

Critical Care Medicine (PICU)

Simon Li, MD
Associate Professor of Pediatrics

Education - Residency Program

Joann Carlson, MD
Associate Professor of Pediatrics

Education - Student Programs - Pediatric Clerkship

Elizabeth Goodman, MD
Associate Professor of Pediatrics

Emergency Medicine

Ernest Leva, MD
Professor of Pediatrics

Endocrinology

Ian Marshall, MD
Professor of Pediatrics

Gastroenterology and Nutrition

Soula Koniaris, MD
Associate Professor of Pediatrics

Medical Genetics

Milen Velinov, MD, PhD
Associate Professor of Pediatrics

Hematology/Oncology (Rutgers Cancer Institute of New Jersey)

Peter Cole, MD
Professor of Pediatrics

Pediatric Hospital Medicine

Dalya Chefetz, MD
Professor of Pediatrics

Immunobiology

Derek Sant'Angelo, PhD
Professor of Pediatrics

Institute for the Study of Child Development

Michael Lewis, PhD
University Distinguished Professor of Pediatrics

Neonatology (NICU)

Deepak Jain, MD (FY21)
Associate Professor of Pediatrics

Vadim Ten, MD, PhD, Division Director (10.18.21)
Professor of Pediatrics

Nephrology and Hypertension

Joann Carlson, MD
Associate Professor of Pediatrics

Child Neurology and Neurodevelopmental Disabilities

Vikram Bhise, MD
Associate Professor of Pediatrics

Population Health, Quality, and Implementation Sciences (PopQulS)

Lawrence Kleinman, MD, MPH
Professor of Pediatrics

Pulmonary Medicine and Cystic Fibrosis Center

Thomas Scanlin, MD
Professor of Pediatrics

Rheumatology

Lakshmi N. Moorthy, MD, MS
Professor of Pediatrics



From Left to Right: First Row: S. Anderson, S. Radovick, T. Sharp, A. Henriquez
Second Row: C. Jurcsek, N. Silver, D. Weeks, A. Khan

Chair's Administration

Suzanne L. Anderson
Program Assistant

Kathleen Faup
Faculty Practice Manager

Kelley Hamilton
Staff Assistant

Ashley Henriquez
Program Support Specialist

Christine Jurcsek
Staff Assistant

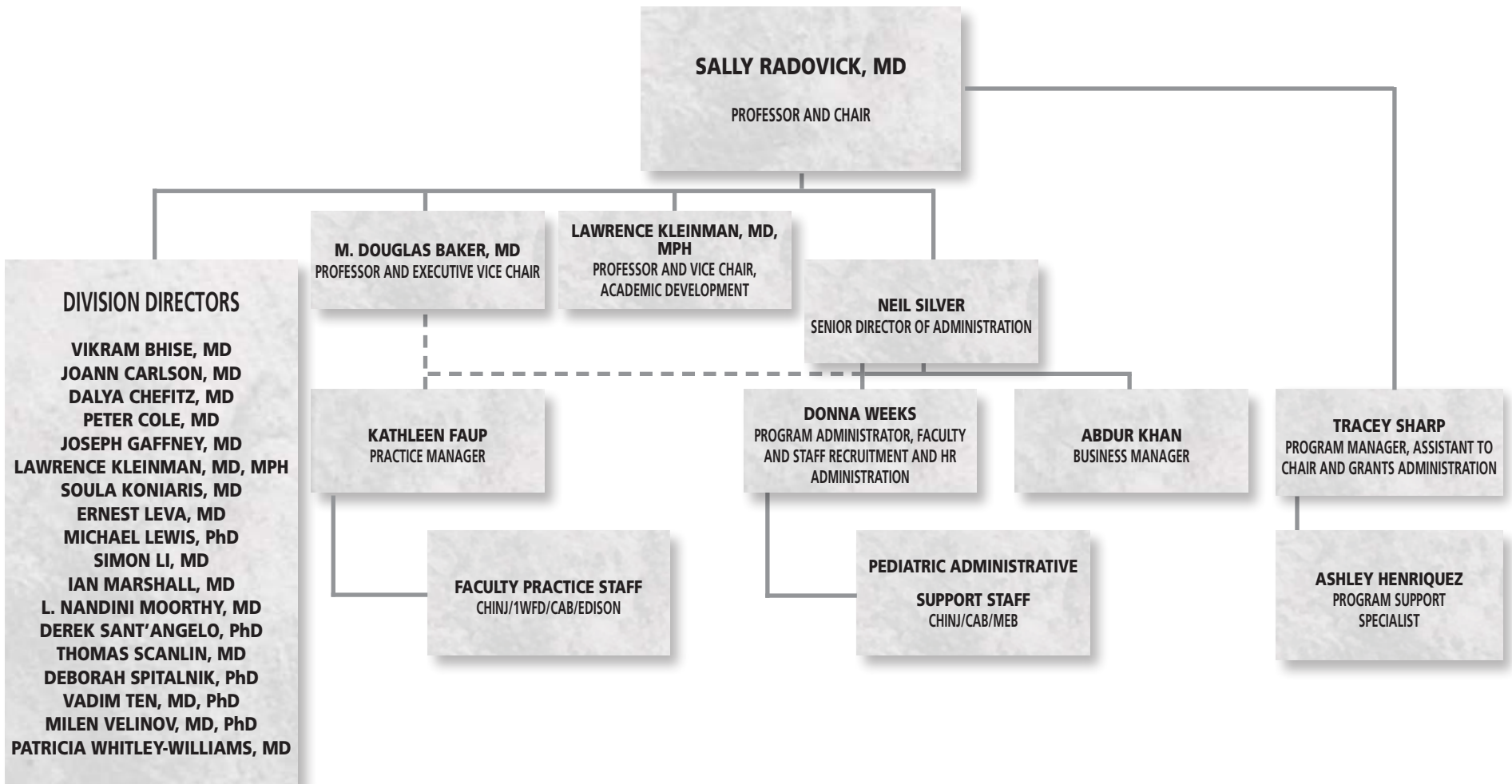
Abdur Khan
Business Manager

Tracey Sharp
Program Manager

Neil Silver
Senior Director of Administration

Donna L. Weeks
Program Administrator

Department Administration



EFFECTIVE OCTOBER 2021

DEPARTMENT CHAIR

SALLY RADOVICK, MD

DIVISIONS/CENTERS**ALLERGY, IMMUNOLOGY
AND INFECTIOUS
DISEASES**PATRICIA WHITLEY-
WILLIAMS, MD**BOGGS CENTER ON
DEVELOPMENTAL
DISABILITIES**

DEBORAH SPITALNIK, PhD

CARDIOLOGY

JOSEPH GAFFNEY, MD

**CRITICAL CARE
MEDICINE**

SIMON LI, MD

EDUCATIONJOANN CARLSON, MD
ELIZABETH GOODMAN, MD**EMERGENCY
MEDICINE**

ERNEST LEVA, MD

ENDOCRINOLOGY

IAN MARSHALL, MD

**GASTROENTEROLOGY/
NUTRITION**

SOULA KONIARIS, MD

**MEDICAL
GENETICS**

MILEN VELINOV, MD, PhD

**HEMATOLOGY/
ONCOLOGY**

PETER COLE, MD

**PEDIATRIC HOSPITAL
MEDICINE**

DALYA CHEFITZ, MD

IMMUNOBIOLOGY

DEREK SANT'ANGELO, PhD

**INSTITUTE FOR THE
STUDY OF CHILD
DEVELOPMENT**

MICHAEL LEWIS, PhD

NEONATOLOGY

VADIM TEN, MD, PhD

**NEPHROLOGY AND
HYPERTENSION**

JOANN CARLSON, MD

**CHILD NEUROLOGY AND
NEURODEVELOPMENTAL
DISABILITIES**

VIKRAM BHISE, MD

**POPULATION
HEALTH, QUALITY &
IMPLEMENTATION
SCIENCES (POPQUIS)**

LAWRENCE KLEINMAN, MD, MPH

**PULMONARY MEDICINE
AND CYSTIC FIBROSIS
CENTER**

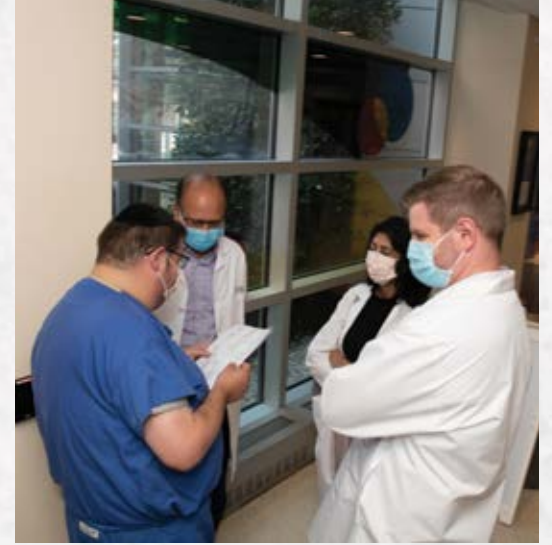
THOMAS SCANLIN, MD

RHEUMATOLOGY

L. NANDINI MOORTHY, MD

EFFECTIVE OCTOBER 2021

Department of Pediatrics



Covid-19 Pandemic

Every cloud has a silver lining. The global tragedy that is COVID-19 revealed the scope and depth of professional talent of the Robert Wood Johnson Medical School Department of Pediatrics. Under the leadership of Chair Sally Radovick, MD, and her senior team, the department responded to the ongoing crisis with clinical, academic, and service achievements that continue to grow and to adapt to the changing circumstances.

The ups and downs of the COVID pandemic provided opportunities to study the nature of the behavior of the virus within the pediatric community. Department faculty members helped lead national collaborative studies of epidemiology and clinical management of COVID infections in children. Ongoing works target special populations of patients (immunocompromised and others), unusual and interesting presentations of virus-related illness, and diagnostic dilemmas that are created by the context of the pandemic. Department faculty members also actively participated in vaccine trials in young children that led to the nationwide initiation of administration of vaccines to the youngest cohort of school age children. Department faculty have brought together diverse health care organizations from around the country to help us to understand this illness and its impact on children. Others have worked to bring COVID-19 testing to underserved communities.

As a result of their professional efforts, department faculty members have earned recognition as national experts. The regional and national media have often utilized department faculty members for public service, and public and professional education. Faculty members helped to bring items of importance to the public sphere through interviews in newspapers, on radio and television. Statewide and regional webinars featured our faculty in professional and public forums. Our faculty continue to be invited to testify before legislatures, advise elected and appointed officials, and provide guidance to public, religious, and private schools and other organizations. Department leadership has published op-ed articles in regional and national media outlets.

Department faculty members collaborated to help determine the best clinical care to manage the medical consequences of COVID-19 infections in children, and to understand and mitigate the nonmedical challenges faced by families. Their efforts contributed to the statewide, regional, and national understanding of management of multi-inflammatory syndrome in children, or MIS-C, and other COVID-19 related illnesses, and helped to establish the national medical standard of care. Moving forward, our ongoing efforts seek to unravel and remedy the racial and ethnic disparities that this virus demonstrates. If crisis truly reveals character, then we can say that the tragic circumstances of COVID show the Department of Pediatrics to be composed of mindful, generous, and engaged leaders who are committed to improving the lives of children and family even amongst adversity.

M. Douglas Baker, MD
Professor and Executive Vice Chair
Department of Pediatrics

Lawrence Kleinman, MD, MPH
Professor and Vice Chair for Academic Development
Department of Pediatrics



Allergy, Immunology and Infectious Diseases



Patricia Whitley-Williams, MD
Professor and Division Director

The Division of Allergy, Immunology and Infectious Diseases has five full-time faculty, one part-time faculty, four volunteer faculty, and twelve program and administrative support staff during FY21. One of our full-time faculty, Aswine Bal, MD, is based at Jersey Shore University Medical Center.

CLINICAL:

Clinical subspecialty services and consultations in pediatric immunology and infectious diseases are provided at the Child Health Institute of New Jersey. The allergy/immunology subspecialty services are provided at 1 Worlds Fair Drive in Somerset. Our inpatient consultation services are conducted at Bristol-Myers Squibb Children's Hospital

at Robert Wood Johnson University Hospital.

The Robert Wood Johnson AIDS Program (RWJAP) has provided comprehensive, multidisciplinary, coordinated, family-centered services to more than 1,300 patients and families (HIV infected persons, especially youth, women and children) in central New Jersey. It is one of the seven sites of the New Jersey Statewide Family Centered HIV Care Network, administered by the NJ Department of Health (DOH), Division of Family Services Special Child Health (SCHS) and Early Intervention Services since 1988; and provides Ryan White Part D funding. Through this comprehensive and integrated care model, morbidity, mortality and perinatal transmission rates have been drastically reduced. RWJAP grant funding from Ryan White funding, SCHS, and DOH totals over \$1,000,000. Measureable outcomes include viral load suppression (86% non-detectable in AY21). During the COVID-19 pandemic, RWJAP provided telehealth services to ensure that HIV patients had continued access to health care as well as to facilitate access to vital community-based resources and services.

RWJAP has provided an on-site rapid HIV testing program through funding from the NJ DOH Division of HIV, STD and TB Services since 2004 conducted in both adult and pediatric emergency rooms at RWJUH, CHINJ, and the Inpatient Adolescent Unit at BMSCH. Walk-in

testing is also available to the community. Despite the onset of the COVID-19 pandemic in 2020, the program continued to provide HIV prevention services thanks to funding from the NJ DOH and Northwestern University. New services were implemented through a collaborative partnership with the RWJBH PROUD Gender Center of New Jersey, in which free rapid HIV testing and Pre-Exposure Prophylaxis (PrEP) are provided to transgender patients. Continued focus has been on providing free and confidential HIV testing and PrEP counseling to Latino gay and bisexual men, and young men who have sex with men (YMSM), and the general population at large.

EDUCATION:

The division provides an elective for both medical students and residents in pediatric infectious diseases and allergy, including a one-day clinical laboratory experience at RWJUH. Our faculty have served as mentors for medical students as part of their Distinction in Service to the Community (DISC) project. Seven medical students have served as mentors to RWJAP patients to address the psychosocial burdens of growing up with HIV. Faculty participate in CME programs, as well as give CME presentations.

COMMUNITY OUTREACH ACTIVITIES:

RWJAP provides HIV/AIDS education to the community, as well as counseling and HIV Rapid Testing along with PrEP by participating in community health fairs.

The South Asian Total Healthcare Initiative (SATHI) engages multidisciplinary professionals such as researchers, health practitioners, and public health experts in promoting research, education and outreach to improve the health of South Asians. In collaboration with Rutgers School of Public Health, Rutgers School of Pharmacy, Co-operative Extension, South Asian Studies Program, and the Rutgers Cancer Institute of NJ, SATHI conducted community-based research projects (resulting in scholarly publications), CME conferences, and community outreach programs to improve health outcomes.

DIVISION RESPONSE TO THE COVID-19 PANDEMIC:

From the beginning of the COVID-19 pandemic in 2020, our division has played a major role in helping to educate the public and our medical colleagues about the SARS-CoV-2 virus via media broadcasts, interviews, lectures and Grand Rounds. The BMSCH Pediatric Antibiotic Stewardship program and the Barnabas Pediatric ASP program developed guidelines and protocols regarding prevention, treatment/ management of pediatric COVID infection, COVID pneumonia and MIS-C (Multi-inflammatory Syndrome in Children), which were also shared with all hospitals in the RWJBarnabas system. Our division has created and maintained a database of all COVID positive patients admitted

to BMSCH (about 130 in AY21) and is actively involved in follow-up of these children.

RESEARCH:

The division faculty have been at the forefront of research activities from the beginning of the COVID-19 pandemic. These projects include the establishment of a pediatric COVID database in NJ; vaccine efficacy studies risk factors for COVID; impact of COVID on people living with HIV/AIDS; vaccine hesitancy studies; and racial disparities in vaccine acceptance.

HIGHLIGHTED PUBLICATION:

Malhotra, A, Sturgill, M, Whitley-Williams, P, Lee, Y, Eschaghi, C, Rajasekhar, H, Olson, B, Gaur, S. Pediatric COVID-19 and Appendicitis: A Gut Reaction to SARS-CoV-2. The Pediatric Infectious Disease Journal. Volume 40, Number 2, February 2021. Online First - Issue doi: 10.1097/INF.0000000000002998 PMID: 33298761

SELECTED FUNDED RESEARCH PROJECT:

A Phase 1, open-label, dose finding study to evaluate safety, tolerability and immunogenicity and phase 2/3 placebo controlled, observer blinded, safety, tolerability and immunogenicity study of a SARS-CoV-2 RNA vaccine candidate against COVID-19 in healthy children < 12 years of age. (Sponsor: Pfizer) 2021; S. Gaur, Co-investigator

INSTITUTIONAL CONTRIBUTIONS BY DIVISION MEMBERS:

- Sunanda Gaur, MD – Director, Adult and Pediatric CRC; Medical Director, RWJAP; Director, SATHI
- Amisha Malhotra, MD – Director, Pediatric Antibiotic Stewardship Program, BMSCH; Director, Pediatric ID/Allergy elective; and Assistant Dean for Ambulatory Infectious Disease and Infection Control
- Roseann Marone, BSN, RN, MPH, Assistant Professor of Pediatrics; Program Coordinator, RWJAP
- Patricia Whitley-Williams, MD – Division Chief, Pediatric Allergy, Immunology and Infectious Diseases; and Associate Dean for Inclusion and Diversity

NATIONAL CONTRIBUTIONS BY DIVISION MEMBERS:

- Patricia Whitley-Williams, MD – President, National Foundation of Infectious Diseases; Chair, USMLE Management Committee; Liaison member for the National Medical Association to the CDC/Advisory Committee on Immunization Practices; member NMA COVID-19 Task Force



From Left to Right: 1st Row: A Malhotra, P. Whitley-Williams, S. Gaur, 2nd Row: M. Tawe, R. Marone, D. Fong, B. Ghosal, F. Corona

Faculty

Patricia Whitley-Williams, MD
Professor and Division
Director
Aswine Bal, MD, MPH
Professor of Pediatrics
Gail Burack, PhD
Clinical Assistant Professor
of Pediatrics
Sunanda Gaur, MD
Professor of Pediatrics
Amisha Malhotra, MD
Associate Professor of
Pediatrics
Roseann Marone, BSN, RN,
MPH
Assistant Professor of
Pediatrics

Staff

Katharine Anatale, RN
Nurse Case Manager
RWJAP
Suzanne L. Anderson
Program Assistant
Fatima Corona
Medical Health Technician
Donna Fong
Family Case Manager
RWJAP
Bishakha Ghoshal, MPH
Data Control Clerk II
RWJAP
Anthony Helena
Community Health Worker
HIV CTR / PrEP Program
RWJAP
Evelyn Lagalante, RN
Nurse Case Manager
RWJAP

Vanessa Rios

Grants Coordinator
RWJAP
Editt Rodriguez
Public Health Rep III
HIV CTR / PrEP Program
RWJAP
Mumah Tawe, MPH
Public Health Rep I
Program Coordinator
HIV CTR / PrEP
RWJAP
Xiomara M. Vargas
Public Health Rep III
HIV CTR / PrEP Program
RWJAP
N. Colleen Whelan, DNP,
APRN, PNP-BC
Pediatric Nurse Practitioner
RWJAP

The Boggs Center on Developmental Disabilities



Deborah M. Spitalnik, PhD
Professor and Executive Director

The Boggs Center on Developmental Disabilities is New Jersey's federally designated University Center for Excellence in Developmental Disabilities Education, Research, and Service (UCEDD). Part of a national network of University Centers sponsored by the Administration on Intellectual and Developmental Disabilities, Administration on Community Living, U.S. Department of Health and Human Services (HHS), The Boggs Center provides student education, community training and technical assistance, conducts research, and disseminates information and educational materials to promote independence, productivity, and full inclusion of people with developmental disabilities in all facets of community life.

The Boggs Center is also New Jersey's Leadership Education in Neurodevelopmental Disabilities program (NJLEND), a clinical interdisciplinary leadership program, funded by the Maternal and Child Health Bureau within the Health Services Resource Administration (HRSA), HHS. LEND programs are the premier federally funded training program to address autism and related early onset disabilities, health disparities, social determinants of health, and other maternal and child health priorities. NJLEND graduated 67 clinical interdisciplinary fellows in its first five years, provided extensive continuing education, and technical assistance in Autism and related disabilities, special health care needs, health disparities and the social determinants of health. The Boggs Center received renewed grant from funding from the federal Maternal and Child Health Bureau in the HRSA to continue the LEND program.

A community health program of the Department of Pediatrics, The Boggs Center has responded to the myriad ways that the COVID-19 pandemic has exacerbated the ongoing disparities experienced by the disability community, by developing disability specific informational resources, conducting community and student education programs through virtual platforms, and engaging in advocacy. The center has reached out to families of children and adults with disabilities, service providers, and state and community

agencies, to address the loss of access to in-person special education and adult services; the increased demands on families for 24/7 caregiving; health concerns and prevention measures, social isolation; and the grief and loss experienced due to COVID-19.

COVID-19 resources have been created, curated and widely disseminated throughout New Jersey and nationally. Planning for emergency situations in which a primary caregiver is no longer available, helping children and adults with intellectual and developmental disabilities process grief and loss, and how stimulus payments affect disability benefits are among the available resources, as are guides to safe community participation. COVID-19 resources, created and curated by The Boggs Center, many in Spanish as well as English, and in plain language accessible to people with disabilities, are available at <https://rwjms.rutgers.edu/boggscenter/links/COVID-19Resources.html>

The Boggs Center has expanded our information dissemination and educational materials to emphasize vaccinations, including materials to support individuals with disabilities in understanding vaccinations, and in collaboration with the New Jersey Department of Human Services, to make vaccination sites accessible U.S. Department of Human Services' Expanding Disabilities Network's (UCEDD) Access to COVID 19 Vaccines program to promote vaccinations for people with disabilities, The Boggs Center is conducting outreach with the families of adolescents and emerging adults with disabilities and their families to promote vaccines, and develop and provide additional educational materials.

All Robert Wood Johnson Medical School students receive education in developmental disabilities through the Seminar on Family Centered Care and Developmental Disabilities, a required component of the third-year Pediatrics clerkship. The Boggs Center continues to offer the Elective in Health Care for Children and Adults with Developmental Disabilities, for third- and fourth-year medical students.

Continuing education and in-service training were provided by The Boggs Center in virtual formats. The Developmental Disabilities Lecture Series conducted eight times a year reached more than 1,000 participants. Through funding from the New Jersey Department of Education, The Boggs Center enhanced the capacity of schools and districts across the state to educate students with disabilities through the Positive Behavior Support in Schools (PBSIS), Community Based Instruction (CBI) and Person-Centered Approaches to Transition (PCAST) training and technical assistance programs. The capacity of the community service system for adults with developmental disabilities was enhanced through training and technical assistance supported by the Division of Developmental Disabilities of the NJ Department of Human Services. The center continues to educate family member and self-advocates through the Partners in Policy Making Program.

Research activities in Autism and the evaluation of residency training in family medicine to address the health care needs of individuals with developmental disabilities are ongoing. The Boggs Center enhances disability and health policy through testimony, policy briefs and service on national and state boards and committees.

<https://rwjms.rutgers.edu/boggscenter/>

Faculty

Deborah Spitalnik, PhD
Professor of Pediatrics and Family and Community Medicine
Executive Director, Boggs Center

Caroline Coffield, PhD
Assistant Professor

Margaret Gilbride, JD, CT
Assistant Professor

Manuel Jimenez, MD, MS, FAAP
Assistant Professor

Sharon Lohrmann, PhD
Assistant Professor

Philip Smith, PhD
Assistant Professor

Staff

Ziba Arjmand
Program Assistant

Robyn Carroll, MSW
Supervising Program Development Specialist

Bethany Chase, MSW, LSW, CESP
Training and Consultation Specialist

Melissa Cheplic, MPH, NADD-DDS
Senior Training and Consultation Specialist

Lisa Corliss, MA
Training and Consultation Specialist

Beth Ann Custer, PhD
Training and Consultation Specialist

Melinda Elizabeth Darby
Secretary II

Robin Dupiche
Program Support Specialist

Vanessa Duverneau
Data Control Clerk I

Susan Ellien, MSW
Coordinator, Grant Development Communications

Kellyann Giudice
Secretary II

Joyce Jelley
Senior Training and Consultation Specialist

Robert Samuel Kimmel, MAT, BCBA, CESP
Training and Consultation Specialist

Ashle Laidlaw, MHA
Training and Consultation Specialist

Kenny Lewis
Budget Analyst I

Deborah Mahovetz
Management Assistant

Colleen Ann McLaughlin, MEd
Program Director

Scott McMahon, MSW
Training and Consultation Specialist

Somerlee McMahon, MS
Training and Consultation Specialist

Ann Marie McVay
Secretary I

Michelle Mead, MA
Training and Consultation Specialist

Stephanie Michael
Program Assistant

Nicola Nucci
Program Director

Karen Paulvin, MS, Prof. Dipl.
Training and Consultation Specialist

Nikkilee Pedersen, MA
Training and Consultation Specialist

Renee Alaina Rodkey
Training and Consultation Specialist

Jessica Leigh Short
Senior Training and Consultation Specialist

Michael Paul Steinbruck, MA
Senior Training and Consultation Specialist

Gizem Tanol, PhD
Training and Consultation Specialist

Lisa Michelle Thomas, MEd
Secretary I

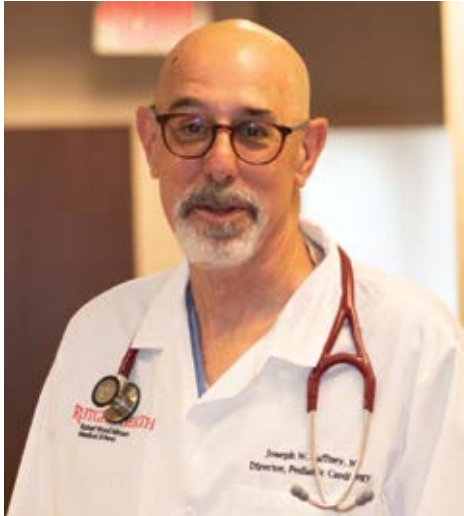
Kim Danielle Tomlin
Receptionist

Jaime Zahid
Training and Consultation Specialist



From Left to Right: 1st Row: L. Thomas, A. McVay, J. Jelley, D. Spitalnik, K. Tomlin, S. Ellien, M. Gilbride, J. Mayfield; Left to right, 2nd Row: D. Matlock, Z. Arjmand, M. Cheplic, J. Short, C. Coffield, R. Rodkey, K. Paulvin, B. Bickar, S. Lohrmann, J. Zahid, R. Carroll, C. McLaughlin; Left to right, 3rd Row: B. Chase, M. Mead, D. Mahovetz, P. Raigoza, N. Nucci, R. Dupiche; Left to right, 4th (back) Row: S. Dacres, K. Lewis, R. Kimmel, S. McMahon, M. Steinbruck, M. Darby, S. Monaghan, P. Smith; Not pictured: B. Custer, V. Duverneau, K. Giudice, Dr. M. Jimenez, A. Laidlaw, S. McMahon, S. Michael, N. Pedersen, G. Tanol

Cardiology



Joseph Gaffney, MD
Professor and Division Director

The Division of Pediatric Cardiology at Rutgers Robert Wood Johnson Medical School provides extensive, non-invasive services for infants, children, and adolescents with heart disease, along with cardiac fetal evaluation and care. Our division offers notably advanced cardiovascular services to children and young adults with congenital heart disease and to children with acquired heart disease. Our mission is to administer comprehensive clinical services for fetuses and children with all forms of heart disease and to prepare the next generation of clinical pediatric cardiologists and physician-scientists through an all-inclusive teaching program of superior quality. We encourage our students to perform high-quality clinical

and principal research in the fields of heart disease and developmental cardiology as we demonstrate the fundamentals of pediatric cardiology to medical students, pediatric residents, and pediatric cardiology fellows.

Our echocardiography laboratory is IAC (Inter Societal Accreditation Commission) certified in pediatric and fetal echocardiography, offering a full range of outpatient and inpatient services. This extremely precise field offers assessment and treatment of congenital and acquired cardiac disorders including:

- Congenital heart defects
- Cardiac arrhythmias
- Acquired heart disease, such as Kawasaki disease, endocarditis, and rheumatic fever
- Heart murmur
- Syncope
- Palpitations
- Genetic cardiac disorders such as hypertrophic cardiomyopathy and Long QT syndrome
- Family history of sudden cardiac death and early heart disease
- Hypercholesterolemia and hyperlipidemia

- Fetal cardiology

Our team has expertise in the procedures of pediatric and fetal echocardiography, ambulatory electrocardiography and exercise stress testing. All of our pediatric cardiologists are board certified and work with a multidisciplinary pediatric team at Robert Wood Johnson Medical School to provide factual, advanced medical care. The division is committed to teaching all aspects of pediatric cardiology to medical students, interns, residents, fellows, nurses, and sonographers, both in the classroom and at the bedside. Our cardiac sonographers are involved in the clinical training of students through the Rutgers Cardiac Sonography Program.

- New Jersey's only university-based accredited bachelor's degree program in cardiac sonography (MSCHE.org)
- Our diverse clinical affiliates include New Jersey's most noted medical facilities
- Accomplished faculty, experienced in cardiovascular disease diagnosis
- Comprehensive clinical and didactic instruction in cardiac and vascular sonography
- Accredited by the Commission for the Accreditation of Allied Health Education Programs (CAAHEP.org), which allows graduates to immediately sit for national registry examinations in cardiac sonography

DIVISION RESPONSE TO COVID-19

Joseph Gaffney, MD, professor and division director was engaged in multiple responses to improve patient care during the pandemic, this included:

Developing the protocol for treatment of Multi-system Inflammatory Syndrome (MIS-C) in children related to Covid-19 for both BMSCH at RWJUH and for the RWJBarnabas Health System Dr. Gaffney also presented a webinar on the topic to members of the AAP of New Jersey.

AWARDS AND STAFF RECOGNITION

Clinical Award for Excellence in Service and Professionalism

- Monica Chugh, MD
from Associate Professor to Professor
- Joseph Gaffney, MD

New Jersey Monthly 2021 Top Doctors

Lawrence T. Taft 2021 Excellence in Clinical Teaching Award

Activity Director, The Eighth Evidence-Based Pediatric Update Symposium (11/13/2021)

- Benjamin Lentzner, MD
from Associate Professor to Professor
- New Jersey Monthly 2021 Top Doctors
- Robert Manduley, MD

PATIENT EXPERIENCE

The patient experience represents a fundamental factor in our ability to engage and maintain patients. When patients form positive relationships and begin to trust our providers, they become more involved in their own care, and develop a stronger sense of loyalty to our organization. Our doctors combine expert communication skills with a professional examination to provide all of our patients with an exceptional experience.

Monica Chugh, MD: "Great experience – the staff and doctors were wonderful! The nurse was knowledgeable and very personable – amazing staff! Dr. Chugh was great. I will recommend family to her!"

Joseph Gaffney, MD: "Given the nervousness of the reason for the visit, the office staff is INCREDIBLY kind, patient, and friendly. I was well-informed and well cared for during my entire visit. I felt very confident in the provider, and the information I was given."

Benjamin Lentzner, MD: 1.) "Dr. Lentzner and his staff are incredible!" 2.) "Always impressed with this office. Staff and Dr. Lentzner are always excellent! Always easy to work with and pleasant to deal with. Will be sad when [son] has to leave Dr. Lentzner when he turns 21!" 3.) "Everybody in the office is so nice and knowledgeable. All take time to listen to any and all questions." 4.) "Registration woman was EXTREMELY friendly, helpful, knowledgeable and comforting upon registration. Very quick and efficient. Thank you. Ms. LuAnn (nurse and EKG) was super, and we both appreciated her friendliness and efficiency. Great from start to finish. Great big thank you to all who work hard (EVERY DAY) AND especially during COVID to make this visit great. Quick from start to finish." 5.) "Dr. Lentzner is wonderful—ordered tests so we can be sure our son is healthy, awesome bedside manner, SO real."

Robert Manduley, MD: 1.) Each time I call I am communicated immediately and they are very kind and loving. I trust the doctor a lot. My son is in very good hands, and it gives me confidence and security. They are professional, very good. They are educated and very respectful and they explain very good. All is excellent. I would recommend any person their consultation. They're excellent. 2.) Doctor and staff from reception area, nurses and techs were excellent! Took their time and had patience with my girls. Explained everything in detail. Dr. Manduley even drew a detailed picture of a heart to explain to my daughter the results of her echocardiogram. Nicest staff. Great attitudes and personality. A pleasure to be around. Extremely helpful when making appointments and explaining the process, since this was our first visit. 3.) Receptionist was very friendly and made my son and I very comfortable.



From Left to Right: 1st Row: C. Rosado, M. Homan, D. Messam, N. Clarke, T. Thurm, 2nd Row: E. Gozun, R. Manduley, J. Tompkins, J. Gaffney, C. Cole, M. Chugh, B. Lentzner

Faculty

Joseph Gaffney, MD
Professor and Division
Director

Monica Chugh, MD
Assistant Professor

Benjamin Lentzner, MD
Associate Professor

Robert Manduley, MD
Professor

Staff

Je'Nelle Tompkins
Pediatric Echocardiography
Lab Supervisor

Nadia Clarke
Ultrasonographer

Christina Cole
Ultrasonographer

Mary Homan, RN-BC
Staff Nurse

Tamar Thurm, MSNB, RN-BC
Staff Nurse

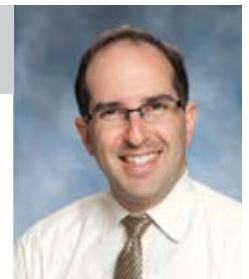
Damaris Messam
Secretary II

Carmen Rosado
Secretary II

SEE WHAT OUR PATIENTS ARE SAYING!

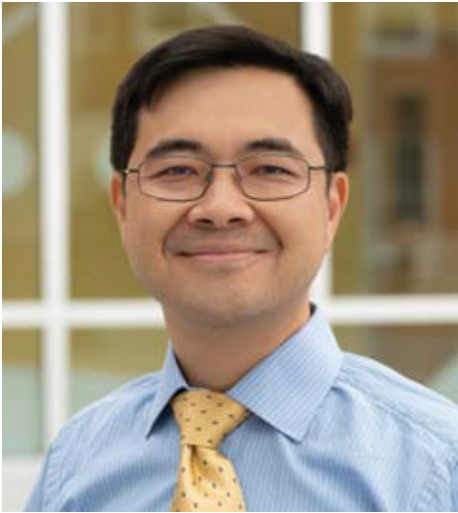


Great staff, great physician -- very informative and explained everything in detail. Seemed extremely thorough in everything, and I received a call back from my son's primary the very next day. Beyond my expectations.



BENJAMIN LENTZNER, MD
PEDIATRIC CARDIOLOGY

Critical Care Medicine (PICU)



Simon Li, MD

Associate Professor and Division Director

The Pediatric Intensive Care Unit (PICU) at the Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital (BMSCH) is a 20-bed, state-of-the-art multidisciplinary inpatient service that provides a full range of services to critically ill and injured children from birth to adulthood in a patient- and family-centered environment.

The family and patient are invited to join the PICU multidisciplinary team during patient care rounds. Families and patients have the opportunity to participate in the child's care plans, ask questions of

the team, and contribute to patient information. We welcome partnering with both inpatient and outpatient providers to help care for their patients.

Keys to our uniqueness

- Our PICU is staffed twenty-four hours a day, seven days a week, by on-site board-certified and only if newly graduated board-eligible pediatric intensive care physicians.
- Our nurse practitioners are highly trained and experienced in acute care with the prestigious CPNP-AC certification.
- ~50% of our staff nurses have the Pediatric CCRN certification obtained by a challenging examination along with evidence of significant experience. Their expertise in providing the highest quality of care for acutely ill/critically ill pediatric patients has helped lead our hospital to attain its Sixth Magnet designation in 2021.
- As part of the accreditation process for pediatric trauma, our PICU is uniquely equipped to handle pediatric traumatic injury that comes to our American College

of Surgeons accredited Level 2 pediatric trauma facility (one of only three in New Jersey).

- We offer expertise in advanced organ support such as high-frequency oscillatory mechanical ventilation, continuous renal replacement therapy, plasmapheresis, and extracorporeal membrane oxygenation (ECMO). Our ECMO program has a Silver designation by the Extracorporeal Life Support Organization.
- We have a busy research agenda allowing us to not just provide a high level of care but also advance the care and outcomes of the sickest of children. This includes involvement in collaboratives such as the Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) and quality improvement through internal, regional, and national networks such as the Children's Hospitals' Solutions for Patient Safety (SPS) Network.
- Our team is highly involved in the specialized pediatric transport service and we serve as medical control for critical care transport at BMSCH.
- We provide pediatric sedation services for children undergoing scheduled inpatient and outpatient procedures. We are happy to help expedite these procedures for you.

DIVISION HIGHLIGHTS

NEW FACULTY

We were joined this year (Jul-Sept 2021) by two New Jerseyans.

- Cassandra Louis, MD, is a graduate of Robert Wood Johnson Medical School and joins our faculty after completing her fellowship at Arkansas Children's Hospital, a nationally recognized hospital in trauma, heart, kidney, and pulmonary disease. In addition to amazing clinical care, she will be starting investigations in several areas of clinical research.
- Manette Ness-Cochinwala, MD, completed her medical training at Nicklaus Children's Hospital in Florida, where she excelled in her academic endeavors; and will join us to continue her pursuit to improve the care of critically ill children through her research efforts.

COVID-19 RESPONSE CONTINUES

We remain vigilant in our response to the COVID-19 pandemic. We adjusted and learned together with our colleagues locally and around the world. Our division met the challenge clinically by treating the sickest of children and young adults. Concurrently, our academic work focused on understanding the virus and the various ways it affected the children we care for.

FACULTY HIGHLIGHTS

Dr. Steven Horwitz was named the Director of Pediatric Transport at RWJBH, and published five articles in journals such as NEJM & JAMA.

Dr. Simon Li published seven articles in journals such as Critical Care Medicine, NEJM & JAMA.

Dr. Maureen Madden completed her Doctorate in Nursing, published three articles, edited a textbook on acute care pediatrics, and one book chapter.

Dr. Minnette Markus-Rodden completed her PhD in Nursing and published two book chapters.

Dr. Kalgi Mody published one article.



From Left to Right: K. Mody, C. Louis, J. Owensby, N. Torres-Feliz, S. Horwitz, S. Li, M. Madden

Faculty

Simon Li, MD, MPH

Associate Professor and Division Director

Meghan Faulkner, MSN, RN, CPNP-AC

Advanced Practice Nurse, RWJUH

Steven Horwitz, MD

Assistant Professor

Director, Pediatric Transport Services,
RWJBH

Michael Kelly, MD

Assistant Professor

Associate Dean for Graduate Medical
Education, RWJMS

Cassandra Louis, MD

Assistant Professor

Maureen Madden, DNP, RN, CPNP-AC

Professor

Lead Advanced Practice Nurse, Pediatric
Critical Care Medicine

Minnette Markus-Rodden, PhD, RN, CPNP-
AC

Assistant Professor

CNO of RWJMS Ambulatory Practices

Kalgi Mody, MD

Assistant Professor

Manette Ness-Cochinwala, MD

RBHS Instructor

Jennifer Owensby, MD

Assistant Professor

Interim Associate Director for Pediatric
Critical Care Medicine

Medical Director of Pediatric ECMO

Hariprem Rajasekhar, MD

Assistant Professor

Clerkship Director

Medical Student Education Director for
Pediatric Critical Care Medicine

Christine Reustle, RN, MSN, CPNP-AC

Clinical Instructor

Natalie Torres-Feliz, MD

Assistant Professor

Resident Education Director for Pediatric
Critical Care Medicine

Sirisha Yalamanchi, MD, MHA

Assistant Professor

Chair of BMSCH Clinical Pathways
Committee and PICU Quality Director

Staff

Diana Brantley

Secretary I

Education - Residency Program



Joann Carlson, MD

Associate Professor

Director of the Pediatric Residency Program

The development of the pediatric residency program at Robert Wood Johnson Medical School parallels the dramatic growth of the medical school's clinical and research programs. The Department of Pediatrics, including faculty and resident rotations, is primarily based at Bristol-Myers Squibb Children's Hospital. The pediatric faculty and residents provide a full range of clinical services. There are 11 pediatric residents per class and two chief residents. Fellowships are offered in neonatology, developmental disabilities, and pediatric endocrinology, the only accredited fellowships of their type in New Jersey.

Residents serve as the primary providers at all sites, supervised by attending physicians. The wide breadth of clinical experiences allows the resident to be involved with all aspects of the care of a child, from a well-child visit to the management of respiratory failure to the care of a child or infant recovering from a prolonged illness. Our graduates are well positioned to become primary care providers or to move on to pediatric fellowships.

With regards to program leadership, Dr. Carlson was promoted to interim director of the pediatric residency program in July 2020 and was named as permanent residency director in 2021. She also serves as the Pathology Webinar Chair of the American Society of Pediatric Nephrology and a member of the Editorial Board for PREP Nephrology. Elizabeth (Beth) Goodman, MD, is now the associate program director. Dr. Goodman also serves as director of the pediatric medical student clerkship and is a strong resident advocate. In the past year, Dr. Goodman was awarded the New Jersey Health Foundation Excellence in Teaching Award and the Gold Humanism Honor Society-Leonard Tow Humanism in Medicine Award. Both Drs. Carlson and Goodman are active members of the American Association of Pediatric Program Directors.

This year, we had a difficult task of organizing the first virtual recruitment season. After a

great deal of preparation and Zoom lessons, we launched our virtual format in November. We are so grateful to all the amazing faculty and resident help. Uchechi Azubuine, MD, the leader of the departmental taskforce on diversity and inclusion, worked with us to help promote recruitment of underrepresented minority students. With her guidance, we conducted blind interviews this year to improve the interview process and be able to truly get to know the candidates beyond their scores. In March, we were so excited to find that we matched 11 incredible medical students who are eager to join us in July 2021.

In the past year, we have been working hard to strengthen resident education. Our resident education committee is consistently ensuring our block lectures are high-yield and interactive. Our hard work paid off when the last graduating residency class had a board pass rate of 100%. In the next academic year, the program will be starting a new subscription with residents for the MedStudy question bank. This will allow our faculty to have access to more board questions and continue to strengthen our board preparation. We are also continuing to work with Robert Lebeau, EdD, in the Office of Education's Cognitive Skills to ensure all residents have developed study plans before graduation.

On the research side, all of our residents have been actively involved in scholarly activity projects. This year, our scholarly activity committee was re-designed. We created smaller faculty mentor groups for each resident class that they met with 3x during the year. With this structure, we were able to provide the residents with more support. The graduating third-year residents all presented their research projects during grand rounds in the spring of 2021. We are also proud to announce many of them had work accepted at national conferences. Madhusree Chowdhury, MD, had two posters accepted at the Council of Medical Student Education in Pediatrics (COMSEP). Samantha Chu, MD, was a listed author on a poster presentation of anti-metabolite therapy with the Division of Hematology and Oncology at the American Society of Pediatric Hematology/Oncology (ASPHO) national meeting. Aashiki Shah, MD, had an abstract accepted to the Pediatric Academic Societies (PAS) national meeting on challenges and barriers of care to children of South Asian Origin. In total, the third-year class published more than nine articles during their residency.

During the pandemic, we worked diligently to both support residents who needed it and continue to help in clinical care in the hospital. Over the past year, our conferences were mainly virtual and the chief residents did a phenomenal job creating new and interesting

virtual learning techniques. As COVID-19 restrictions have started to improve, we are excited to move back to in-person learning. We also continue to prioritize wellness for residents during these challenging times. Indira Amato, MD, serves as our wellness champion and helped organize six wellness sessions throughout the year. We will also continue to organize social events for residents to encourage bonding and to get to know each other outside of work.

On June 10, we held our virtual graduation where we were able to recognize the accomplishments of our residents and fellows. We also were able to hear some personal reflections and best wishes from their faculty mentors and past residency graduates. We are very proud of this year's graduates. These residents are a strong group of diligent, passionate pediatricians. Our graduates will be going on to the following practices and fellowship positions:

- Dr. Marianne Armanious- General Pediatrics, New Jersey
- Dr. Madhusree Chowdhury-General Pediatrics, Connecticut
- Dr. Samantha Chu-Hematology/Oncology Fellowship, Memorial Sloane Kettering
- Dr. Rannan Kased-NICU Fellowship, Sparrow Hospital, Michigan State University
- Dr. Jovanna Madray-General Pediatrics, New Jersey
- Dr. Emily Negroponete-General Pediatrics, New Jersey
- Dr. Akreeti Maskey-Pagodin-Chief Resident
- Dr. Laretta Oseni-Hospitalist, NYU
- Dr. Aashiki Shah- General Pediatrics, New Jersey
- Dr. Peter Wu-Urgent Care Fellowship, Children's National Medical Center
- Dr. Sarah Yavelberg- Chief Resident

PEDIATRIC CHIEF RESIDENTS

FY21

Jaya Isaac, MD
Debra Zharnest, MD



J. Isaac



D. Zharnest

FY22

Akreeti Maskey-Pagodin, MD
Sarah Yavelberg, MD



A. Maskey-Pagodin



S. Yavelberg

PROGRAM LEADERSHIP

Joann Carlson, MD
Associate Professor of Pediatrics
Director of the Pediatric Residency Program

Elizabeth Goodman, MD
Associate Professor of Pediatrics
Associate Director of the Pediatric Residency Program

ADMINISTRATIVE STAFF

Karen Moore
Residency Program Coordinator

Mona Matta
Program Support Specialist



From Left to Right: K. Moore, E. Goodman, J. Carlson, M. Matta

Education - Student Programs



Elizabeth Goodman, MD
Associate Professor
Pediatric Clerkship Director
and Sub-Internship Director

Amidst the continued COVID-19 pandemic, there was much excitement in Undergraduate Medical Education during the past academic year. School-wide curriculum renewal continues – which means that we will be seeing medical students in the hospitals and clinics earlier in their training. Over the course of the next several years, the pre-clinical years of medical school will be reduced from 24 months to 18 months. Ultimately, students will start full-time clinical exposure in the winter of their second year of medical school.

There are multiple notable changes occurring nationally in regards to the United States Medical Licensing Exams. Firstly, Step 1 USMLE, typically taken at the end of the pre-clinical years, is moving towards a pass/fail score report after January 2022. Secondly, after

being postponed due to the pandemic, the Clinical Skills portion of the USMLE Step 2 exam has been permanently cancelled. There have been no changes to the USMLE Step 2 Clinical Knowledge exam, which is typically taken during the latter half of medical school and the score of which is reported numerically.

In 2021, 19 of our medical students matched into a pediatric, triple board, med-peds, or peds-neuro residency program. These students were incredibly successful in the inaugural virtual interview season! Our newly graduated students have begun internships this summer in residency programs across the US, including The Children's Hospital of Philadelphia, Yale, Children's National, Cornell, Columbia, University of Pittsburgh, and New York University to name a few. We are very excited to have a Rutgers Robert Wood Johnson Medical School graduate join our Pediatric Residency Program: Jessica Ohiri. Notably, Ariana Gover-Chamlou was the recipient of the outstanding pediatric student award. We wish all our graduates the very best as they move onward in their careers.

During the summer of 2020, student activities started transitioning from entirely virtual to in-person. Students from the Class of 2022 are continuing to complete their four-week pediatric clerkship (which had been shortened due to the pandemic). Students

from the Class of 2023 already started their six-week pediatric clerkship in June of 2021. During their five weeks of clinical time, students rotate through the pediatric wards, the nursery or NICU, the pediatric emergency department, outpatient general pediatric sites, as well as outpatient subspecialty clinics. The students have one week of non-clinical activities when they have access to Amboss Learning Software to take mock shelf exams and Aquifer to complete interactive cases. They also have several in-person small-group teaching sessions, which include common pediatric symptoms, a rapid rash review, a team-based learning session on well-child care, and a discussion of health disparities in children.

The clerkship students continue to rotate at one of five different clinical sites: Robert Wood Johnson University Hospital, Saint Peter's University Hospital, JFK Medical Center, Monmouth Medical Center, and Princeton Medical Center. Our site directors, Michael Lucas, MD; Ranbir Kaur, DO; Jacqueline Brunetto, MD; and Koel Guha, MD, are extraordinary educators and we are fortunate to have them as leaders in our clerkship. Students rotating at RWJUH will have their general pediatric outpatient experience at one of our wonderful, educational outpatient sites: Eric B. Chandler Health Center; Plainfield Health Center; Rutgers Health Group; Mid-Jersey Pediatric Group; and Highland Park Pediatrics.

The Pediatric Interest Group, composed of first- and second-year medical students, has a robust lecture series to which many of our faculty contribute. In addition, our department faculty invite these students to shadow them in the clinical space.

Two volunteer faculty were recognized for their contributions to pediatric education. They were Ranbir Kaur, DO, clerkship site director at JFK Medical Center, and Koel Guha, MD, clerkship site director at Princeton Medical Center.

In July 2021 Monica Chugh, MD, was appointed pediatric sub-internship director. In May, Elizabeth Goodman, MD, was awarded the New Jersey Health Foundation Excellence in Teaching Award by the Class of 2021. Dr. Goodman was also awarded the Gold Humanism Honor Society Leonard Tow Humanism in Medicine Award.

PROGRAM LEADERSHIP

Elizabeth Goodman, MD
Associate Professor
Pediatric Clerkship Director

Monica Chugh, MD
Assistant Professor
Pediatric Sub-Internship Director (FY22)

Hariprem Rajasekhar, MD
Assistant Professor
Pediatric Intensive Care Unit Course
Director

ADMINISTRATIVE STAFF

Mary Beth Green
Pediatric Clerkship Coordinator

Education - Developmental and Behavioral Pediatrics (DBP) Fellowship Program



Anna Malia Beckwith, MD
Assistant Professor
Program Director

The Developmental and Behavioral Pediatrics (DBP) Fellowship Program is a three-year fellowship training program accredited by the Accreditation Council for Graduate Medical Education (ACGME). The program is served by an experienced faculty with clinical, research and scholarly accomplishments. The fellow will be trained to serve as an expert consultant to pediatricians in the clinical diagnosis and management of all developmental behavioral conditions commonly seen in children, as well as acquire the skills to teach trainees and engage in advocacy. In keeping with the ACGME requirements, research is a required component of the fellowship with the expectation that the fellow

will publish a paper or do a poster presentation at the end of the training program.

GOALS AND OBJECTIVES

- To train fellows to provide patient care that is compassionate and effective for children with developmental/behavioral problems. The fellow will be taught to diagnose and manage children with developmental/behavioral issues resulting from chronic illnesses, cognitive/adaptive disabilities, language and learning disorders, motor disabilities, autism spectrum disorders, attention deficit hyperactivity disorder, externalizing behavioral conditions, internalizing behavioral conditions, substance use/abuse, child abuse and neglect, somatoform disorders and pain, sleep problems, feeding/eating problems, elimination disorders, atypical behaviors, and behaviors related to sexuality.
- To help fellows acquire sound medical knowledge of the development of the central nervous system, the biological mechanisms of development and behavior and family and societal factors influencing development and behavior. The fellow will learn about

normal milestones, normal behavioral patterns, the structure and functional diversity as well as socioeconomic diversities of various families, methods of screening children's development and behavior as well as methods of diagnostic assessment, and specific treatments and interventions including medications, behavioral therapies, counseling and technological interventions.

- To teach fellows to critically review scientific evidence related to the various developmental behavioral conditions and to learn to use this knowledge for ongoing learning and for improving patient care.
- To educate fellows about the systems of health care and resources in the community available to children and families with developmental/behavioral concerns, learn about the costs of evaluations and intervention, learn to evaluate the quality of patient care and learn to identify insufficiencies in health care delivery and ways of improving the inefficiencies.
- To teach fellows compassion, integrity and respect for others, to demonstrate sensitivity towards various diverse cultures and to be accountable to patients, society and the profession.
- To train fellows in methods of effective interpersonal communication with patients and colleagues and other providers involved in the care of children with developmental/behavioral concerns.

PROGRAM LEADERSHIP

Anna Malia Beckwith, MD
Assistant Professor of Pediatrics
DBP Fellowship Program Director
Rutgers Robert Wood Johnson Medical School
Chief, Section of Developmental and Behavioral Pediatrics
Assistant Vice President of Ambulatory Medical Practices
Children's Specialized Hospital

ADMINISTRATIVE STAFF

Mona Matta
Program Support Specialist

Education - Endocrinology Fellowship Program



Mariam Gangat, MD
Professor
Program Director

Rutgers Robert Wood Johnson Medical School has the first and only ACGME accredited Pediatric Endocrinology Fellowship Program in the State of New Jersey. This three-year program is designed to prepare trainees for a career in academic medicine through a structured curriculum focused on clinical care, teaching, and research skills.

Year one is focused on clinical training with the ultimate goal of expertly diagnosing and managing pediatric endocrine disorders through a comprehensive understanding of the underlying pathophysiology of hormonal regulation from infancy to young adulthood.

Training years two and three focus primarily on research, and fellows are actively involved in the day-to-day activities of their translational project.

The goals of this training program include the following:

- Develop a comprehensive understanding of basic pediatric endocrine processes, and the mechanisms leading to common and rare disorders
- Demonstrate proficiency in patient evaluations including history-taking and physical examination skills
- Acquire the knowledge and skills to appropriately select and interpret laboratory and radiologic findings
- Acquire the knowledge and skills to provide effective management for a variety of common and rare endocrine disorders
- Be able to communicate effectively with patients and their families including disease counseling, as well as with other health care providers
- Have the skills to critically interpret published basic and clinical research
- Develop a commitment to life-long learning and continued professional growth

The program director, Mariam Gangat, MD, is dedicated to medical education and is actively involved in teaching and mentoring medical students, residents, and fellows.

She serves on multiple committees related to education including the Resident Education Committee and Program Evaluation Committee for the Pediatric Residency Program at the medical school, as well as the national Pediatric Endocrine Society Training Committee.

PROGRAM LEADERSHIP

Mariam Gangat, MD
Associate Professor
Endocrinology Fellowship Program
Director

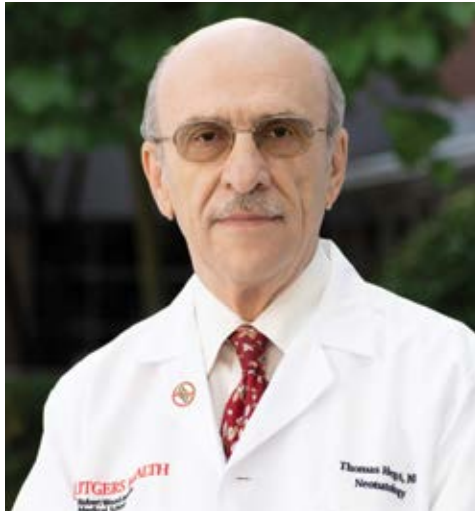
ADMINISTRATIVE STAFF

Mona Matta
Program Support Specialist



From Left to Right: M. Matta, M. Gangat

Education - Neonatal-Perinatal Medicine Fellowship Program



Thomas Hegyi, MD
Professor and Program Director

The Neonatal-Perinatal Medicine (Neonatology) Fellowship Program in the Division of Neonatology at Rutgers Robert Wood Johnson Medical School was instituted in 1980 as an ACGME-approved program and has continually maintained its ACGME accreditation since its establishment. In its fourth decade, the program has graduated nearly 100 neonatologists, more than 39 of whom care for the infants in New Jersey. The training program is a regional one, providing experience in various settings by sending fellows to different Level III NICUs in New Jersey and New York-Presbyterian Morgan Stanley Children's Hospital in New York for comprehensive clinical training.

The academic program utilizes the opportunities afforded by the Rutgers University environment and includes the Child Health Institute of New Jersey, the School of Pharmacy, and the Environmental and Occupational Health Science Institute.

The continuing advancement of technology in neonatology has led to vastly improving outcomes for newborns with prematurity, infections, and congenital and genetic anomalies. The care of critically ill newborns requires specialized training over a three-year period during which trainees gain expertise in neonatal resuscitation at birth, use conventional and high-frequency ventilators to optimize survival and outcomes, and hands-on skills such as airway management and umbilical/percutaneous line placement. Fellows become experts in new technologies. Recent examples include the use of head cooling to improve long-term outcomes for asphyxiated babies and our Extracorporeal Membrane Oxygenation (ECMO) Program for infants with severe cardiopulmonary disorders. Practices regarding infection control, fluid management, and nutrition for compromised newborns are constantly evolving, so fellows are trained in evaluating and applying evidence-based criteria in their approach.

The result of this clinical experience is the graduation of highly skilled fellows who have many opportunities for a position as attending neonatologists. The recent graduating classes have found positions at level III institutions in New York, Virginia, and California. Other graduates from the program have acquired positions in prestigious medical systems,

including Emory, Tufts, Wayne State, Northwell Health, New York Medical College, New Jersey Medical School, and more local institutions such as Hackensack University Medical Center, Morristown Medical Center, Saint Peter's University Hospital and Monmouth Medical Center. The 2020-2021 trainee-recruiting program successfully attracted three new fellows from our catchment area and California.

An integral part of the training program is the scholarly effort that has led to successful presentations by the trainees at regional and national meetings and publications in peer-reviewed journals. These research projects are under the guidance of mentors in the university, with the dual goals of advancing science and better understanding how knowledge is established and practices change. The academic activities of the trainees also include required quality improvement projects focusing on improving the care of the high-risk infants admitted to the NICU. This past year, the trainees have worked on enhancing parent communication, reducing the rate of pneumothorax, increasing the rate of delayed cord clamping, and reducing hospital infection, to name a few. These projects have succeeded in many areas, including the excellent record of the NICU in the incidence of nosocomial and CLABSI infections.

In summary, the Neonatology Fellowship continues its commitment to excellence in its missions of clinical care, education, and scholarly endeavors and, during the past year, has continued to expand its clinical and academic activities.

PROGRAM LEADERSHIP

Thomas Hegyi, MD
Professor of Pediatrics
Neonatal-Perinatal Medicine Fellowship
Program Director

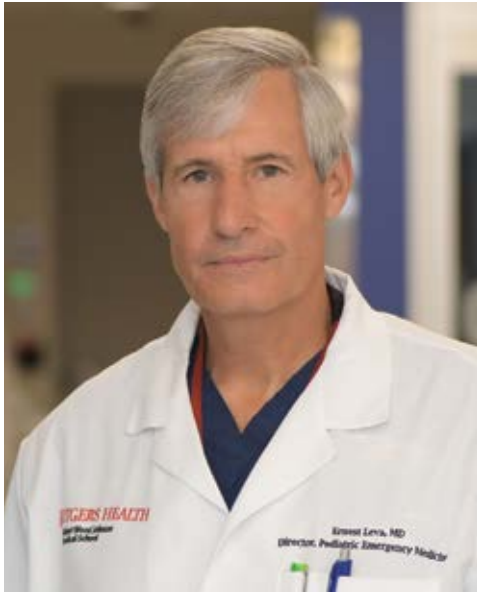
ADMINISTRATIVE STAFF

Mona Matta
Program Support Specialist



From Left to Right: 1st row: M. Guillermo, M. Matta, G. Lingasubramanian, Rhythm, 2nd Row: A. Minor, O. Sudol, T. Hegyi, J. Manzano, K. Srinivasan

Emergency Medicine



Ernest Leva, MD
Professor and Division Director

The Division of Pediatric Emergency Medicine comprises specialty trained pediatric physicians with expertise in pediatric emergency medicine. These specialists staff the emergency department at the Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital. The division is charged with caring for the most severely injured and sick children, as well as those with minor problems.

This academic year our division is particularly proud of the academic progress that both James Luckey, MD, and Prerna Trivedy, MD, accomplished. Dr. Luckey and Dr. Trivedy have both been promoted to assistant professors of pediatrics. We applaud their accomplishments.

COVID AND THE WORLD PANDEMIC

The Division of Pediatric Emergency Medicine was on the frontline in battling the world pandemic against our invisible foe, the Coronavirus - COVID-19. Realizing the need to navigate risk and produce a safe environment for our patients under the leadership of Ernest Leva, MD, and Richard Brodsky, MD, a pre-hospital triage system along with complete evaluation, was quickly designed and implemented. The system consisted of a series of tents in which patients with symptomatology reminiscent of COVID-19 were evaluated using a robot and telemedicine technique by providers inside the hospital. In providing this service, hundreds of patients were seen quickly, efficiently, and with little or no risk to themselves and providers. We are proud of the fact that no patient seen in this system returned for further care. The patient satisfaction was extremely positive and the time spent in our emergency service was half that of the normal patient. Along with the service has come research involved in this novel technique; most notably Drs. Richard Brodsky, Rachael Grieco, Matthew Pepper, Anna Petrova and Ernest Leva have had an article accepted.

Members of our division spent hours in personal protective equipment and have become fluent in the nuances of infectious protection both for themselves and staff.

EDUCATIONAL PROGRAMS

The division orchestrates the teaching program for the Robert Wood Johnson Medical School, Department of Pediatrics, Department of Emergency Medicine and Department of Family Medicine and Community Health. First-, second-, and third-year residents, as well as medical students, rotate through the Emergency Department. Educational opportunities are also offered to residents from other programs and medical students who wish to partake in the educational activities of the division. Physician assistant students and nursing students are also offered educational opportunities in the Pediatric Emergency Department. The division is intimately involved in research and academic pursuits pertinent to pediatric emergency medicine.

Uchechi Azubuine, MD, has taken on the responsibilities of educational director. Under her tutelage all aspects of education have been coalesced. Most notably, Dr. Azubuine has been accepted into the Women's Leadership Forum for Rutgers Biomedical and Health Sciences. She has also taken on the responsibility of departmental director of the Diversity and Inclusion Task Force.

Dr. Brodsky has also been accepted to the prestigious Rutgers Leadership Academy, participating in the 2021-22 academic year.

EXPRESS CARE MEDICINE PROGRAM

The Section in Express Care Medicine offers the opportunities of patients with minor illnesses and injuries to be quickly attended to by board certified pediatricians at the busiest time of the day. Rachael Grieco, MD, section director, has initiated endeavors that have expedited the care of these patients and significantly decreased their time spent in the emergency department.

TELEMEDICINE PROGRAM

The Division of Pediatric Emergency Medicine has continued to expand the Section of Telemedicine. Under the direction of Richard Brodsky, MD, expertise in pediatric emergency medicine is offered to other emergency departments in central New Jersey through tele-technology. In doing so, our academic and clinical expertise can be shared with colleagues, facilitating children's care and offering the ability for patients to be transferred to our hospital and emergency department. Currently, we engage with five

Emergency Departments, giving advice on care provided by our faculty.

PEDIATRIC POINT OF CARE ULTRASOUND

Under the guidance of Marinelle Quim, MD, director, Point of Care Pediatric Emergency Ultrasound, the division now incorporates the newer ultrasound capabilities for use by our physicians. Through the addition of ultrasound techniques, the emergency physicians can quickly diagnose problems, acting to reduce costs and time spent in our emergency department. Dr. Quim was awarded a three-year grant from the R Baby Foundation which allowed her to incorporate the newest computer technology to teach 18 learners per year techniques in point-of-care.

This academic year, Dr. James Luckey will be taking the reins of this important endeavor and expanding its reach. Educational opportunities are offered to all learners.

EMERGENCY MEDICAL SERVICE PROGRAM

The Section of Emergency Medical Services is involved in the establishment and oversight of pre-hospital care for children in central New Jersey. Ernest Leva, MD, has been the chair of Emergency Medical Services for the Children's Committee of the State of New Jersey for many years, and now acts as its vice chair. Under his guidance, Minh-Tu Do, MD, now leads the section in assuring the best possible care for the pre-hospital pediatric patient.

OFFICE PREPAREDNESS COURSE

The division also affords to pediatricians in central New Jersey an Office Preparedness course. The course consists of mock code scenarios performed in physician's offices to access and help in the preparation of significant problems that could take place in an office setting. After the course, there is a feedback session in which equipment and physician knowledge is updated to meet the practice's needs.



From Left to Right: 1st row: N. Miele, U. Azubuine, M. Do, M. Pepper, P. Trivedy, E. Leva, R. Brodsky, M.D. Baker, C. Williams, R. Grieco, J. Luckey

Faculty

Ernest Leva, MD
Professor and Division Director
 Uchechi Azubuine, MD
Assistant Professor
 M. Douglas Baker, MD
Professor
 Richard Brodsky, MD
Associate Professor
 Minh-Tu Do, MD
Assistant Professor
 Rachael Grieco, MD
Assistant Professor

James Luckey, MD
Assistant Professor
 Niel Miele, MD
Professor
 Matthew Pepper, MD
Assistant Professor
 Marinelle Quim, MD
Assistant Professor
 Prerna Trivedy, MD
Assistant Professor

Staff

Collette Williams
Staff Assistant

Endocrinology



Ian Marshall, MD
Professor and Division Director

The Division of Pediatric Endocrinology provides expert diagnostic and therapeutic services to patients ranging in age from birth to greater than 21 years for a variety of endocrine issues. These consist of disorders of growth, puberty, obesity, polycystic ovarian disease, thyroid, bone, vitamin D and calcium. Our physicians, along with our certified diabetes educators also provide care to patients and families with types 1 and 2 diabetes, as well as other rare forms of diabetes. In addition, we manage patients with rare disorders including congenital adrenal hyperplasia (CAH), Turner, Noonan and Prader Willi syndromes, as well as differences in sexual development. Further, we now have the largest transgender program for hormonal affirmation treatment

in New Jersey, providing care to transgender children, youth, and young adults. Ian Marshall, MD, was instrumental in the development of this multidisciplinary transgender care program, which has not only raised awareness of the unique health concerns in this population, but also has provided a supportive environment to optimize health and well-being in a comprehensive manner. We continue to grow our clinical programs.

The Chair of the Department of Pediatrics Sally Radovick, MD, is a leader in the field of pediatric endocrinology. With her extensive clinical and teaching experience and expertise in research, Dr. Radovick has transformed the landscape of the pediatrics department by recruiting superb academic faculty and expanding research opportunities throughout the division.

Dr. Marshall serves on the medical advisory board for CARES Foundation, a national non-profit organization that seeks to advance quality health care in patients and families with congenital adrenal hyperplasia in the community through support, advocacy, education and research. He was also invited to serve on Governor Murphy's Transgender Equality Task Force for the State of New Jersey, and continues to serve as a member on the Pediatric Endocrine Society's Transgender Special Interest Group.

Mariam Gangat, MD, is the program director for the first and only ACGME-accredited

Pediatric Endocrinology Fellowship Program in the State of New Jersey; the first fellow started in October 2018.

Ahmed Khattab, MD, has extensive experience in adrenal disorders, specifically congenital adrenal hyperplasia (CAH), has authored multiple manuscripts in the field of CAH and disorders of sexual differentiation; he also has been serving as director of the CAH Comprehensive Center at the medical school, the fifth of nationally recognized CAH Comprehensive Centers, through collaboration with the CARES Foundation.



From Left to Right: 1st row: E. Reyes-Rodriguez, R. Fowlie, M. Romano, 2nd Row: D. Cambareri, M. Ganget, I. Marshall, A. Khattab

Faculty

Ian Marshall, MD
Professor and Division Director
Mariam Gangat, MD
Associate Professor
Ahmed Khattab, MD
Associate Professor
Sally Radovick, MD
Professor and Henry Rutgers Term Chair

Research Faculty

Andy Babwah, PhD
Associate Professor

Staff

Diane Cambareri, LPN
Licensed Practical Nurse
Rachel Fowlie, RD, CDE
Registered Dietician
Edna Reyes-Rodriguez
Secretary I
Megan Romano, LCSW
Social Worker I

Postdoctoral Research Fellows

Bahaa Aloqaily, PhD
Sarmed Al-Samerria, PhD
Vanessa De Oliveira, PhD

Faculty Practice



Kathleen Faup
Faculty Practice Manager

The multispecialty faculty practice comprises 48 physicians providing comprehensive health care services for children from birth to age 21. Eleven clinical divisions, including primary care, and ten subspecialty divisions, provided approximately 38,000 patient visits this fiscal year. A multidisciplinary team of more than 70 staff, including allied health professionals as nutritionists, certified diabetes educators, social workers and cardio sonographers, support the faculty in providing quality health care at our practices located in New Brunswick, Edison, Monroe, Monmouth and Somerset. Our practice offers onsite services including, pulmonary function tests, Holter monitors, EKG and echocardiograms.

Subspecialists in infectious diseases, surgery and neurology expanded services outside of New Brunswick by offering convenient appointments at our Edison and Somerset sites.

As the COVID-19 pandemic continued to influence how health care services were provided, virtual visits became increasingly more popular with one-third of our total patient volume seen via telemedicine. The practice remained vigilant in its response to the COVID-19 pandemic continually adapting clinic processes to provide safe, quality care while ensuring patients had a positive experience.



From Left to Right: M. Rojas, M. Gomez-Mena, D. Davis, E.M. Castro Alvarez, K. Faup, J. Montanez, D. D'Aiello, D. Isales, S. Morales

Clinical Operations Support Staff

Faculty Practice Manager

Kathleen Faup

Supervisors, Ambulatory Care Services

Tracy Lynn Disney
Rita Thornton

Supervisor

Claire Gregory, LPN

Certified Medical Assistant

Denisse Isales, CMA

Clinic Services Representative I

Juliette E. Coker

Clinic Services Representative II

Doreen Davis
Rashonda N. Foxx
Maritza A. Gomez-Mena
Donna Griffin
Johanna Lee
Jenniffer Montanez
Samantha Morales
Sheila O'Reggio
Michelle Rojas
Julie Schaeffer

Jonathan Alexander Smith
Christina Tran

Medical Services Assistant

Emma Melissa Castro Alvarez
Tiffany Cooper
Melissa Romero-Hurtado
Mushirah James
Betty Pazmino
Dyshira Wade

Secretary II

Christina Congiusta
Damaris Messam
Carmen Rosado

Licensed Practical Nurse

Lisa Basha, LPN
Diana A. D'Aiello, LPN
Luanne Georgevich, LPN
Hina Patel, LPN
Paritaben Patel, LPN
Sheena Paule, LPN
Lori Pomales, LPN
Patricia Travastino, Sr. LPN

Staff Nurse

Mary Homan, RN
Tamar Thurm, BSN

Gastroenterology and Nutrition



Soula Koniaris, MD

Associate Professor and Division Director

The Division of Pediatric Gastroenterology and Nutrition consists of six full-time pediatric gastroenterologists, and a full complement of nutritionists, nurses, a social worker and support staff. We fully evaluate and treat pediatric patients with gastrointestinal, hepatobiliary and nutrition related disorders.

We routinely treat children with conditions such as complicated inflammatory bowel disease, celiac disease, dysphagia (swallowing difficulties), feeding disorders, chronic diarrhea, constipation/encopresis, failure to thrive, abdominal pain, vomiting, gastroesophageal reflux, eosinophilic disorders, food allergies, acute and chronic liver disease,

recurrent/chronic pancreatitis, weight management and short bowel syndrome.

Specific attention is paid to nutritional requirements through the full assessment of patients with chronic illnesses so that normal growth and development may be achieved. A team approach, including physicians, specialized pediatric nutritionists and a social worker is used. Education materials and instruction are provided to the patient and their families. There are multidisciplinary clinics in dysphagia/feeding disorders, failure to thrive, medically complicated children and inflammatory bowel disease. There are multi-disciplinary conferences including an aerodigestive conference and inflammatory bowel disease conference both held monthly. Participants of the aerodigestive conference are from pediatric gastroenterology, pulmonology, otolaryngology, nutrition, speech pathology and social work. Participants of the inflammatory bowel disease conference include pediatric gastroenterology, adult gastroenterology, colorectal surgery, pathology and radiology.

There are three full-time pediatric nutritionists in the division. As part of interdisciplinary team, the nutritionists continue to provide medical nutritional therapy to infants, children and adolescents with a wide array of acute and chronic diseases including gastrointestinal diseases, neuromuscular disease, developmental disabilities and pulmonary diseases

including cystic fibrosis and bronchopulmonary dysplasia. In addition, nutritionists also help manage patients with home parenteral and enteral nutrition, eating disorders, food allergy, short gut syndrome, hyperlipidemia, celiac disease, feeding disorders, renal disease, diabetes, and obesity.

Our division cares also for many children with obesity and its medical complications. The COVID-19 pandemic led to the abrupt disruption of school programs and limited opportunities for outdoor activities in all children. Elizaveta Iofel, MD, led a study examining the impact of the COVID-19 pandemic on weight gain, eating behaviors, and emotional responses in children between the ages of 5-12 years. One hundred and four families and 156 children participated in the original survey and results of the study were selected for presentation at the annual meeting of the North American Society of Pediatric Gastroenterology and Nutrition in December 2021. The second phase of the study, to evaluate adjustment of the same children to the new normal, is ongoing.

PROCEDURES AVAILABLE INCLUDE:

Esophagogastroduodenoscopy; colonoscopy; esophageal dilation, esophageal variceal banding, pyloric botox injection, capsule endoscopy; rectal suction biopsy; removal of foreign body and polypectomy; liver biopsy; 24-hour esophageal pH probe/impedance testing; hydrogen breath testing; total parenteral nutrition; enteral tube feeding and percutaneous endoscopic gastrostomy (PEG) placement.

Provide clinical social work services to patients and families as they manage and navigate having a child with chronic illness:

Services include individual counseling, family counseling, address and identify barriers to care, advocate on behalf of the patient and family, and link families to community resources for additional supports. This is a shared position with the Division of Pediatric Endocrinology. In addition, we have partnered with the Crohns and Colitis Foundation to provide a monthly support group for teens with inflammatory bowel disease (currently offered virtually due to the COVID pandemic).

RESEARCH INTERESTS:

Our division has been involved in several research areas within pediatric gastroenterology. There is recent nutritional research through our multi-disciplinary weight management program as well as evaluating specialized nutrition options such as blenderized tube feedings. Our division cares for many children with special medical needs such as gastrostomy feeding tubes (G-tubes). Blenderized tube feedings (BTF), are pureed table foods that can be given via G-tubes. Our division has been involved in research evaluating the efficacy and safety of this nutritional option.

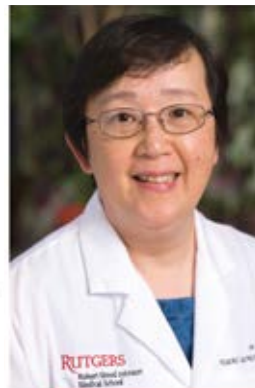
We are also one of 10 centers within the United States involved in the PRECIOUS study, a multi-center study evaluating a biomarker in the blood that predicts disease severity in inflammatory bowel disease. This biomarker has been validated within a European population and was able to accurately predict patients that would have mild versus moderate to severe inflammatory bowel disease. We hope that this biomarker will help future patients with inflammatory bowel disease and their gastroenterologists in treatment decisions.

Additionally, there is ongoing research within our division in regards to the gut microbiome. At this time, research studies have shown the gut microbiome appears to be critically important in human health and imbalances in the microbiome have been associated with several types of autoimmune, allergic and metabolic diseases. Research projects focus on evaluating the microbiome in children hospitalized with COVID infection, as well as the microbiome in relation to women and their newborns with and without COVID infection. Our division will also have a significant role in the upcoming NJ Kids Study, in which up to 5,000 pregnant women and their children will be followed for several years to answer big picture questions within New Jersey regarding maternal and child health including how the microbiome impacts health and disease.

SEE WHAT OUR PATIENTS ARE SAYING!

“

Dr. Chen was kind, thorough, gentle, prompt, knowledgeable, professional, caring and courteous. Couldn't ask for a better experience!



YEN PING CHEN, MD
PEDIATRIC GASTROENTEROLOGY



From Left to Right: E. Iofel, K. McMahon, M. Romano, M. Colin, S. Koniaris, D. Mintz, Y.P. Chen, D. D'Angelo, M. Weidner

Faculty

Soula G. Koniaris, MD
Associate Professor
and Division Director
Kristin Capone, MD
Assistant Professor
Yen Ping Chen, MD
Assistant Professor
Sherry Huang, MD
Professor of Pediatrics
Vice Chancellor for
Graduate Medical
Education/Enterprise
Wide DIO

Elizaveta Iofel, MD

Assistant Professor

Melissa Weidner, MD

Assistant Professor

Staff

Michele Colin, RD
Nutritionist I

Donna-Jean D'Angelo
Staff Assistant

Sandra Ann Gartelmann, RN,
BSN

Staff Nurse

Melanie Sunkyoung Lee, RD

Nutritionist I

Katherine E. McMahon, RN
Staff Nurse

Daria N. Mintz, RD
Nutritionist I

Megan Romano, MSW
Social Worker I

Medical Genetics



Milen Velinov, MD, PhD
Associate Professor and
Division Director

The Division of Pediatric Medical Genetics continues its commitment to provide high quality, state of the art genomic medicine to the residents of New Jersey and surrounding region. The genetics team during the 2020-2021 academic year consisted of board-certified medical and biochemical geneticists: Philip Giampietro, MD, PhD, FACMG, and Susan Sklower Brooks, MD, FACMG; three licensed genetic counselors, Christina Botti, MS, LCGC; Ji-Sun Kim, MS, LCGC; and Sara Welner, MS, LCGC; and advanced practice nurse, Sharon Anderson, DPN, APN-C.

Dr. Giampietro and Dr. Brooks departed from the department during the 2020-2021 period. Milen Velinov, MD, PhD, joined the service in May 2021 as the

division director. Dr. Velinov's research interests include Fragile X Syndrome, genetic basis of autism and gene therapy for neurodevelopmental disorders. Drs. Milen Velinov and Sharon Anderson serve on the New Jersey Department of Health (NJ DOH) Newborn Screening Committees.

The division is the recipient of a Genetic and Newborn Screening Service grant from the NJ DOH. Dr. Velinov is the Principal Investigator of the grant and works closely with Dr. Anderson to diagnose and provide medical management for patients with inborn errors of metabolism.

Despite adverse conditions posed by the COVID-19 pandemic making clinical service a challenge, all facets of our program were operational with the help of telehealth. We continued to see both new and follow-up patients with genetic concerns using a telemedicine platform supported by the medical school. For some patients we were able to proceed with a genetic evaluation and offer genetic testing if they had clinical evaluations that disclosed cardiac abnormalities such as a congenital heart defect, rhythm disturbance or aortic root enlargement, or family history of a specific genetic concern. For patients experiencing delays in acquisition of motor and speech milestones, we were able to begin the evaluation and initial genetic testing. Since a percentage of medical genetic evaluations rely heavily on features identified on physical examination, some

evaluations needed to be postponed. As many members of our division telecommuted, we have continued to perform genetic evaluations with the patient, genetic counselor, geneticist, advanced practice nurse, translator, pediatric resident, and medical and genetic counseling students in different locations.

With the decrease of new COVID infections in our area, we are now transitioning back to in-person patient visits.

Dr. Velinov collaborated with the company Zynerba to initiate a clinical trial for patients with Fragile X syndrome as part of the multi-site trial "Reconnect". The Clinical Research Center at the Child Health Institute was approved as a clinical trial site after the company pre-trial visit on July 7, 2021. This clinical trial is projected to start recruiting by the end of 2021. In 2021, Dr. Velinov served as an Expert Member for the Study to Explore Early Development (SEED) follow-up studies, Disease, Disability, and Injury Prevention and Control Special Emphasis Panel of the Department of Health and Human Services, Centers for Disease Control and Prevention. In addition, he is a Scientific Board Member of the parent support group Chromosomal Disease Outreach.



From Left to Right: C. Botti, M. Velinov, S. Anderson, J.S. Kim, D.Soto

Faculty

Milen Velinov, MD, PhD
Associate Professor and Division Director
Christina Botti, MS, LCGC
Assistant Professor

Ji-Sun Kim, MS, LCGC
Genetics Counselor
Sara Welner, MS, LCGC
Genetics Counselor
Damaris Soto
Secretary I

Staff

Sharon Anderson, DNP, APN-C
Advanced Practice Nurse

Patient Testimonials

Yen Ping Chen, MD, Gastroenterology

Dr. Chen was kind, thorough, gentle, prompt, knowledgeable, professional, caring and courteous. Couldn't ask for a better experience!

Monica Chugh, MD, Cardiology

Great experience – the staff and doctors were wonderful! The nurse was knowledgeable and very personable – amazing staff! Dr. Chugh was great. I will recommend family to her!

Valeriya Feygina, MD, Nephrology

Office was spotless and well spaced. Dr. Feygina was kind and knowledgeable. We never felt rushed as we asked many questions. Would definitely recommend!

Joseph Gaffney, MD, Cardiology

Given the nervousness of the reason for the visit, the office staff is INCREDIBLY kind, patient, and friendly. I was well-informed and well cared for during my entire visit. I felt very confident in the provider, and the information I got moving forward.

Mariam Gangat, MD, Endocrinology

- 1.) Excellent service. Good service from the nurses. Very satisfied with Dr. Gangat. I recommend to anyone. They take the necessary precautions during this pandemic. Very good service from the nurses, receptionists and doctors.
- 2.) Nurses are great. Rachel and Jo are a godsend to us. They always go above and beyond.

Sunanda Gaur, MD, Allergy, Immunology and Infectious Diseases

Very helpful and knowledgeable.

Elizaveta Iofel, MD, Gastroenterology

First time here and I had a very good experience. Everyone was kind.

Soula Koniaris, MD, Gastroenterology

Super good doctor. Would recommend to friends or family definitely.

Benjamin Lentzner, MD, Cardiology

- 1.) Dr. Lentzner and his staff are incredible!
- 2.) Always impressed with this office. Staff and Dr. Lentzner are always excellent! Always easy to work with and pleasant to deal with. Will be sad when [son] has to leave Dr. Lentzner when he turns 21!
- 3.) Everybody in the office is so nice and knowledgeable. All take time to listen to any and all questions.
- 4.) Registration woman was EXTREMELY friendly, helpful, knowledgeable and comforting upon registration. Very quick and efficient. Thank you. Ms. LuAnn (nurse and EKG) was super, and we both appreciated her friendliness and efficiency. Great from start to finish. Great big thank you to all who work hard (EVERY DAY) AND especially during COVID to make this visit great. Quick from start to finish.
- 5.) Dr. Lentzner is wonderful—ordered tests so we can be sure our son is healthy, awesome bedside manner, SO “real.”

Emanuel Lerner, MD, Primary care services

- 1.) From the first day of meeting Dr. Lerner, we knew it was going to be a lifelong relationship. He was so kind, working with new parents of twins, and put all of us at ease immediately. My kids are now 17, and Dr. Lerner has seen them as they've grown into young adults. Little does he realize, but his yearly check-up mantra during their well visit each year about only drinking H2O is cemented into their brains and they only drink water! Thank you, Dr. Lerner!
- 2.) Dr. Lerner has always been a great doctor! My children love seeing him! We love Dr. Lerner and trust him to give the best medical care.

- 3.) Professional, knowledgeable and friendly staff. Great listener, sense of humor and eased our worries.

Robert Manduley, MD, Cardiology

- 1.) Each time I call I am communicated immediately and they are very kind and loving. I trust the doctor a lot. My son is in very good hands, and it gives me confidence and security. They are professional, very good. They are educated and very respectful and they explain very good. All is excellent. I would recommend any person their consultation. They're excellent.
- 2.) Doctor and staff from reception area, nurses and techs were excellent! Took their time and had patience with my girls. Explained everything in detail. Dr. Manduley even drew a detailed picture of a heart to explain to my daughter the results of her echocardiogram. Nicest staff. Great attitudes and personality. A pleasure to be around. Extremely helpful when making appointments and explaining the process, since this was our first visit.
- 3.) Receptionist was very friendly and made my son and I very comfortable.

Elsie Roca-Piccini, MD, Primary care services

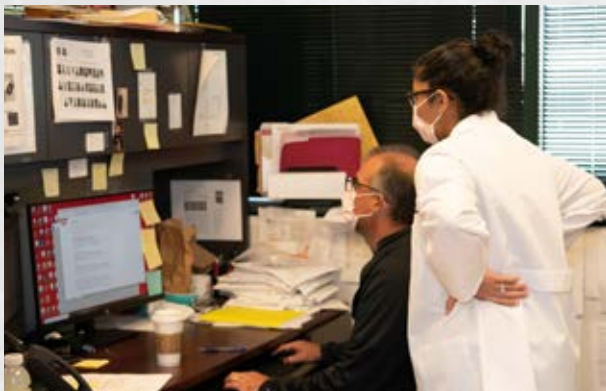
The nurse was very gentle and respectful of what we asked of her during the vaccine administration. The office had great precautions for COVID-19. We felt very safe and comfortable.

Michele Takyi, MD and Elizabeth Goodman, MD, Primary care services

Dr. Takyi and Dr. Goodman are outstanding!

Shoshana Zitter, MD, Primary care services

The receptionist Donna is always helpful!



Hematology/Oncology: Rutgers Cancer Institute of New Jersey



Peter Cole, MD
Professor and Division Director

The Pediatric Hematology/Oncology Service provides care for children with cancer or blood disorders at three sites in the RWJBarnabas Health System, under the direction of Peter Cole, MD, Embrace Kids Endowed Chair and Professor of Pediatrics. Our team is centered in New Brunswick at the Rutgers Cancer Institute of New Jersey and the PSE&G Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital, with 9 clinical faculty and 5 research faculty. Our physicians also care for patients at The Valerie Fund Children's Center for Cancer and Blood Disorders at the Unterberg Children's Hospital at Monmouth Medical Center. In addition, five clinical faculty provide hematology and oncology care at The Valerie Fund Children's Center for Cancer and Blood

Disorders at The Children's Hospital of New Jersey at Newark Beth Israel Medical Center. Our combined, interdisciplinary team offers expertise in the full range of diagnoses seen in pediatric hematology and oncology.

As part of our ongoing efforts to improve care through research, we offer participation in clinical research, testing innovative treatment strategies to patients with cancer, sickle cell anemia, bleeding or clotting disorders. In addition to investigator-initiated clinical trials, we offer trials sponsored by industry partners as well as cooperative clinical trial groups such as the Children's Oncology Group and the Dana Farber Cancer Institute Acute Lymphoblastic Leukemia Consortium. This year, we are particularly excited to begin offering clinical trials of cell-based therapies, including an industry-sponsored trial of chimeric antigen receptor T-cells (CAR-T) targeting CD30 for patients with refractory Hodgkin lymphoma, as well as an expanded access protocol testing umbilical cord blood infusions for children with brain injuries or autism.

Our research faculty continue to pursue cutting edge research at Rutgers Cancer Institute,

with new NIH funding, high profile publications and awards. Peter Cole, MD, along with Travis Baker, PhD, assistant professor, Center for Molecular and Behavioral Neuroscience, received notice of new NIH funding for a project to characterize differences in brain functioning between survivors of childhood solid tumors and healthy controls. Advaita Madireddy, PhD, assistant professor, published the results of her studies of DNA damage repair in *Nature* and *Proceedings of the National Academy of Sciences*. Katie Devine-Recuay, PhD, MPH, associate professor, continues to expand the work in her Section of Pediatric Population Science, Outcomes and Disparities Research, with new collaborators as well as her existing NIH-funded work reducing distress among adolescents with cancer. Beth Savage, PhD, CPNP, CPON, assistant professor, received the Dianne Fochtman New Author Award from the Association of Pediatric Hematology Oncology Nursing. Scott Moerdler, MD, assistant professor, was awarded membership status with the SWOG (Southwest Oncology Group) Cancer Research Newark, and was admitted to the junior section of the Society for Pediatric Research.

Our biggest news is the creation of the New Jersey Center for Pediatric Cancer and Blood Disorders Research at the Rutgers Cancer Institute, funded by a \$10 Million annual allocation from the State of New Jersey. Under the direction of Peter Cole, MD, this new Center of Excellence will advance research and treatment for children with cancer and allow our researchers to broaden our scientific understanding, raise survival rates and improve quality of life. Already, we have expanded our clinical trial infrastructure, issued a request for applications to fund new pilot research projects related to pediatric cancer or blood disorders, and have begun interviewing for five new tenure-track research positions in laboratory, translational or population science.

The division remains committed to the education of the next generation of clinicians and scientists. Archana Sharma, DO, assistant professor, and Scott Moerdler, MD, lead our Pediatric Hematology and Oncology Education Program, continually revising and updating our curriculum to reflect the most current data and to meet the needs of medical students and pediatric residents. All of our faculty are actively involved in mentoring students and residents in clinical care as well as research endeavors. Students and residents received recognition for their work with authorship on more than two dozen posters, oral presentations, or manuscripts. This year, we are submitting an application for a fellowship training program for pediatric hematology and oncology.

We look forward to continuing our existing interactions with our colleagues in the Department of Pediatrics, as well as to exploring and developing new clinical, research, and teaching collaborations.

Faculty (New Brunswick)

Peter Cole, MD
Tenured Professor of
Pediatrics
Embrace Kids Foundation
Endowed Chair
Division Director for
Pediatric Hematology/
Oncology
Director of the New Jersey
Center for Pediatric Cancer
and Blood Disorders
Research
Razia Akhtar, MD
Assistant Professor
Katie Devine-Recuay, PhD
Associate Professor
Director of the Section of
Pediatric Population Science,
Outcomes and Disparities
Research
Richard Drachtman, MD
Professor and Clinical Section
Chief
Meenakshi Goyal-Khemka,
MD
Assistant Professor
Karen Long-Traynor, PhD
Assistant Professor
Advaita Madireddy, PhD
Assistant Professor, Research
Lab II
Nicole Mallory, MD
Assistant Professor
Margaret Masterson, MD
Associate Professor

Scott Moerdler, MD
Assistant Professor
Susan Murphy, MD
Assistant Professor
Beth Savage, PhD
Assistant Professor
Archana Sharma, DO
Assistant Professor

Staff (New Brunswick)

Elana Brodsky, RN
Sickle Cell Program Nurse
Navigator
Dawn Carey, APN
Advanced Practice Nurse
Rosemary Carreno
Medical Health Technician
Sheliny Carrillo, RN
Treatment Nurse
Elizabeth Castro, APN
Advanced Practice Nurse
Lauraine Celestin
Scheduler
Susan Christ
Program Administrator
Shayna Cornelius, RN
Treatment Nurse
Dora Delsordo, APN
Advanced Practice Nurse
Frank Diglio
Lab Tech, Peter Cole
Research Lab
Paulette Forbes, MPH, MS,
APN-BC
Advanced Practice Nurse
Teresa Gallardo
Financial Counselor

Jennifer Hadjar, MSN, RN
Director of Nursing, Pediatric
H/O
Audrea Henry
Administrative Research
Associate
Antonia Kaz
Laboratory Technician, Peter
Cole Research Lab
Gary Kwok, PhD
Postdoctoral Fellow
Deborah Leif, LCSW
Licensed Clinical Social
Worker
Kristine Levonyan-Radloff
Program Coordinator
Lori Magoulas, PhD, RD
Nutritionist
Marilyn Mundy, RN
Treatment Nurse
Michelle Olk
Medical Technician
Susan Pillet, APN
Advanced Practice Nurse
Donna Plaxe, APN
Advanced Practice Nurse
BMSCH
Stephanie Samuels
Medical Records
Jennifer Savarese
Senior Scheduler/Patient
Liaison
Jennifer Slicner, RN
Treatment Nurse
Susan Stephens, LCSW
Licensed Clinical Social
Worker



From Left to Right: 1st Row: S. Dillard, D. Tortajada, R. Drachtman, D. Plaxe, J. Savarese, 2nd Row: M. Mundy, J. Hadjar, P. Cole, S. Christ, S. Murphy, R. Akhtar.

Dawn Tortajada, APN
Advanced Practice Nurse
Kathleen Welsh
Secretary I
Lauren Grace Wiest, RN
Research Nurse Clinician
Dawn Yuhas, RN
Treatment Nurse

Faculty (Newark)

Teena Bhatla, MD
Medical Director
Surabhi Batra, MD
Attending/Late Affects
Physician

Marianna DeBenedictis,
MD
Attending Physician
Shalu Narang, MD, MPH
Attending Physician
Harini Rao, MD
Attending Physician

Staff (Newark)

Autumn Banta, LSW
Social Worker
Donna Frasca-Brady, M.S.
Ed.
Educational Liaison
Sarah Graham
Child Life Specialist

Lateasha Grant-Mack,
MSW, LCSW
Social Worker
Jillian Hinko, CCLS
Child Life Specialist
Melissa Rovetto-Ruffner,
LCSW
Social Worker
Ester Savetsky, ATR-BC,
LCAT
Art Therapist
Mariella Silva, MS, RYT,
LMT
Mind, Body, Spirit
Specialist

Pediatric Hospital Medicine



Dalya Chefitz, MD
Professor and Division Director

The Division of Pediatric Hospital Medicine provides inpatient care for newborns and children in the Bristol-Myers Squibb Children's Hospital (BMSCH) on the Robert Wood Johnson University Hospital campus. The division faculty serve as the in-house physicians to provide care in the well-newborn nursery and on the pediatric and adolescent floors. These child health experts care for both acute and chronic illness, including previously healthy children and those with high levels of medical complexity. The division is committed to providing state of the art, high quality and safe care to the continuum of children who come from throughout the state of New Jersey and beyond to BMSCH.

As a part of our commitment to clinical excellence, the division plays a central role in the education and development

of physicians in training, ranging from medical students to resident physicians. The division maintains primary responsibility for teaching the role of the generalist physician in coordinating and managing the inpatient care of children with acute and chronic illness. Integral to these activities is leadership in practice and education, developing scholarly projects and quality improvement activities. At our best, we model community service, compassion and humanism with good humor when caring for our patients. We promote positive patient outcomes and a superior patient and family experience. We value patient- and family-centered care for our patients. We offer community physicians the opportunity to have their patients managed by onsite experts who have established relationships with the pediatric and surgical specialists that some patients require. We remain engaged with our specialist and community colleagues and are available to help to enhance physician-patient and physician-family communications. We work with our community physicians' offices to promote a seamless continuum of care.

The evolution of a distinct Division of Pediatric Hospital Medicine from Academic General Pediatrics promotes our capacity to serve as clinicians and scholarly leaders regarding care

of the sick child. We serve our patients and our community, promoting a higher standard of care for the whole child in the context of both their family and their community. We are flourishing and continuing to grow. The elevation of Hospital Medicine to a division promotes our ability to recruit and retain top-level inpatient specialists, including those interested in enhancing our understanding of care for children and adolescents via clinical and health services research.

The primary care practices, located in the Division of Population Health, Quality and Implementation Sciences (PopQuIS) coordinate closely with the Division of Pediatric Hospital Medicine (PHM) and allow Rutgers Health to support the full continuum of care for those patients seen in our practices. We further partner with PopQuIS to develop and advance research, education and advocacy that extends beyond the walls of BMSCH. Secondary appointments in PopQuIS may be available for candidates with scholarly interests in areas that range from public or population health to health services research to Quality and Safety or Implementation research.

THE DIVISION TACKLES COVID-19

With the COVID pandemic, the hospitalist division took the lead in education and safety of patients, staff and doctors. Our group saw the first pediatric patient in our hospital now described as MIS-C, a COVID-related inflammatory process that has features of Kawasaki Disease and in this case, heart failure. The child recovered and we soon had a crash course in this newly-described condition. We participated in the daily department-wide calls to fine-tune patient care and coordinate between not only our divisions, but hospitals within our system. With other hospitals converting to COVID-only centers for adults, we managed many of the pediatric inpatients for our entire hospital system. We coordinated with our colleagues in obstetrics and neonatology to manage newborns born to COVID positive mothers. With the COVID pandemic heading into its third year, we continue to care for medically fragile children as well as previously healthy children who have COVID. As we look forward to a new academic year, we share our highlights.

DEDICATED FACULTY & RESIDENTS

Every year we welcome two chief residents as junior faculty in our division. We thank Jaya Isaac, MD, and Debra Zharnest, MD, for their hard work and dedication for the academic year 2020-21. This year, in addition to the role as chief residents, Akreeti Maskey-Pagodin, MD, and Sarah Yavelberg, MD, teach and see patients as hospitalists. This year we also welcomed our first pediatric hospital medicine fellowship trained faculty, Fahmida Islam, MD, and Esther Thoby, MD, who in addition to caring for patients are working on quality improvement projects that revolve around health disparities.

Indira Amato, MD, FAAP, noting the importance of healthy residents, developed a

Residents Wellness Curriculum. She has since been appointed to run this curriculum for the entire medical school graduate education program. She serves as vice president of the NJ Chapter of the American Academy of Pediatrics (NJAAP) and will be the president on July 1, 2022.

Also, in education, is Elizabeth (Beth) Goodman, MD, who was recently appointed (FY21) as the associate residency program director and continues to be the director of the Pediatric Clerkship. She is an integral educator in the continuum from undergraduate to graduate education. During COVID, she re-imagined clinical clerkships and quickly created virtual clerkships for the students. Her devotion to patients and education earned her the prestigious induction into Alpha Omega Alpha as a faculty member.

Janice Cato-Varlack, MD, associate professor of pediatrics, is also the assistant dean of students and multicultural affairs. In this role, she is the chair of the Access-Med and Biomedical Careers program and oversees all aspects of the five programs designed to increase access to underrepresented minorities to our medical school. She oversees all the multicultural affairs student groups and serves on the admissions committee and Alpha Omega Alpha selection committee. This past year she was selected as the convocation speaker.

Paula Lucuara Revelo, MD, a member of the Gold Humanism and Honor Society (GHHS), worked with medical students during GHHS solidarity week to create thank you cards for nurses. She mentors monitory undergraduates at Rutgers interested in medicine, and last year received the Lawrence Taft, MD Teaching Award from the pediatric residents.

The newborn nursery doctors: Aazim Hussain, MD, an accomplished teacher, established a 24-hour newborn discharge protocol during the COVID pandemic, Aimee LaRiviere, MD, was awarded last year for the fourth time, the Ruth Ellen Steinman, MD, resident teaching award. Our newest newborn attending is Susan Dibs, MD, who is also working in PopQuIS as she launches a brand-new international adoption service.

Dalya Chefitz, MD, FAAP, and Alan Weller, MD, FAAP, serve as the division and associate division chief, respectively. Together, they are working on quality improvement projects with the pediatric residents on asthma and complex pneumonia. Both Drs. Chefitz and Weller are working on child health and education outside of the university. Dr. Weller, in his role with the NJ Chapter of the American Academy of Pediatrics Governor's Affairs Committee, testified in front of the legislature and in closed-door sessions on children and vaccinations. He completed his two-year term as president of the NJ Chapter of the American Academy of Pediatrics, where he has focused on making CME available to pediatricians state-wide through webinars. He was instrumental in COVID education and preparation. His weekly webinars had record attendance and greatly improved pediatric care around the state. Last year he was awarded the "Health Care Hero" title for his exemplary work for the hospital and community during the COVID crisis.



From Left to Right: A. Weller, E. Goodman, D. Chefitz, I. Amato, C. Williams

Faculty

Dalya Chefitz, MD, FAAP

Professor and Division Director

Alan Weller, MD, FAAP

Associate Professor and Associate Division Director

Indira Amato, MD, FAAP

Associate Professor

Janice Cato-Varlack, MD

Associate Professor

Assistant Dean of Students and Multicultural Affairs

Susan Dibs, MD

Associate Professor

Director of International Adoption Medicine

Elizabeth Goodman, MD

Associate Professor

Director, Pediatric Clerkship

Associate Director, Pediatric Residency Program

Aazim Hussain, MD

Assistant Professor

Fahmida Islam, MD

RBHS Instructor

Aimee LaRiviere, MD

Assistant Professor

Paula Lucuara Revelo, MD

Assistant Professor

Akreeti Maskey-Pagodini, MD

RBHS Instructor

Esther Thoby, MD

Assistant Professor

Sarah Yavelberg, MD

RBHS Instructor

Staff

Collette Williams

Staff Assistant

Immunobiology



Derek Sant'Angelo, PhD
Professor and Division Director

Understanding the biological basis for the immune response to infections, self-destructive autoimmune diseases, and the prevention of cancer is a means to prevent these diseases from occurring. Equally important, the immune system plays a continuous role in maintaining the well-being of many of our organs, such as the intestine, skin, lungs and more. "Immunobiology" is the study of the immune system in health and disease.

The Division of Immunobiology serves a dual function within the Department of Pediatrics. First, the division serves as a focal point for immunology related research. Second, the division is a meeting point between the basic and

translational research being done at the Child Health Institute of New Jersey (CHINJ) and the Department of Pediatrics. The mission of CHINJ, under the leadership of Director Arnold Rabson, MD, is to perform outstanding research to identify the causes, treatment, and prevention of important childhood diseases. Members of CHINJ pursue research projects in diverse areas including type 1 diabetes, the neonatal immune system, cancer immunology, the neurobiology of feeding disorders, autism and addiction, and metabolic regulation including childhood obesity.

KEY HIGHLIGHTS OF THE YEAR INCLUDE:

The search and recruitment of two new outstanding tenure track faculty to CHINJ and the division was, without question, the highlight of the year. Bringing in new immunology faculty has been a longtime goal of Derek Sant'Angelo, PhD, division director.

- **Gaetan Barbet, PhD**, joined CHINJ as a tenure-track assistant professor of pediatrics in January 2021. Dr. Barbet comes to us from Weill-Cornell Medical School, where

he had developed an exciting research program concerning the immune basis of inflammatory bowel disease and the roles of calcium in regulating antigen presenting cells in tissues. His laboratory studies the biology and function of mononuclear phagocytes such as macrophages, dendritic cells, and monocytes. He is developing an innate immunity focused research program centered around the functions of mononuclear phagocytes in various settings of infection, cell death, autoimmunity, and cancer. Dr. Barbet has a longtime interest in the regulation of the calcium homeostasis and its role in the biology of dendritic cells and macrophages. Dr. Barbet has also developed an exciting research program in the immune basis of inflammatory bowel disease. These studies are funded by a prestigious Crohn's and Colitis Foundation post-doctoral fellowship and Career Development award. These studies will continue Dr. Barbet's pioneering and cross-disciplinary work dissecting calcium signaling in mononuclear cells in the physiological context of innate immune responses resulting from infection, tissue damage or cancer.

- **Qi Yang, MD, PhD**, joined CHINJ in October 2021 as a tenure-track associate professor of pediatrics. Dr. Yang was previously at Albany Medical College, where she established a dynamic research program that focused on understanding the function and regulation of innate and innate-like lymphocytes in airway inflammation. Dr. Yang is already an established leader in this field and was among the first to discover group-2 innate lymphoid cells (ILC2) in the lung in 2010. At Rutgers, Dr. Yang will continue to study in-depth molecular and cellular mechanisms that control ILC2 responses in airway inflammation and infection. Dr. Yang recently published an intriguing paper describing crosstalk among MAIT cells, ILC2 and pathogenetic T cells during allergic airway inflammation. These discoveries have led to the development of a novel probiotic strain that is expected to boost the abundance of anti-inflammatory MAIT cells to combat severe asthma. In her most recent studies, Dr. Yang has shown that innate lymphocytes regulate neuroinflammation, introducing her to the field of neuroimmunology. Dr. Yang is an extraordinary scientist who has published multiple high-profile papers throughout her training and career and is funded by three R01 NIH grants.
- **Lisa Denzin, PhD**, tenured, associate professor of pediatrics and pharmacology, continues her internationally recognized studies of the proteins that regulate MHC

class II peptide loading, which ultimately controls the CD4 T cell response during infection and autoimmunity. Dr. Denzin, in close collaboration with Dr. Tatyana Golovkina, (University of Chicago), has shown that one of these proteins, HLA-DO, controls retroviral infections. These breakthrough studies are central to Dr. Denzin's current research and are supported by an NIH R01/R56. Dr. Denzin initiated new research in response to the COVID-19 pandemic to develop a vaccine that relies on modulating protein conformational dynamics to improve the adaptive immune response to SARS-CoV-2 and other emerging infections. These studies were supported by new grants from both the Rutgers Center for COVID-19 Response and Pandemic Preparedness and the New Jersey Health Foundation. Finally, Dr. Denzin is working with Vikram Bhise, MD, to explore antigen presentation deficiencies in children with multiple sclerosis. Correlating these changes with disease may offer new therapeutic strategies. These studies are supported by a Pediatric Research Pilot Support (PRePS).

- **Derek Sant'Angelo, PhD**, division director, tenured, professor of pediatrics and pharmacology, associate director of basic sciences, CHINJ, continued his research exploring the genetic control of immune cells in health and disease. Current NIH funded studies emphasize the control of inflammatory bowel disease by T cells and the control of metabolism and obesity by T cells. Dr. Sant'Angelo was able to expand his research and was awarded a supplement to his R01 to study immunological alterations that might be associated with cognitive deficiencies found in patients with long-COVID. These studies are being conducted with William Hu, MD, PhD, in the medical school's Department of Neurology. Dr. Sant'Angelo was also the recipient of a Busch Biomedical grant to study neonatal T cells, a New Jersey Commission on Cancer Research grant to study novel receptor-ligand pairs that

may control T cell responses, a New Jersey Health Foundation grant to study T cells that control the growth of tumors and an NIH R21 to study innate T cell control of obesity. Finally, Dr. Sant'Angelo is exceptionally proud of his senior graduate student, Agata Krzyzanowska, who was awarded the Aaron J. Shatkin Memorial Research Award and the AAI Career Development Fellowship.

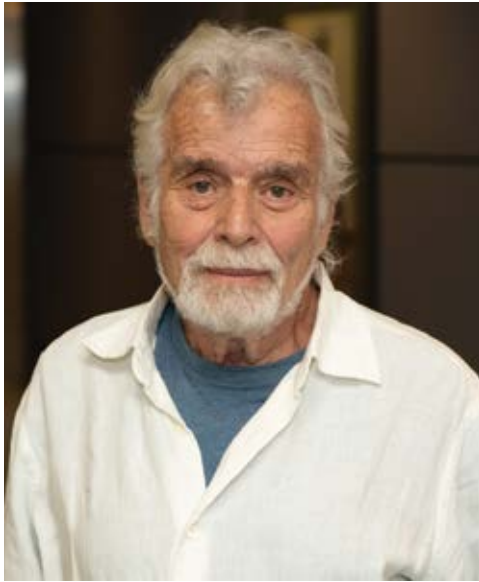
Derek Sant'Angelo, PhD

Harold L. Paz, M.D. Endowed Professor of Developmental Biology
Associate Director of Basic Science
Child Health Institute of New Jersey
Professor, Department of Pediatrics and Pharmacology
Division Director, Immunobiology



From Left to Right: 1st Row: L. Osorio, D. Sant'Angelo, A. Rabson, A. Krzyzanowska 2nd Row: C.C. (Chris) Sung, P. Sathuvalli, D. Millick, G. Barbet, S. Peeters, N. Vasquez

Institute for the Study of Child Development



Michael Lewis, PhD

Distinguished Professor and Division Director

The Institute for the Study of Child Development (ISCD) has as its goals: 1) research designed to understand the processes leading to healthy children, 2) translation of research findings into useful products and services, and 3) education.

Health of children and families involves their emotional, social, and psychological functioning, as well as their physical/medical well-being. For a complete understanding of children's health, research is necessary at all levels of functioning, from the molecular processes underlying behavior to the behavior of the whole child. In addition to understanding the different levels of

functioning, it is important to measure the environmental context in which the child is raised. Indeed, to understand development at any level of functioning, from the molecular to the whole child, understanding the role of environment is critical to understanding the developmental process itself.

Research goals of the institute range from characterizing the environment, whether it be the physical environment of toxins or the social environment of caregivers, to studying the relation between brain and behavior using brain-imaging technology. Current research includes studies of behavioral teratology, the long-term effects of drugs during pregnancy, and includes factors that affect the behavioral and physiological reaction to stress and the capacity to cope with stress, including measures of the ANS and adrenal cortical functioning.

An important area of study is the emergence of the self-conscious emotions of embarrassment, shame, pride, and guilt as they affect atypical cognitive, social, and emotional development. Longitudinal studies of abused and neglected children provide the opportunity to explore the emotional development of children living in toxic

environments.

One recent product of the institute involves the development and use of intersensory integration procedures to examine these capacities as a tool to identify infants at-risk for an Autism Spectrum Disorder (ASD) diagnosis earlier than current ASD diagnostic procedures. This work was funded by 2015 and 2020 grants from the Governor's Council for Medical Research and Treatment of Autism. In addition, these testing procedures can be used to study children who have received cochlear implants.

Along with Tara Matthews, MD, developmental and behavioral pediatrician at Children's Specialized Hospital, we have developed and copyrighted an app called EARLYThree which pediatricians and parents can use to detect developmental delays in children from eight months to three years of age. This app is in the process of being evaluated and the agreement between parents and pediatricians has been good. Another experimental procedure we developed and used in the study of autism is mirror self-recognition. Recognition in mirrors should be accomplished by 24 months, and delays to that are related to clinical conditions such as Down syndrome, ASD, and prematurity.

Our educational programs involve supervision of the research of: fellows in the Developmental and Behavioral Pediatrics Fellowship Program; first- and second-year medical students conducting independent research projects; and master's level students in the Rutgers School for Graduate Studies Capstone Program working on the institute's many research projects. The students' research is presented at many national conferences, such as the Society for Developmental and Behavioral Pediatrics; Association for Psychological Science; Pediatric Academic Societies; Eastern Society for Pediatric Research; International Congress of Infant Studies; and Eastern Psychological Association.

Over this past year, these students have published the following papers and presentations: Park, P.S. & Lewis, M. (2020). On the measurement of self-conscious emotions. *Child Psychiatry and Human Development*. Published online November 13, 2020, <https://doi.org/10.1007/s10578-020-01094-2>

Suri, K., Minar, N., Willson, E., Ace, J., & Lewis, M. (2021). Face memory deficits in children and adolescents with Autism Spectrum Disorder. *Journal of Psychopathology and Behavioral Assessment*, 43(1), 108-118. Published online January 5, 2021, <https://doi.org/10.1007/s10862-020-09840-5>

Christensen, R.E., & Lewis, M. (2021). The development of disgust and its relationship to adolescent psychosocial functioning. *Child Psychiatry & Human Development*. Published online June 23, 2021, <https://doi.org/10.1007/s10578-021-01208-4>

Karpova, N., Zhang, D., Beckwith, A., Bennett, D., & Lewis, M. (in press). Prenatal drug exposure and executive function in early adolescence. *Neurotoxicology and Teratology*.

Suri, K., Lewis, M., & Minar, N.J. (in press). Perception of audio-visual synchrony in infants at-risk for ASD. *Journal of Autism and Developmental Disorders*.

A course in the Rutgers Graduate School of Biomedical Sciences (“Neurons to Neighborhoods – Human Development in Context: Rethinking Nature vs. Nurture”) has been taught for the last five years. Moreover, a Pediatric Psychology & Social Work Practicum Training Program for psychology and social work graduate students continues to operate. Students are assigned to both outpatient units as well as inpatient hospital units in the Department of Pediatrics. The program teaches students from the School of Social Work and Graduate School of Applied and Professional Psychology about pediatrics, and at the same time they help hospital and clinical staff with psychological and behavioral problems of patients and their families.

In response to the COVID-19 pandemic, the institute launched two new research projects to study issues related to the pandemic. In the first project, we collaborated with pediatricians in the department to provide mental health support via telephone and video conferencing to health care staff working through the COVID-19 pandemic at RWJUH. In the second project, we are collecting data by interviewing Spanish speaking families about their experience using telemedicine during COVID, in an effort to identify and ameliorate any problems they had in using this technology.



From Left to Right: J. Gold, S. Napoli, M. Lewis, B. Zimmerman-Bier, C. Bozso, O. Dominguez

Faculty

Michael Lewis, PhD

University Distinguished Professor and Director

Jason Gold, PhD

Adjunct Associate Professor

Barbie Zimmerman-Bier, MD

Clinical Associate Professor

Staff

Michelle Cheng, PhD

Postdoctoral Fellow (joined 9/1/2020)

Stacey Napoli

Research/Administrative Assistant

Affiliated Research Faculty

Malia Beckwith, MD

Assistant Professor

Developmental & Behavioral Pediatrics Fellowship Program Director

Rutgers Robert Wood Johnson Medical School

David Bennett, PhD

Professor

Drexel University College of Medicine

Jill Harris, PhD

Director of Research Development & Coordinator of Autism Services

Children's Specialized Hospital

Alan Leslie, PhD

Distinguished Professor

Rutgers School of Arts and Sciences

Anu Venkat, MD

Clinical Associate Professor of Pediatrics

Rutgers Robert Wood Johnson Medical School and Saint Peter's University Hospital

John Worobey, PhD

Professor

Rutgers School of Environmental and Biological Sciences

Dake Zhang, PhD

Associate Professor

Rutgers Graduate School of Education

Neonatology (NICU)



Deepak Jain, MD
Associate Professor and Division Director
(Interim-FY21)

The Division of Neonatology continues to be a leader in all three missions of clinical care, research and education. Last year brought unprecedented challenges to all three missions in the form of the COVID-19 pandemic and the division demonstrated exceptional resilience to provide the highest quality clinical care and patient safety. We have been setting the standards in developing evidence-based guidelines for clinical management and infection prevention which are being used by NICUs across the RWJBarnabas Health System. We continue to be one of the most compliant units in the hospital (adult and pediatric) in terms of hand hygiene compliance during the last four years, with the improved hospital acquired infection data to show it!

Our quality data when benchmarked against national data is excellent and our patient outcomes reflect this. Our Press Ganey data consistently places us at 95% for patient satisfaction. All of these good things are a result of the hard work of all of our care providers. We have excellent nursing care and paraprofessional staff. The residents and fellows all are passionate about the care we provide, and they are led by an enthusiastic attending staff.

During the last few years, our neonatal extracorporeal membrane oxygenation (ECMO) program grew with excellent outcomes. We continue to have an active fetal evaluation service, an infant cuddler program, and most recently the SIDS Center has developed a SIDS mobile application for the general population. In the last year, we have started a donor breast milk program to provide the best nutrition for the sickest and smallest of our patients. Our neonatal intensive care unit continues to grow with an increasing number

of births and transports of critically ill infants from neonatal units across the state. During last year we have initiated many multi-disciplinary quality improvement initiatives such as extremely low-birth weight golden-hour management, bronchopulmonary dysplasia reduction, and respiratory support management for preterm infants.

Our fellows, the only neonatal fellows in the state, continue to actively research new topics in conjunction with our colleagues in the Child Health Institute and other sites. They help staff a neonatal developmental follow-up clinic in partnership with Children's Specialized Hospital. They are constantly looking for new ways to aid in quality improvement in the NICU and have run many projects to improve our unit's commitment to quality. Our fellows are committed to participating in the educational experience for our residents. We look forward to the three new fellows starting next year!

We are extremely happy to welcome a new addition to our faculty, Jeffrey Suell, MD. He completed his neonatal-perinatal medicine fellowship at Mount Sinai Hospital in New York and has strong academic interest in point-of-care ultrasound. In the last year, Deepak Jain, MD, was accepted as a full-time member of the Society for Pediatric Research. We are also happy to have in our ranks a nonclinical provider, Barbara Ostfeld, PhD, program director of the SIDS Center of New Jersey, who works with Thomas Hegyi, MD, medical director of the center. She is a great contributor to the department and patients in the region and state.





From Left to Right: J. Suell, A. Feldman, A. Suarez, R. Mehta, M. Shah, D. Jain, A. Kashyap, T. Hegyi, S. Borole, B. Ostfeld

Faculty

Deepak Jain, MD
Associate Professor and Interim Division
Director
Mayoor Bhatt, MD
Assistant Professor
Swapna Borole, MD
Assistant Professor
Alexander Feldman, DO
Assistant Professor

Thomas Hegyi, MD
Professor
Director, Neonatal and Perinatal Medicine
Fellowship Program
Arun Kashyap, MD
Assistant Professor
Director Neonatal Intensive Care Unit -
BMSCH
Rajeev Mehta, MD
Professor

Joseph Napolitano, MD
Clinical Assistant Professor
Barbara Ostfeld, PhD
Professor
Surasak Puvabandisin, MD
Associate Professor
Manan Shah, MD
RBHS Instructor
Jeffrey Suell, MD
Assistant Professor

Staff

Diana Brantley
Secretary I
Puja Kalia, PA
Physician Assistant
Ellen Leone, APN
Advanced Practice Nurse
Norma Lewis
Data Control Clerk I
Mona Matta
Program Support Specialist

Nephrology and Hypertension



Joann Carlson, MD
Associate Professor and
Division Director

The Division of Pediatric Nephrology and Hypertension provides current, compassionate, comprehensive care to infants, children and teenagers (birth to 21 years) with kidney disease and elevated blood pressure. We follow patients from chronic kidney disease stage 1 to end-stage renal disease. We perform hemodialysis, peritoneal dialysis and renal transplantation. We also have an active 24-hour ambulatory blood pressure program, where we can help set up monitors to trend blood pressure in our patients.

Our division continues to look for ways to expand its clinical services. We have

satellite clinics in Somerset and in Lakewood at The Center for health Education, Medicine and Dentistry (CHEMED). We are also looking for opportunities to expand to other areas. We are discussing different opportunities for combined clinics. The first is a nephrology/urology clinic in Somerset in coordination with Joseph Barone, MD, professor of pediatric urology. We hope this will make it easier for patients who need to see both subspecialties. We will see patients with a range of diagnoses including kidney stones, congenital abnormalities and reflux. The second is a combined clinic with pediatric rheumatology to help coordinate care for our lupus patients. With both of these divisions, we are also discussing quarterly conferences to discuss patients and review clinical protocols.

We also continue to help patients with end-stage kidney disease. We have an active and growing hemodialysis and peritoneal dialysis program at Davita. Valeriya Feygina, MD, is now the pediatric medical director at Davita for both dialysis programs. Additionally, Dr. Feygina serves as pediatric medical director of kidney transplantation. We have had an active transplant program in the last year with many successful pediatric transplants.

For education, Joann Carlson, MD, serves as program director of the pediatric residency program. It was a challenging year where conferences were all virtual as well as the

recruitment season. The residency program worked hard to incorporate interesting virtual learning techniques and strengthen board preparation. The hard work paid off with 100% of our recent graduates passing the boards. Dr. Feygina is serving as the director of the nephrology elective for the medical students, which engages students and residents both virtually and in person.

On the research side, we continue to be involved in CKiD, a prospective, longitudinal study of patients with chronic kidney disease. Our focus has been on chronic kidney disease and quality of life. Dr. Carlson was one of the listed authors on a manuscript in Pediatric Nephrology in June 2021 entitled, "Overview of the findings and advances in the neurocognitive and psychosocial functioning of mild to moderate pediatric CKD: perspectives from the Chronic Kidney Disease in Children (CKiD) cohort study." Dr. Carlson is also working on a study looking at the effect of anemia on neurocognition in chronic kidney disease. She presented her findings at the Department of Pediatrics Research Day and has submitted her abstract to the American Society of Nephrology National Conference. Dr. Carlson also has been working on a study coordinated through the Division of Rheumatology that is looking at the effect of the pandemic on patients on immunosuppression and the role of telemedicine. This study has been grant funded and was also presented at the departmental research day. We also look for opportunities for case reports among the interesting and complex patients that we follow.

Nationally, both Dr. Carlson and Dr. Feygina are active members of American Society of Pediatric Nephrology (ASPN). Dr. Carlson is a co-chair of a pathology webinar for ASPN members and helps lead meetings bi-monthly. She also has become a member of the editorial board of PREP Nephrology. Additionally, Dr. Carlson has become chair of a new ASPN subcommittee that focuses on support for nephrologists in a small group setting. Through this group, she helps organize clinical conferences and case presentations with national experts. Dr. Feygina also joined the editorial board for ASPN where she helps write board questions. Both Drs. Carlson and Feygina are members of the International Pediatric Nephrology Association (IPNA) and the American Society of Nephrology (ASN). In March 2021, we held a virtual transition dinner for our adolescent patients. This event, sponsored by the Pediatric Adult Transition in Healthcare (PATH) medical group, was a great success. Participants had an opportunity to review basic nephrology topics, learn about the transition process and meet an adult nephrologist. Dr. Carlson has recently

taken over as the faculty mentor of PATH and we look forward to additional collaboration with this group.

We are sad to announce that Aura, one of our wonderful nurses, resigned in July 2021. She accepted an assistant nurse manager job with the Department of Obstetrics, Gynecology and Reproductive Sciences. This is a wonderful opportunity and we are all excited for her. However, we will miss her and her incredible dedication to our patients. We are so thankful for everything she did for our division.

OUR RESPONSE TO COVID-19

We have been working hard during the pandemic to accommodate and support our patients. Once the pandemic started, we changed the majority of our clinics to telemedicine. We used both video and phone encounters to connect to our patients in any way possible. Telemedicine allowed us to continue providing care to patients while they remained safe in their homes. As the year progressed, we have transitioned back to a majority of in-person clinics but are excited to still offer telemedicine to patients who need it.

Our outpatient dialysis center at Davita did a wonderful job ensuring the safety of our dialysis patients when the pandemic started, and we continue to ensure the health and safety of our hemodialysis and peritoneal dialysis patients.

We also continue to work with Embrace Kids and our subspecialty nurse navigator to help and support our patients. Our nurse navigator has been a tremendous resource, orienting patients to telemedicine and ensuring patients are getting the appointments they need.



From Left to Right: V. Feygina, J. Carlson, C. Ludwig, L. (Nina) Blair

Faculty

Joann Carlson, MD
Associate Professor and Division
Director
Program Director of Pediatric
Residency Program

Valeriya Feygina, MD
Assistant Professor

Staff

Lyneta (Nina) Blair
Secretary I

Cheryle Ludwig, RN
Staff Nurse

Aura Velasco, RN
Staff Nurse

Aviva Wohlgenuth, RN
Staff Nurse

Child Neurology and Neurodevelopmental Disabilities



Vikram Bhise, MD
Associate Professor and Division Director

The Division of Child Neurology and Neurodevelopmental Disabilities consists of five full time pediatric neurologists, one part-time pediatric neurologist, two neurodevelopmental pediatricians, one advanced nurse practitioner, one pediatric nurse, one pediatric mental health provider, one child psychiatrist, and support staff. We fully evaluate and treat pediatric patients with neurological and developmental disorders.

We routinely treat children with conditions such as seizures, tics, headaches, spasticity, low tone, microcephaly, macrocephaly, concussion, stroke, neurodegenerative disorders, demyelinating disease, and much more.

Specific attention is paid to the developmental status of a child as they deal with a chronic medical condition. A team approach is used, coordinating the physicians, nurse practitioners, and community services. We also coordinate with adult neurological services when needed.

As part of our specialty services, three of our physicians are epileptologists and specialize in the care of children with complicated epilepsy. We have long-term video EEG monitoring services available to identify seizure disorders in children. Children with intractable epilepsy also have the option to engage in the ketogenic diet, vagal nerve stimulation (VNS), and state medicinal marijuana program. Our program consists of a collaborative monthly epilepsy surgery conference to discuss complicated cases where surgical intervention may be of benefit.

Vikram Bhise, MD, is board certified in pediatrics, child neurology, and clinical neurophysiology, and also specializes in pediatric neuroimmunology, and runs the program for the evaluation, diagnosis, and management of children with demyelinating disorders such as multiple sclerosis, neuromyelitis optica, autoimmune encephalopathy, and related diseases. Early diagnosis and treatment are key to best outcomes. We work

in collaboration with pediatric-specific ophthalmology, rehabilitation, physical therapy, psychology, urology, nephrology, and cognitive specialists to provide cutting-edge therapies, patient and family education, and access to clinical trials.

Anna Malia Beckwith, MD, is assistant professor of pediatrics at Rutgers Robert Wood Johnson Medical School. She is also a developmental and behavioral pediatrician and chief, Section of Developmental and Behavioral Pediatrics as well as assistant vice president of ambulatory medical practices at Children's Specialized Hospital. Dr. Beckwith also serves as program director of the Developmental and Behavioral Pediatrics Fellowship Program at the medical school. She completed a six-year combined BA/MD program at the University Of Missouri-Kansas City School of Medicine in 2005, and trained at the Children's Mercy Hospitals and Clinics in Missouri for her pediatric residency from 2005 – 2008. In the same institution, she also completed her developmental and behavioral pediatrics fellowship training from 2008 – 2011. Dr. Beckwith has produced several oral presentations and publications in the past 10 years, including co-authorship of a chapter in the forthcoming *Developmental Behavioral Pediatrics*.

Abdolreza Esfahanizadeh, MD, is board certified in child neurology and epilepsy. He has more than a decade of experience treating children with a wide variety of neurological conditions. He has special clinical and academic interests in epilepsy, epilepsy surgery, and sports-related concussion. He serves as the director of the pediatric concussion program providing rapid access, diagnosis, and management of children with head injuries. He evaluates and treats infants and children with a wide range of seizure and epilepsy diagnoses including using intracranial electroencephalography (iEEG), surgical treatment options (such as VNS) and serves as director of the pediatric epilepsy program.

Emanuel M. DiCicco-Bloom, MD, specializes in basic and translational research studies in cell, animal, and human iPSC models, defining mechanisms regulating neurogenesis, and identifies how abnormalities in growth factors, signaling pathways, autism genes, and environmental factors disrupt brain regions that contribute to neurodevelopmental disorders. As a physician-scientist, Dr. DiCicco-Bloom shares his knowledge and expertise with professional, press, and advocacy organizations, federal panels, and serves as scientific advisor of the Eagles Autism Foundation. He publishes numerous research articles and book chapters, including his Springer Nature volume on iPSCs in neurodevelopment. (DiCicco-Bloom E., Millonig J. (eds) *Neurodevelopmental Disorders. Advances in Neurobiology*, vol 25. Springer, Cham, 2020. DOI: <https://doi.org/10.1007/978->

3-030-45493-7). He has been elected as Fellow of the American Association for Advancement of Science (AAAS).

Genevieve Gabriel, MD, is a pediatric neurologist and epileptologist. Prior to coming to the medical school, she was an assistant professor of pediatrics at the University of Arkansas for Medical Sciences, where she participated in the evaluation and management of children with intractable epilepsy. Her specific interests include infantile spasms and status epilepticus. She is board certified in pediatrics, child neurology, and epilepsy.

Shawen Ilaria, MD, is a child and adolescent psychiatrist. She sees outpatients through multi-disciplinary teams with both pediatric neurology and pediatric hematology/oncology. She is board certified in child and adolescent psychiatry as well as general (adult) psychiatry. Her specific interests include anxiety and obsessive compulsive disorder.

Manuel Jimenez, MD, MS, FAAP, a developmental and behavioral pediatrician, is an Alpha Omega Alpha Honor Medical Society alumni inductee who co-leads a Rutgers' University-Community Partnership Grant to promote school readiness through developmental monitoring and language promotion. His research, largely supported by the Robert Wood Johnson Foundation Harold Amos Medical Faculty Development Program, helps assure patient-centered literacy promotion for underserved children. Dr. Jimenez publishes multiple articles and conducts frequent presentations at national meetings. He is the investigative PI or co-PI for multiple ongoing studies.

Karishma Parikh, MD, is a board certified pediatric neurologist who specializes in pediatric neuro-oncology. She practices as part of the multi-disciplinary team in the Division of Pediatric Hematology-Oncology at the Rutgers Cancer Institute of New Jersey, seeing pediatric patients with brain and spinal cord tumors, neurocutaneous conditions like neurofibromatosis as well as neurological complications of cancer.

Amanda Spinner, MD, is a board certified pediatric neurologist whose clinical interests include neurodevelopmental disorders such as attention deficit-hyperactivity disorder (ADHD), autism spectrum disorders, tic disorders/Tourette syndrome, and general pediatric neurology.



From Left to Right: A. Esfahanizadeh, S. Quinn, D. O'Brien, V. Bhise

Faculty

Vikram Bhise, MD

Associate Professor and Division Director

Anna Malia Beckwith, MD

Assistant Professor of Pediatrics

Fellowship Program Director,
Developmental and Behavioral Pediatrics

Rutgers Robert Wood Johnson Medical School
Chief, Section of Developmental and
Behavioral Pediatrics

Assistant Vice President of Ambulatory Medical
Practices

Children's Specialized Hospital

Emanuel M. DiCicco-Bloom, MD

Professor of Neuroscience and Cell Biology and
Pediatrics

Abdolreza Esfahanizadeh, MD

Associate Professor

Shawen Ilaria, MD

Clinical Assistant Professor of Psychiatry

Manuel Jimenez, MD, MS, FAAP

Assistant Professor

Karishma Parikh, MD

Assistant Professor

Amanda Spinner, MD

Assistant Professor

Staff

Corrine McCarthy, PsyD
Psychologist

Deborah O'Brien, RN

Staff Nurse

Stacy Quinn

Staff Assistant

Shauday Rodney, APN

Advanced Practice Nurse

Population Health, Quality, and Implementation Sciences (PopQuIS)

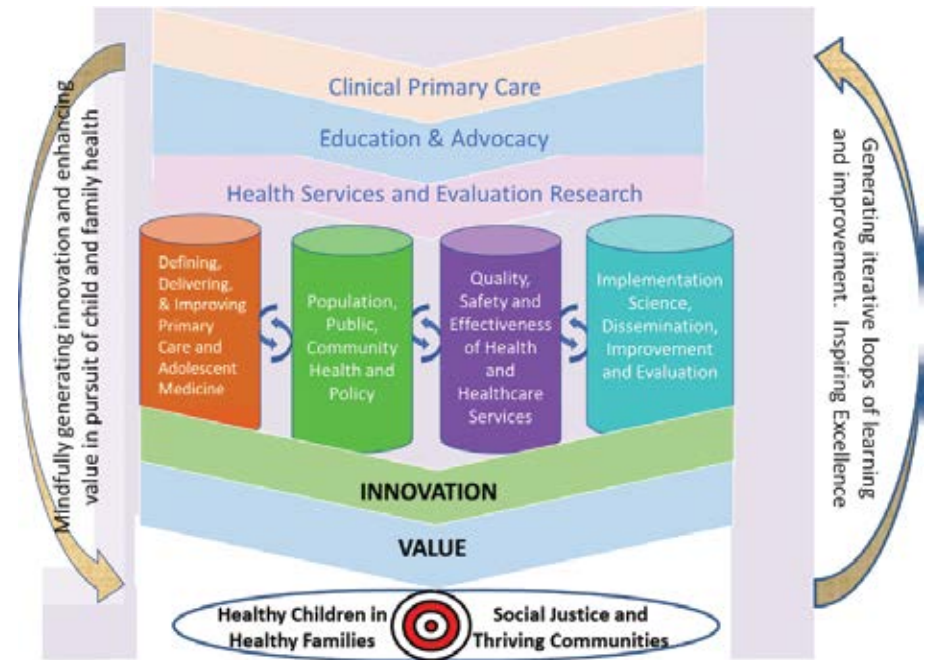


Lawrence Kleinman, MD, MPH, FAAP
Professor and Division Director
Vice Chair for Academic Development

The Division of Population Health, Quality and Implementation Sciences (PopQuIS in Pediatrics) was created in 2019 with the arrival of founding director, Lawrence C. Kleinman, MD, MPH, FAAP.

PopQuIS in Pediatrics benefits from the department's strong and deep roots in primary care (formerly housed in the Division of Academic General Pediatrics) to consider the health and well-being of the whole child in the family, community, and policy contexts. PopQuIS will continue to deliver first-rate primary care, develop multi- and trans-disciplinary teams to conduct research into maternal, child and community health, work to evaluate and improve programs that support

health and health care, contribute at the front of the department's educational mission, and advance the science of providing high quality, safe, and highly reliable health care. We illustrate in the next column a strategic vision for PopQuIS' growth and development. The primary goal of PopQuIS is to improve the health of children and their families in New Jersey and across the field of pediatrics. We incorporate evidence informed practices to elevate the quality of primary care that we provide to our diverse patient populations. PopQuIS is emerging as a national and global leader that advances the development and application of science to shape the delivery of health services for children and their families. As innovators, we partner with our communities to develop and apply tools to improve quality and ensure the safety of our patients, educate health professionals, and advocate for policies and practices that benefit children and their families, reducing inequities and advancing health. We bring value to our patients, our communities, and our institution.



OUR GOALS INCLUDE:

- PopQuIS' primary goal is to improve the health of children and their families, not only in New Jersey, but across the field of pediatrics.
- PopQuIS will continue its national and international leader that advances the development and application of science to improve primary care.
- PopQuIS will continue to partner with our communities and other stakeholders to stimulate innovation to work for social justice and improve maternal child health.
- PopQuIS brings value to our patients, our communities, and our institution.

The COVID-19 pandemic has challenged and disrupted all of us. PopQuIS has been a thoughtful leader in our department's response. We have pioneered the integration of telehealth into our pediatric practices, thoughtfully and safely met the needs of our patients and families, and continue to provide world-class care. Our doctors contribute to our community in a variety of ways, including helping to staff primary care pediatrics at CHEMED, a large federally qualified community health center in Lakewood, NJ.

Dr. Kleinman has been serving as one point person to help coordinate the Department of Pediatrics' research response to the pandemic, along with PopQuIS faculty Daniel Horton, MD, MSCE, and Manuel Jimenez, MD, MS, FAAP. He plays a significant leadership role in the medical school research efforts to address COVID for our patients, our community, and the nation. He has become a familiar name in local, regional, and national media. Dr. Kleinman is helping to lead federally funded studies to enhance our understanding of both acute COVID and delayed syndromes associated with COVID, such as MIS-C and long COVID.

POPQUIS IN PEDIATRICS WORKS TO DEVELOP AND MAINTAIN A CULTURE OF GENEROSITY IN SUPPORT OF THE FOLLOWING VISION:

- Children flourish, families thrive, and communities provide healthy environments and support;
- Children develop in beneficial relationships with loving adults, free of toxic stress and trauma and not exposed to bias, discrimination, and inequity;
- World-class primary care is accessible for all families. Our primary care practice remains highly engaged with patients, families and communities, with colleagues from a wide variety of professional disciplines at Rutgers and beyond;
- We conduct science to generate new knowledge for our colleagues and we incorporate existing science into practices that benefit our patients and their families;
- We educate the next generation of clinical and scholarly leaders in the science and practice of pediatric primary care;

SEE WHAT OUR PATIENTS ARE SAYING!



Dr. Takyi inspires a great deal of trust. Dr. Takyi is awesome. She is patient, knowledgeable and compassionate.



MICHELE TAKYI, MD
GENERAL PEDIATRICS

- We share our work with our community and those whom we serve;
- We listen to our patients and our communities to learn how we can continue to improve;
- We are leaders working with the medical school to achieve national and global leadership as an institution committed to child and family health and flourishing consistent with our vision.

PopQuIS and the Department of Pediatrics have partnered with the Child Health Institute of New Jersey to create the Joint Program in Population and Prevention Science (J3PS), which was successful in competing for funding from the Robert Wood Johnson Foundation. J3PS partners with Family Voices, a national grass roots family organization and is designed to be highly engaged with families and community stakeholders.

Primary care pediatrics is offered at two sites. We offer comprehensive, family-centered care to children from birth to 21 years of age¹, including well child care ("checkups"), health and developmental screening, vaccinations, and treatment for acute and chronic illnesses. Care is personalized to each child's physical, developmental, social, and emotional needs, and streamlined referrals to Rutgers Health specialists, and dental and behavioral health clinicians are available, as needed. In-house behavioral health consultations are also available.

Rutgers Health Practice at One Worlds Fair Drive (1 Worlds Fair Drive, First Floor, Somerset, NJ 08873; Appointments: 732-743-5437)

The Rutgers Health primary care pediatric practice at 1 Worlds Fair Drive in Somerset was founded more than two decades ago by Emanuel Lerner, MD, who still serves as chief of primary care services for PopQuIS and the department. The practice thrives and is the site of training in primary care for more than half of Rutgers Robert Wood Johnson Medical School's pediatric residents.

Rutgers Health's faculty practice at Worlds Fair Drive in Somerset utilizes a private practice model to serve a diverse population from Middlesex and Somerset Counties and accepts a wide range of private and public insurance plans, including Medicaid insurances. The Eric B. Chandler Health Center is a federally qualified community health center that primarily serves the New Brunswick area and is operated by Robert Wood Johnson Medical School and the Eric B. Chandler Community Board. Chandler Health Center accepts private and

Population Health, Quality, and Implementation Sciences (PopQuIS)

Medicaid insurances.

Both sites are proud to train the next generation of doctors, nurse practitioners, and physician assistants to meet New Jersey and the nation's needs.

[Primary care pediatricians provide services to children, adolescents, and young adults through 21 years of age at the Somerset location. The Eric B. Chandler Health Center seamlessly transitions the care of older adolescents and young adults from pediatricians to family physicians after their high school graduation or 18th birthday.]

Adolescent Medicine (Call 732-235-7896 for appointments for all sites)

- Rutgers Health at One Worlds Fair Drive (1 Worlds Fair Drive, First Floor, Somerset, NJ 08873)
- Child Health Institute, 89 French Street, 2nd Floor, New Brunswick, NJ 08901

Continuing and consultative care for adolescent medicine is provided at two sites: on the second floor of the Child Health Institute of New Jersey, part of the children's academic health campus across from Bristol-Myers Squibb Children's Hospital at 89 French Street, New Brunswick (entrance on Plum Street), the Rutgers Health practice on the first floor of 1 Worlds Fair Drive, in Somerset, NJ. The phone number for Adolescent Medicine is 732-235-7896 for appointments at any site.

Sari Bentsianov, MD, leads PopQuIS' Section of Adolescent Medicine. She is a board certified pediatrician and adolescent medicine specialist who is highly qualified to care for the unique physical, psychological, and social needs of adolescents and young adults. Dr. Bentsianov joins the PopQuIS practice after a decade of service at University Hospital, Newark. Her clinical interests include comprehensive inpatient and outpatient care to adolescents and young adults. Among other clinical areas she provides management of menstrual disorders, contraception and family planning needs, treatment of eating disorders, and gender affirming medical care. In addition, Dr. Bentsianov provides long-acting reversible contraception (LARC)-intrauterine devices and implants.

The Adolescent Medicine Program in Pediatrics sees patients from the preteen years through the early 20s with special expertise on the interrelationship of growth, psychosexual development, and behavioral issues and concerns. Patients can be referred to adolescent medicine for health concerns common in this age group including eating disorders and concerns (including anorexia nervosa, bulimia nervosa, disordered eating, body dysmorphia, etc.), gender dysphoria and hormone replacement therapy, menstrual disorders (irregular periods, painful periods, no periods), and common adolescent gynecology concerns (vaginal discharge, STI testing and treatment, and contraception)

or sexual health concerns.

PopQuIS clinicians are also leaders. PopQuIS celebrates our faculty and staff and our outstanding roles and achievements, just a few examples of which are highlighted here:

Emanuel Lerner, MD, has seamlessly assumed the mantle of leadership in the division as director of primary care services and is an exemplar clinical leader, developing the section and steering us all through the clinical and logistical disruptions of COVID, as well as leading the CHEMED primary care initiative.

Elizabeth Goodman, MD, has reduced her presence in the primary care clinic in order to increase her commitment to education of medical students in pediatrics. As a part of the practice, Dr. Goodman's primary clinical role is helping to care for well newborns at the Robert Wood Johnson University Hospital. In May 2021, Dr. Goodman was awarded the New Jersey Health Foundation Excellence in Teaching Award by the Class of 2021. She was also awarded the Gold Humanism Honor Society Leonard Tow Humanism in Medicine Award.

Mary K. O'Connor, MD, is an internal medicine/pediatric specialist who has recently joined



From Left to Right: L. (Nina) Blair, S. Bentsianov

the practice. Dr. O'Connor received her medical degree from Rutgers New Jersey Medical School. She completed her residency in internal medicine and pediatrics, and served as medicine chief resident at Rutgers New Jersey Medical School.

Elsie Roca-Piccini, MD, who speaks fluent Spanish, has been recognized multiple times by New Jersey Family magazine as a "Favorite Kids Doc." She also developed a Medical Spanish rotation for remote learning during the early months of the pandemic and continues to be a mainstay of the Worlds Fair Drive practice.

Kristine Schmitz, MD, FAAP, has joined the medical school as faculty and as a clinician-educator. She was recently appointed director of dissemination and implementation research in the J3PS, referenced above. Prior to coming to Rutgers, Dr. Schmitz founded and directed the Center for Collaborative Primary Care at St. Christopher's Hospital for Children, Philadelphia, a medical home serving socially vulnerable families. She was also



From Left to Right: S. Pai, U. Ramachandran, J. Fleming



From Left to Right: M. Quiñones, S. Moroso-Fela

an assistant professor of pediatrics at Drexel College of Medicine. Following residency until 2017, Dr. Schmitz served on the faculty at Children's National Health System/George Washington University, where she was the medical director for the Healthy Generations Program, a medical home for teen parents and their children, and Project LATER: Linking Alternatives to Early Reproduction, a teen pregnancy prevention program. Dr. Schmitz received her medical degree from Howard University in Washington, DC, and completed her pediatric residency at Inova Children's Hospital in Falls Church, Virginia.

Esha Shah, MD, received her medical degree from Rutgers Robert Wood Johnson Medical School and completed her pediatric residency at Icahn School of Medicine at Mount Sinai in New York. During her time at Mount Sinai, Dr. Shah created and co-founded a specific primary care pathway for residents interested in primary care. She has an interest in medical education for both students and pediatric residents.

Michelle Takyi, MD, is the practice lead of our quality improvement project entitled, 'Improving Vision Screening for Preschool-Age Children'.

Dawn Thompson, MD, is continuing her work on the development and implementation of a new pediatric primary care curriculum for residents, and has received recognition by New Jersey Family Magazine as one of NJ's Favorite Doctors in 2021.

Population Health, Quality, and Implementation Sciences (PopQuIS)

Shoshana Zitter, MD, has stepped up to serve as a key clinician in our service to CHEMED and has worked at the Worlds Fair Drive practice to help develop enhanced office systems to improve the quality of preventive service delivery at the practice. She has also been a key clinician helping to staff the CHEMED community health center in Lakewood, NJ.

Eric B. Chandler Health Center (277 George Street, New Brunswick, NJ 08901; Appointments: 732-235-6700)

Jacqueline Fleming, MD, serves as medical director for pediatrics at the Eric B. Chandler Health Center and continues to work to improve the delivery of primary care pediatrics as well as preventive dental services delivered in primary care.

Shilpa Pai, MD, practices at the Eric B. Chandler site and continues to work with the NJ Chapter of the American Academy of Pediatrics (AAP) including as co-chair of the Immigrant Child Health Committee, and chair of the Diversity, Equity & Inclusion Committee. She was awarded the Gold Humanism Honor Society – Letter of Recognition and the Department of Pediatrics, 2020 Clinical Award for Excellence in Collaboration & Teamwork. Dr. Pai is also an active leader regionally and nationally for the AAP and is co-lead of the NJ Pediatric Residency Advocacy Collaborative. Dr. Pai continues her outstanding leadership to a statewide initiative to enhance advocacy education for pediatric residents, serves as the hub lead for Adverse Childhood Experiences (ACES) outreach under the medical school's Project ECHO (Extension for Community Health Care Outcomes) hub, and is a member of the Anti-Racism Task Force at Rutgers Biomedical and Health Sciences. She also has been very visible in the medical school's response to COVID-19, giving talks to professional and community audiences regarding the impact of the pandemic on people's lives. She has taken on co-leadership of the health equity thread for the medical school curriculum.

Usha Ramachandran, MD, serves as medical director for NJ Reach Out and Read (ROR), a leading national early childhood literacy program, worked on the ROR response to COVID-19, and helped create online training for pediatricians nationwide on providing ROR via telehealth. Dr. Ramachandran is a multi-year recipient of Best Doctors in America. She also serves as associate director for the South Asian Total Health Initiative (SATHI) at the medical school.

RESEARCH AND SCHOLARSHIP

Dr. Lawrence Kleinman directs PopQuIS and serves as vice chair for academic development

in the department. Dr. Kleinman has coordinated the department's research response to COVID-19 and is co-principal investigator with L. Nandini Moorthy, MD, on an intramural grant funded from the Rutgers Center for Covid-19 Response and Pandemic Preparedness (CCRP2). He also leads the federal Health Services and Research Administration's Maternal Child Health Measurement Research Network. Dr. Kleinman is a part of several national collaborations elucidating the COVID-19 pandemic in children and has been an author on several landmark publications in that area. Dr. Kleinman has assumed an additional role as associate director for population and prevention sciences at the Child Health Institute. Dr. Kleinman is one of the principle investigators (with Maria Gennaro, MD, MSc and Daniel Horton, MD, MSCE) for the NIH funded RADx PreVAIL project titled COVID-19 Network of Networks Expanding Clinical and Translational approaches to Predict Severe Illness in Children (CONNECT to Predict Sick Children). Dr. Kleinman is PI of the newly funded Rutgers Transdisciplinary Program in Primary Care Research (TraP PCR), a post-doctoral mentored career development program to develop leaders in primary care research that is funded by HRSA and part of the Ruth L. Kirschstein National Research Service Awards program. Dr. Kleinman is interested more broadly in quality and population health research and in promoting health equity through research and practice. Dr. Kleinman also leads the Collaborative Long-term study of Outcomes of COVID-19 in Kids (CLOCK) consortium, which is a partner in the NIH's RECOVER pediatric cohort study.

From the outset of the pandemic, Dr. Kleinman has frequently served as an advocate for children and one of the faces for the pediatrics department in media coverage of the pandemic.

Dr. Sari Bentsianov brings with her several research collaborations and looks forward to developing her research further here at the medical school, including building on her work regarding gender-affirming health care. She has numerous abstract presentations and manuscript publications and is the co-PI of an NIH funded grant on immunity in transgender populations. In addition, she has collaborated with the Departments of Medicine, Surgery, Obstetrics, Gynecology and Reproductive Sciences, and the Women's Health Institute, in conjunction with hospital leadership to establish the Rutgers Center for Transgender Health. Dr. Bentsianov is responsible for the adolescent medicine curriculum for the pediatrics residents and medical students. She has been an invited speaker on several local panels to discuss adolescent health including transgender health. She is also a member of the executive committee of the New Jersey Chapter of

the American Academy of Pediatrics where she sits on the Adolescent Health Committee, as well as several related task forces working to improve the health of adolescents and young adults across the state.

Dr. Daniel Horton is principal investigator for a new National Institute of Health (NIH) large research grant and a multiple PI with Dr. Kleinman on the CONNECT grant mentioned above. He further serves as co-Investigator for three newly awarded COVID-19-related supplements from NIH, one foundation grant from the Rheumatology Research Foundation, and on a grant looking at social determinants and funded by Rutgers' CCRP2 under the leadership of Drs. Moorthy (rheumatology) and Kleinman. Dr. Horton is on the faculty of TRAP PCR and was funded through an NIH K23 Career Development award.

Dr. Manuel Jimenez is conducting innovative research in literacy development and promotion in Spanish speaking households and recently received an NIH grant to support this important research. He is also one of multiple principal investigators on the NIH supplement to the Clinical and Translational Sciences Award for NJ HEROES TOO, a RAD-X UP project to improve COVID-19 testing for underserved and vulnerable populations in areas where Rutgers academic medical centers are deeply rooted and is funded by the NIH to continue his work. Dr. Jimenez is on the faculty of the TRAP PCR fellowship program.

Anna Petrova, MD, PhD, MPH, is an important contributor to research education including providing a series of sessions on "Research Study Design and Statistics" as well as participating in education of masters of science students in the Rutgers School of Graduate Studies as director of the course "Ethics and Regulation in Clinical and Translational Research." She has published original articles in *Journal of Asthma*, *Indian Journal of Youth and Adolescent Health*, *Journal of Neonatal-Perinatal Medicine* and MDPI (Multidisciplinary Digital Publishing Institute) *Journals Nutrients and Children*. Dr. Petrova is on the faculty of the TRAP PCR fellowship program.

The health economist, Nancy Reichman, PhD, has had another outstanding year. As one of the PIs of the Fragile Family Study, she is responsible for developing some of the most important and interesting data that has become a critical part of our national maternal child health research infrastructure. She and her leadership team at Princeton and Columbia Universities have successfully competed for new funding that will collect data on a third generation of participants. Dr. Reichman continues to serve in leadership roles in the CTSA - New Jersey Alliance for Clinical and Translational Science (NJ ACTS),

funded by the NIH. Dr. Reichman is on the faculty of the TRAP PCR fellowship program. Kristine Schmitz, MD, FAAP, is a general pediatrician who will be working closely with Dr. Kleinman to develop and implement PopQuIS' strategic vision. She is interested in health care quality, care for underserved populations, and adolescent health. Dr. Schmitz brings to the medical school deep experience in the development and evaluation of programs and will help to bring an Implementation Science perspective to PopQuIS.

Dr. Schmitz looks forward to working with Dr. Kleinman and the Child health Institute



From Left to Right: D. Thompson, S. Zitter, E. Shah, M. Takyi

Population Health, Quality, and Implementation Sciences (PopQuIS)

regarding the study of system impacts on health, especially regarding prevention and population health science.

Researchers in PopQuIS have had another exceptional year with the faculty contributing peer-reviewed abstracts and publications in prestigious and highly cited journals. Work across the division has been picked up by professional and lay news outlets. Key research interests in the division include measurement, pharmacoepidemiology, the delivery of enhanced primary care, literacy, outcomes and survey research, enhancing thriving, and reducing the negative health consequences of nonmedical (i.e. social determinants) and medical vulnerability. Responding to the COVID-19 pandemic, the division is helping to coordinate and conduct important high impact studies locally and nationally. Trap PCR is led within PopQuIS and collaborates with the Department of Family and Community Medicine and the Division of General Internal Medicine in the Department of Medicine.

Goals for the coming year include continuing to deliver and promote first-class primary care practices. The One Worlds Fair Drive practice has begun a program to integrate behavioral health services into point of service care delivery. We will look to increase and expand our capacity to provide pediatric office-based preventive oral health care. We always seek to improve our connections and commitment to the community and look to build opportunities to enhance our capacity to promote resilience to various unfavorable non-medical (“social”) determinants of health, trauma and stress. With the integration of adolescent medicine into PopQuIS and the recruitment of new clinicians, we look forward to increased innovation in the delivery of integrated and well-coordinated health care for our community.

PopQuIS in pediatrics is a willing collaborator with the clinical specialties within the Department of Pediatrics and across RBHS and Rutgers University. We cherish our roots in Academic General Pediatrics and our close relationship with the Division of Pediatric Hospital Medicine.

We look to build upon the individuals of the division to increase our role in education and to develop postdoctoral research educational programs. We further intend for the division to develop a community of practice to support research development, health and quality improvement, and other research and service activities that benefit our faculty, our communities, and our institutions.

FACULTY LEADERSHIP

Lawrence Kleinman, MD, MPH, FAAP

Professor of Pediatrics and Urban Global Public Health

Director of PopQuIS

Vice Chair for Academic Development

Department of Pediatrics

Emanuel Lerner, MD

Associate Professor of Pediatrics

Director of Primary Care Services

Sari Bentsianov, MD

Assistant Professor of Pediatrics

Director of the Section of Adolescent Medicine

Elizabeth Goodman, MD

Associate Professor of Pediatrics

Associate Director of Pediatric Residency Program

Director of Pediatric Clerkship

Mary K. O'Connor, MD

Assistant Professor of Medicine and Pediatrics

Elsie Roca-Piccini, MD

Associate Professor of Pediatrics

Kristine Schmitz MD

Assistant Professor of Pediatrics

Associate Director of Dissemination & Implementation Research, J3PS

Esha Shah, MD

Instructor of Pediatrics

Michelle Takyi, MD

Assistant Professor of Pediatrics

Dawn Thompson, MD

Assistant Professor of Pediatrics

Shoshana Zitter, MD

Assistant Professor of Pediatrics

PRIMARY CARE AT THE ERIC B. CHANDLER HEALTH CENTER (EBCHC):

Jacqueline Fleming, MD

Associate Professor of Pediatrics

Medical Director for Pediatrics at EBCHC

Shilpa Pai, MD, FAAP

Associate Professor of Pediatrics

Co-Director, RWJMS Health Equity Curriculum

Usha Ramachandran, MD

Associate Professor of Pediatrics

Associate Director, South Asian Total Health Initiative

ADOLESCENT HEALTH CARE AT THE RUTGERS HEALTH PEDIATRIC SPECIALTY PRACTICE, 1 WORLDS FAIR DRIVE AND THE CHILD HEALTH INSTITUTE, 89 FRENCH STREET (SECOND FLOOR) NEW BRUNSWICK:

Sari Benstianov, MD

Assistant Professor of Pediatrics

Director of the Section of Adolescent Medicine

POPQUS RESEARCH AND SCHOLARSHIP TEAM:

Daniel Horton, MD, MSCE

Assistant Professor of Pediatrics and Epidemiology

Institute for Health, Health Care Policy and Aging Research

Manuel Jimenez, MD, MS, FAAP

Assistant Professor of Pediatrics and Family and Community Medicine

Anna Petrova, MD, PhD, MPH

Professor of Pediatrics

Nancy Reichman, PhD

Professor of Pediatrics

Staff

John Maher, MBA

PopQuIS Operations Director

Sande Moroso-Fela, MA

Program Manager

Maricel Quiñones

Staff Assistant

Postdoctoral Fellows

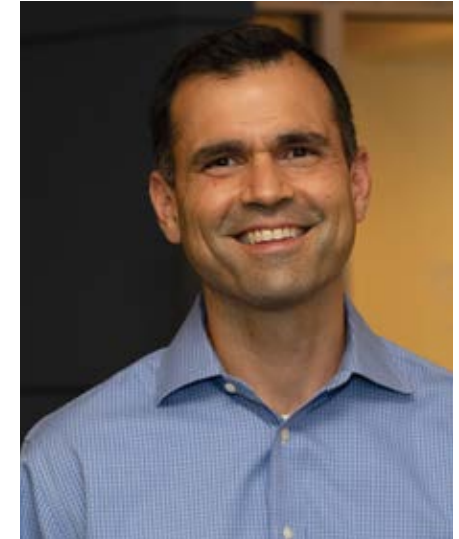
Sarah Fadem, PhD

Myriam Casseus, PhD

Amanda Ratigan, PhD



D. Horton, MD



M. Jimenez, MD



A. Petrova, MD, PhD, MPH



N. Reichman, PhD

Pulmonary Medicine and Cystic Fibrosis Center



Thomas Scanlin, MD
Professor and Division Director

The Division of Pediatric Pulmonary Medicine and Cystic Fibrosis (CF) Center provides comprehensive, interdisciplinary care for children with a variety of chronic lung diseases including asthma, cystic fibrosis, bronchopulmonary dysplasia, primary ciliary dyskinesia, chronic respiratory failure, and a variety of sleep disorders.

Our CF Center also has an adult program that is directed by Sabiha Hussain, MD, along with a complete interdisciplinary care team. Since January 2015, the Cystic Fibrosis Center has been a designated center in the Cystic Fibrosis Foundation Therapeutics Development Network,

which is a national consortium to study new therapies for cystic fibrosis. We currently have three grants from the CF Foundation that help to support our work in research. The primary grant to support the research center, the ARC award, increased support for research coordinators, and the PIPE award supports primary investigators and protects time for research. Thomas Scanlin, MD, had a PIPE award for two years and Dr. Hussain has this award (2021).

In late 2019, the new drug Trikafta was made available for prescription and our Clinical Research Center participated in the Phase III trials of this drug. Since the approval of Trikafta, our center has continued to participate in an extension of this trial (Vx445 Rollover) as well as enrolling more patients in an observational study called PROMISE (PROMISE-OB-18). These two studies provide us the opportunity to follow patients' long term on Trikafta.

The following is a list of the additional studies we have been involved in during the last year:

- TOBI Podhaler – long term post approval study on the effects of TOBI Podhaler in patients
- CORBUS JBT101-CF-002 – Phase II – anti-inflammatory drug study
- GALAXY – Study of GI complication in CF using an app and patient feedback
- STOP2 – IP-15 – Interventional study examining differences in duration of therapy for patients requiring IV antibiotic therapy for a pulmonary exacerbation

We have also been actively pursuing new clinical trials but that process has been slowed by the COVID-19 pandemic. We are currently site selected for the following:

- SIMPLIFY-IP-19 - This study will examine the effects of patients on Trikafta reducing certain therapies. The goal is to safely reduce the treatment burden for CF patients taking Trikafta. This study began in January 2021.
- ARMATA (Armata Pharma) – Interventional study of phage therapy for pseudomonas in CF, became active in 2021.

There are several more studies that our team is considering for 2022.

Mary Carayannopoulos, PhD, supervisor of our clinical laboratories (Department of Pathology and Laboratory Medicine at the medical school), who also serves as co-director of the newborn screening services for the State of New Jersey, partnered with our CF center to obtain a grant for the New Jersey Department of Health to improve the newborn screening program for cystic fibrosis. The NJ newborn screening program was not as updated as many other neighboring states, including New York. As a result of this grant, a lower cut off of the immunoreactive trypsinogen (IRT) value was established. These changes will clearly enhance the ability to detect cystic fibrosis at its earliest stages in newborns in New Jersey. We continue to meet with the statewide newborn screening coalition to fine tune NJ screening and make improvements. Most recently, we began the discussion of dropping the IRT to the national standard of 60. This change will likely take place after the initial changes are complete.

Lakshmi Uppaluri, MD, has launched a technology dependent program, which is active since fall 2019. This program seeks to centralize resources for the complex care of some of our most vulnerable patients by cohorting patients on the same day with multiple

clinical services.

Impulse Oscillometry (IOS) which was established for Pulmonary Function Tests (PFTs) during the pandemic is now available for patients from four to six years of age.

Annually, our CF program provides a Family Education Day. Unfortunately, due to the pandemic, we were forced to cancel our in-person event, which was scheduled in April 2020. However, with help from the CF Foundation, we held a virtual Family Education Day on April 17, 2021. In order to continue to communicate, educate and support our families during COVID, we sent e-blasts to families with updated information, guidance and resources. These have been very well received and have helped families to feel secure that they are receiving good care and information during this time. Our next Family Education Day will be held on April 23, 2022.

Every year, the CF team (adult and pediatric) also participates in the Great Strides Walk for Cystic Fibrosis. Unfortunately, this event was cancelled in 2021. This year, our team members will participate in May 2022.

Lastly, members of the CF clinical team as well as the research team, attend multiple conferences every year. The CF team attended the Virtual NACFC in November 2021. We are looking forward to CFF TDN in Florida in April 2022 and the NACFC in Philadelphia in November 2022.



From Left to Right: S. Bhatt, E. Paredes, L. Saturria, V. De Los Santos, T. Scanlin, E. McElroy-Barker, M. Ramagopal, P. Kozlowski

Faculty

Thomas F. Scanlin, MD
Professor and Division Director
Director of the Cystic Fibrosis Center
 Maya Ramagopal, MD
Associate Professor
Director of the Pediatric Sleep Center
 Lakshmi Uppaluri, MD
Assistant Professor
Director, Technology Dependent Program

Nursing Staff

Patrycja Koslowski, RN
Staff Nurse
 Lillian Saturria, RN
Staff Nurse

Full-Time Staff

Shaishav Bhatt, RRT
Registered Respiratory Therapist
 Vivian De Los Santos
Staff Assistant
 Michael Delrio (FY22)
Staff Assistant

Erin McElroy-Barker, LCSW

Coordinator of the CF Center
 Eddy Paredes, RRT
Registered Respiratory Therapist

Part-Time Staff

*Eileen Harrington, RPh
Registered Pharmacist
 Daria Mintz, RD
Registered Dietician
 *Amanda Morales-Clarke, PsyD
Psychologist

**The two individuals have been awarded grants to provide a full range of interdisciplinary services to patients with cystic fibrosis.*

Rheumatology



Lakshmi N. Moorthy, MD, MS
Professor and Division Director

MD, MS; Daniel B. Horton, MD, MSCE; and Cynthia Salvant, MD, along with Nicole Perez, RN, our nurse, and Damaris Soto, our administrative assistant.

We adjusted to the COVID-19 pandemic by adopting a hybrid of telehealth and in-person evaluations so that we could continue to take the best care of our patients. Dr. Horton has worked on a variety of collaborative research projects studying the epidemiology and biology of COVID-19 and multisystem inflammatory syndrome in children and adults. I also submitted COVID-19-related grants and have been working to understand the biopsychosocial impacts of COVID-19 on youth and families affected by rheumatic and other autoimmune diseases. Our faculty has continued to teach medical trainees during the pandemic.

I greatly appreciate each and every member of our team for their team spirit, hard work and creative ideas. Thank you for your support and help during these unprecedented times.

Lakshmi Nandini Moorthy, MD
Division Director, Pediatric Rheumatology

The Bristol-Myers Squibb Pediatric Rheumatology Center is a leading, state-of-the-art rheumatology center for children and adolescents. Pediatric rheumatic diseases comprise a diverse array of chronic diseases with fluctuating courses that often are challenging to diagnose and manage. These diseases may lead to significant morbidity in children, affecting different aspects of growth, development, physical function and quality of life. Early diagnosis and treatment can be essential to control rheumatic diseases and prevent long-term complications. Our child-friendly and family-focused center provides comprehensive treatment, education and follow-up for pediatric patients with rheumatic diseases in New Jersey.

Our team consists of three pediatric rheumatologists: L. Nandini Moorthy,

OUR MISSION

1. Provide the best possible care for children with rheumatic diseases
2. Teach trainees about caring for children with rheumatic diseases
3. Develop new research insights related to the cause and treatment of rheumatic diseases

OUR C.O.R.E. FOCUS

C = CLINICAL CARE SERVICES

The center is involved in the diagnoses and management of complex rheumatic and musculoskeletal diseases, including juvenile idiopathic arthritis, reactive arthritis, systemic lupus erythematosus, vasculitis, mixed connective tissue disease, juvenile dermatomyositis, periodic fever syndromes, amplified musculoskeletal pain syndromes and other rare rheumatic diseases of childhood.

O = OUTREACH (COMMUNITY OUTREACH)

The division serves the community by teaching in Community Medical Education programs for local pediatricians and at other hospitals.

R = RESEARCH

Division faculty are actively involved in research projects in pediatric rheumatology, with a focus on studies of systemic lupus erythematosus and juvenile idiopathic arthritis, some in collaboration with the Pediatric Clinical Research Center (PCRC).

Dr. Moorthy has focused on health-related quality of life (HRQOL) and physical function outcomes in pediatric lupus and improving awareness of lupus. Dr. Moorthy has qualitatively explored the impact of lupus on HRQOL of children and parents, and developed and validated the Simple Measure of the Impact of Lupus Erythematosus in Youngsters (SMILEY), a measure of HRQOL, through a multicenter study. She has conducted translation and cross-cultural adaptation of SMILEY in several languages. Her work toward improving awareness among providers, patients and the community was made possible by funding from the Office of Minority Health (OMH)/Office of the Assistant Secretary of Health (OASH) (Minority Health Community Programs). Dr. Moorthy has recently published her results from the OMH project. She is currently working to understand the psychosocial impacts of COVID-19. She participates in collaborative research in different areas of pediatric rheumatology, including juvenile arthritis and vasculitis.

Dr. Horton is also a member of the Population Health, Quality, and Implementation Sciences (PopQuIS) Division in the Department of Pediatrics; a pediatric pharmacoepidemiologist in the Rutgers Center for Pharmacoepidemiology and Treatment Science at the Institute

for Health, Health Care Policy, and Aging Research; and an adjunct faculty member in the Department of Biostatistics and Epidemiology at the Rutgers School of Public Health. His research focuses on the uses, effectiveness, and safety of medications in children, and the origins and management of childhood arthritis. He has funding from the National Institutes of Health to study the role of antibiotics and the microbiome on the development and activity of juvenile idiopathic arthritis, in collaboration with multiple pediatric rheumatology centers in the region, along with support from the PCRC and the Division of General Pediatrics. Dr. Horton's other research interests include deprescribing medicines for well-controlled juvenile idiopathic arthritis, the uses and effects of off-label medicines in children, and the epidemiology, biology, and consequences of SARS-CoV-2 infection and COVID-19 in children and adults.

Dr. Salvant joined our practice in October 2019 and is in the process of building on her involvement in continuing the education of the pediatric community in New Jersey, as well as the medical students and residents. Thus far, she is in the process of finalizing a welcome packet for general pediatricians in the community that provides basic knowledge on management of children with rheumatic disease. She has started working at the clinic in Edison and also at CHEMED.

E = EDUCATION

Our faculty is committed to teaching medical students, residents and adult rheumatology fellows about caring for patients with pediatric rheumatic diseases. Faculty members give lectures, precept case discussions, teach physical diagnosis and mentor trainees. Dr. Moorthy also mentors junior faculty, residents, and students, and facilitates the Patient-Centered Medicine course (PCM) for first-year medical students. Dr. Horton mentors several medical students on a variety of research projects.

Dr. Moorthy was nominated into the Alpha Omega Alpha Honor Medical Society this year. Dr. Moorthy also led a wellness art session for the residents. Dr. Salvant has been involved in medical student and resident teaching and has been co-facilitating the Patient-Centered Medicine course for second-year students.

CLINIC ADDRESS:

Child Health Institute of New Jersey, 89 French Street, 2nd Floor, New Brunswick, NJ 08901

For Appointments: 732-235-8700

Faculty

L. Nandini Moorthy, MD, MS
Professor and Division Director
 Daniel B. Horton, MD, MSCE
Assistant Professor
 Cynthia Salvant, MD, MS
Assistant Professor

Staff

Nicole Perez, RN
Staff Nurse
 Damaris Soto
Secretary I



From Left to Right: D. Horton, D. Soto, C. Salvant, L.N. Moorthy



From Left to Right: C. Salvant, L.N. Moorthy, N. Perez

Pediatric Clinical Research Center



Sunanda Gaur, MD
Professor and Director
Clinical Research Center

The Pediatric Clinical Research Center (PCRC) at Robert Wood Johnson Medical School was established in 2007 with the mission to provide a research environment to promote clinical and translational research in children. The center's goals are to facilitate investigator-initiated and externally sponsored clinical and translational research; to expand access to innovative phase I-IV clinical trials and novel treatments; and to establish and support a state-of-the-art research training environment for medical, nursing, and pharmacy students, and residents and fellows. Housed in the Child Health Institute, in close proximity to the pediatric ambulatory specialty outpatient clinics and the Bristol-Meyers Squibb Children's Hospital at

Robert Wood Johnson University Hospital, the PCRC serves as a core facility to support the Department of Pediatrics. Our PCRC is the only dedicated academic pediatric clinical research center in New Jersey. The facility is a 5,000 sq. ft., two-bed, child friendly unit equipped with a research pharmacy, on-site phlebotomy and laboratory facilities, and examination room. Staffed with pediatric-trained research personnel highly experienced in conducting clinical trials in compliance with FDA guidelines for safety and accuracy, the center provides a broad range of management and quality control services, including trial development; activation; eligibility verification; monitoring; data and safety reporting; and assistance with regulatory issues. PCRC staff work closely with faculty to assist in all aspects of the conduct of clinical trials in both inpatient and outpatient settings. Since inception, the scope of the studies conducted in the PCRC has been broad-based, encompassing multiple pediatric therapeutic areas with an emphasis on conducting studies involving children with chronic and rare diseases. This includes disease such as Type 1 diabetes, sickle cell disease, cystic fibrosis, infectious diseases, chronic kidney disease, rheumatologic diseases and conditions related to prematurity such as bronchopulmonary dysplasia. Since 2007, more than 120 studies have been conducted.

In 2015, the PCRC was funded to develop a Cystic Fibrosis Therapeutic Drug Development

Network (TDN) Center. Since then, the center has shown dramatic growth in the number of studies conducted, the proportion of CF center patient population enrolled in clinical trials and study launch timeline metrics. In 2020, PCRC became a participating center of the Institute for Advanced Clinical Trials for Children (I-ACT for children), a non-profit organization that serves as an independent voice on behalf of children dedicated to advancing new pediatric medicines and devices. It has built a network of U.S. pediatric trial sites designed to accelerate and enhance the quality of pediatric clinical trials. PCRC is the only participating center in New Jersey.

COVID RESPONSE:

Since the start of the COVID-19 pandemic in March 2020, PCRC has been integrally involved in the Rutgers rapid research response to the epidemic through participation in a myriad of studies that were operationalized in record time. Most recently in June 2021, the PCRC started recruitment for COVID-19 the Pfizer BioNtech Pediatric Vaccine Clinical Trial for children 6 months -11 years old under the leadership of Simon Li, MD, associate professor of pediatrics and division director of critical care medicine. PCRC is the only vaccine clinical trial site in New Jersey.

Following is a list of studies that the PCRC staff and investigators were involved in during the COVID pandemic:

Study Title/Summary	PI	Co-I
The pediatric COVID experience in central New Jersey	Dr. Lawrence Kleinman	Drs. Sunanda Gaur, Hariprem Rajashekhar, Patricia Whitley- Williams, Amisha Malhotra
The impact of social determinants of health on people living with HIV/AIDS during the COVID-19 epidemic	Dr. Gail Burack	Drs. Sunanda Gaur, Patricia Whitley- Williams, Lawrence Kleinman
Influenza and other emerging respiratory pathogens surveillance registry (PALISI)	Dr. Lawrence Kleinman	Drs. Hariprem Rajashekhar, Steven Horwitz, Sunanda Gaur
Seroprevalence of infection with SARS-CoV-2 virus	Dr. Maria Gennaro	Drs. Sally Radovick, Sunanda Gaur
RCT Remdesivir in Children 12 y/o and above	Dr. Pinki Bhatt	Drs. Sunanda Gaur, Patricia Whitley-Williams, Amisha Malhotra
A Phase 2 double-blind placebo-controlled study investigating the safety and efficacy of EDP1815 in the treatment of patients hospitalized with SARS-CoV-2 Infection	Dr. Reynold Panettieri	Drs. Sunanda Gaur, Daniel Horton
NICU COVID Database	Dr. Deepak Jain	Drs. Arun Kashyap, Swapna Borole

Study Title/Summary	PI	Co-I
Rutgers Corona Cohort Study of SARS-CoV-2 in healthcare workers and non-healthcare workers	Dr. Martin Blaser Dr. Jeffrey Carson Dr. Reynold Panettieri	Dr. Daniel Horton
A randomized, double-blind, placebo-controlled, multicenter study to evaluate the safety and efficacy of tocilizumab in patients with severe covid-19 pneumonia	Dr. Sabiha Hussain	Drs. Sugeet Jagpal, Tanaya Bhowmick, Pinki Bhatt, Deepali Dixit
A phase 1, open-label dose-finding study to evaluate safety, tolerability, and immunogenicity and phase 2/3 placebo-controlled, observer-blinded safety, tolerability and immunogenicity of SARS-COV-2 RNA vaccine candidate against covid-19 in healthy children <12 years of age	Dr. Simon Li	Drs. Sunanda Gaur, Maya Ramagopal
COVID-19 network of networks expanding clinical and translational approaches to predict severe illness in children	Dr. Lawrence Kleinman	Drs. Sunanda Gaur, Maria Gennaro, Clarissa Hoover, Daniel Horton, Steven Horwitz, Simon Li, Wilson Pace, Sally Radovick, Jason Roy, Beth Dworetzky
Neonatal and early childhood outcomes in infants born to mothers with SARS-CoV-2 infection during pregnancy	Dr. Deepak Jain	Drs. Swapna Borole, Alexander Feldman, Elizabeth Goodman, Arun Kashyap, Subhasri Sangam
Moving beyond the biopsychosocial model: Understanding the medical and non-medical needs of Immunosuppressed children, adolescents and young adults with rheumatic and other autoimmune diseases during the COVID-19 pandemic	Dr. L. Nandini Moorthy	Drs. Vikram Bhise, Richard Brodsky, Ellen Cahill (medical student), Joann Carlson, Daniel Horton, Vivien Hsu, Lawrence Kleinman, Lisa Mikesell, Cynthia Salvant
A randomized, double-blind, placebo-controlled phase 3 study to assess the efficacy and safety of Ad26.COV2.S for the prevention of SARS-CoV-2 mediated COVID-19 in adults aged 18 years and older	Dr. Jeffrey Carson	Drs. Barbara Armas-Loughran, Jesper Aurup, Raman Bhalla, Martin Blaser, Christopher Bryczkowski, Joshua Bucher, Catherine Chen, Shan Chen, John Collins, XinQi Dong, Colleen Donovan, Amanda Esposito, Sunanda Gaur, Julia Grimes, Janos Jeges, Karthik Kota, Ibiyonu Lawrence, Daniel Morrison, Jay Naik, Reynold Panettieri, Sheetal Patel, Maya Ramagopal, Chirag Shah, Lakshmi Uppaluri, Grant Wei, Melissa Weidner
Fecal studies on COVID-19 patients	Dr. Vinod Rustgi	Drs. Sunanda Gaur, Daniel Horton, Carlos Minacapelli, Melissa Weidner, Carolyn Catalano, APN, Dr. Abhishek Bhurwal
Influenza vaccine effectiveness for preventing laboratory-confirmed severe influenza-associated illness and understanding coronavirus disease 2019 (Overcoming COVID-19) in U.S. Children	Dr. Lawrence Kleinman	Drs. Sunanda Gaur, Hariprem Rajasekhar



From Left to Right: M. Soni, E. Rodriguez, C. Varghese, M. Ramagopal, S. Gaur, L. Cerracchio, S. Gzemski, S. Rodrigo, B. Richlin, R. Gart

Faculty

Sunanda Gaur, MD
Professor
Director, Clinical Research Center
Director, Robert Wood Johnson AIDS Program
Director, South Asian Total Health Initiative
Maya Ramagopal, MD
Associate Professor
Associate Director, Pediatric Clinical Research Center

Staff

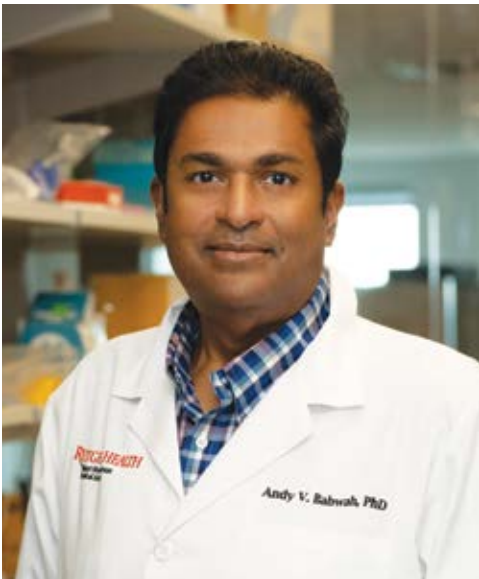
Lisa Cerracchio, BSN, RN-BC, CCRC
Nurse Manager
Rachel Gart, RN
Research Nurse Coordinator
Elizabeth George, RPH BCOP
Research Pharmacist
Sherri Gzemski
Senior Financial Analyst
Yue Hao, MS
Regulatory Coordinator

Chetram Nauth, CPhT
Pharmacy Technician
Sylvia Rodrigo
Program Support Specialist
Editt Rodriguez
Research Assistant/ Public Health Representative
Mark Rusay, PharmD
Research Pharmacist
Megha Soni
Research Assistant
Christina Varghese, MBS
Clinical Research Coordinator

Laboratory of Human Growth and Reproductive Development



Sally Radovick, MD



Andy Babwah, PhD

The major research interest of Sally Radovick, MD's laboratory is to determine the mechanisms of growth and development of children. Dr. Radovick's research is focused on determining the regulation of the gonadotropin-releasing hormone (GnRH) gene, which has a central role in controlling the onset of puberty. Her group was the first to generate GnRH-expressing neuronal cell-lines and in vitro map the cellular regulation of this critical gene by growth factors, which has increased knowledge of the relationship between growth, puberty and nutrition. She has progressed to development of genetically modified mouse models to elucidate mechanisms of in vivo regulation of GnRH secretion in response to neuroendocrine and growth factor stimulation and sex steroid feedback regulation. Of particular interest has been to determine the roles of neurotransmitter/hormone receptors in mediating the large increase in GnRH secretion to adult levels at puberty, which results in the attainment of fertility. These studies will provide insights into pubertal disorders, polycystic ovary syndrome, as well as provide future therapies for infertility. Dr. Radovick has been continuously funded for this work by the National Institutes of Health since 1992.

The other major area of this research has been to characterize the transcription factors important for normal pituitary development. Her initial studies provided the first genetic mechanism of a child with short stature due to hypopituitarism; this involved a mutation in the Pit-1 gene that is necessary for pituitary cell lineage determination and differentiation. She has gone on to describe the mechanisms by which novel mutations in other pituitary-specific transcription factors responsible for pituitary hormone deficiencies in man. These studies are

supported by a U01 collaborative agreement with investigators at the NIH at the NIH Clinical Center.

Dr. Radovick has remained clinically active during her career, precepting teaching clinics in pediatric endocrinology. She is the curator of a tissue repository for patients with hypopituitarism. She has trained more than 50 predoctoral students and postdoctoral fellows and junior faculty. Dr. Radovick's most notable teaching efforts have been in training individuals for scientific research.

Andy Babwah, PhD's laboratory studies the regulation of female fertility through a better understanding of pubertal development and early pregnancy events.

It is estimated that in the U.S. alone, 10% or more than six million women of reproductive age suffer from infertility. Infertility is caused by many defects that may arise before or after the onset of puberty. To better understand the regulation of fertility, the Babwah laboratory has focused its attention on the uterus. Here they study the roles of several estradiol- and/ or progesterone-regulated factors in regulating the preimplantation and early post-implantation periods of pregnancy in both mice and women. Their studies specifically test how these factors regulate the acquisition of uterine receptivity, embryo implantation, decidualization and early placentation. Among their findings, they have identified critical roles for G protein-coupled receptors (GPCRs) in regulating progesterone receptor signaling and demonstrated that a lack of GPCR signaling blocks the acquisition of uterine receptivity. Their work has also focused on understanding the negative impact of gonadotropin-dependent ovarian stimulation, an

important aspect of in vitro fertilization, on embryo implantation.

Dr. Babwah is committed to the training of highly qualified personnel through research mentorship and teaching, particularly in the area of continuing medical education. He holds appointments in the Department of Pediatrics and the Child Health Institute of New Jersey, both at the medical school, and several Rutgers School of Graduate Studies programs (endocrinology and animal biosciences, molecular biosciences and the joint graduate program in toxicology).

LABORATORY TEAM MEMBERS

Bahaa Aloqaily, PhD
Postdoctoral Fellow

Sarmed Al-Samerria, PhD
Postdoctoral Fellow

Andy Babwah, PhD
Associate Professor

Nimisha Nandankar
PhD candidate

Ariel Negron, PhD
Postdoctoral Fellow

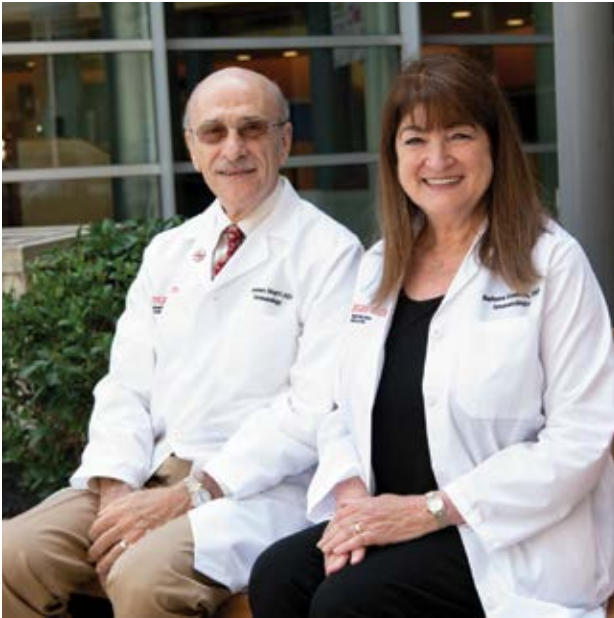
Nataliya Parobchak
MS candidate

Sally Radovick, MD
Professor and Henry Rutgers Term Chair
Jennifer Schaefer
PhD candidate



From Left to Right: J. Schaefer, S. Al-Samerria, S. Radovick, A. Babwah, N. Nandankar, A. Negron

The SIDS Center of New Jersey



MEDICAL DIRECTOR
Thomas Hegyi, MD
Professor of Pediatrics

PROGRAM DIRECTOR
Barbara M. Ostfeld, PhD
Professor of Pediatrics

The SIDS Center of New Jersey was established in 1988 and operates under a grant from the New Jersey Department of Health. The program addresses a leading cause of infant mortality, Sudden Unexpected Infant Death (SUID), which is composed of Sudden Infant Death Syndrome and other sleep-related infant deaths. Its missions include providing bereavement support for families experiencing a SUID, researching the etiologies, risks and potential interventions of this disorder, and

educating families and the medical community on strategies to prevent infant death.

The SIDS Center's research on the infant's sleep environment has contributed to the risk reduction policy statements of the American Academy of Pediatrics. Also investigated are the roles of racial disparity, adverse social and health determinants, including preterm birth, smoke exposure and implicit bias, in infant deaths. To call attention to these factors, the SIDS Center developed an Infant's Bill of Rights for a comprehensive approach to reducing infant mortality. Other examples of its research include studies of effective messaging to enhance not only knowledge but also compliance with risk reducing practices. The results of the SIDS Center's research have been presented in national forums and published in peer-reviewed journals.

The SIDS Center provides a range of education programs for physicians, nurses, social service providers, home visitors, first responders, faith-based communities and other

groups who serve as trusted communicators to parents on risk reduction. It provides the public with direct access to this information via its free mobile phone app, SIDS Info, which received a Public Health Innovation award from the New Jersey Department of Health and selected for inclusion as an Emerging Practice by the Association of Maternal and Child Health Programs (AMCHP). The app is used by hospitals, downloaded for parents, as a tool for educating parents and grandparents. Voice-overs in English and Spanish overcome any literacy challenges. Another app, Baby be Well, was developed in collaboration with Rutgers University and volunteers at AI for Good at Microsoft Corporation. This unique app increases motivation to return to the app over the course of the first year to receive reminders about safe sleep by building in a baby diary feature that allows for uploading and sharing of photos and milestones. Both apps are now in wide use throughout the US. Other methods for provider and caregiver education include on-site lectures, webinars, videos, print material in multiple languages, baby clothing with safe sleep messaging, school-based curricula, and participation in community fairs.

To amplify its impact, the SIDS Center collaborates with public health and research programs at both state and national levels with a shared focus on infant mortality, racial disparity, or adverse social and health determinants. The SIDS Center participates in the mission of Nurture NJ, the project developed by New Jersey's First Lady.

In association with its many education initiatives, New Jersey's rate of Sudden Unexpected Infant Death is one of the lowest in the US. Barbara Ostfeld, PhD, program director of the SIDS Center, was honored in 2020 as a Champion for Children by the American Academy of Pediatrics, New Jersey Chapter in recognition of her contributions to the missions of the SIDS Center.



Graduation and Awards – June 10, 2021

Congratulations to the 2021 Graduates!



PEDIATRIC RESIDENTS

Marianne Armanious, MD	Rannan Kased, DO	Emily Negroponete, MD	Peter Wu, MD
Madhusree Chowdhury, MD	Jovanna Madray, DO	Lauretta Oseni, MD	Sarah Yavelberg, MD
Samantha Chu, DO, MPH	Akreeti Maskey-Pagodin, MD	Aashiki Shah, DO	

ANNUAL FACULTY AND STAFF AWARDS

Pediatric ED Nurse of the Year:

Demitrus Alvarez, RN, BSN

General Pediatrics Nurse of the Year:

Jennifer Olas, DNP, MSN-E, RN-BC, APN, CPNP-PC

Neonatal ICU Nurse of the Year:

Rosemarie Natividad, BSN, RNC-NIC

HemeOnc Nurse of the Year:

Josephine Afoakwah, RN, BSN

Pediatric ICU Nurse of the Year:

Virginia Mota, RN, BSN

Nurse Practitioner of the Year: Amanda Lee, APN

Social Services Provider of the Year:

Katherine Bowden, LSW

Pharmacist of the Year: Liza George, PharmD/RPH

SPECIAL AWARDS

Lawrence T. Taft Award for Excellence in Clinical Teaching: Benjamin Lentzner, MD

Ruth Ellen Steinman Award for Excellence as a Clinician, Teacher and Role Model: Aazim Hussain, MD

David H. Carver Teaching Award: Marianne Armanious, MD

Mercy Urgino, MD Compassionate Doctoring and Caring Award: Akreeti Maskey-Pagodin, MD

Avrum Katcher, MD/Paul Winokur, MD Award for Excellence in Student Teaching: Emily Negroponete, MD

PEDIATRIC CHIEF RESIDENTS



Jaya Isaac, MD



Debra Zharnest, MD

NEONATOLOGY FELLOWS



Jennifer Horne, DO



Ajay Reddy, MD



Miry Shim, DO

DEVELOPMENTAL PEDIATRICS FELLOW



Natalia Karpova, MD

CLINICAL FACULTY AWARDS

Excellence in Collaboration and Teamwork: Jennifer Owensby, MD

Excellence in Quality and Safety: Amisha Malhotra, MD

Excellence in Service and Professionalism: Monica Chugh, MD

IN RECOGNITION

New Jersey Health Foundation (NJHF) Excellence in Teaching Award & Gold Humanism Honor Society: Leonard Tow Humanism in Medicine Award

Elizabeth Goodman, MD

Recognition and Awards

2020 RBHS CHANCELLOR AWARDS

CHANCELLOR CLINICAL OR HEALTH SCIENCES INVESTIGATOR AWARD

Nancy Reichman, PhD, Professor of Pediatrics
For her studies of the effect of socioeconomic status on infant and child health



CHANCELLOR EXCELLENCE IN DIVERSITY, EQUITY AND INCLUSION AWARD

Patricia Whitley-Williams, MD, Professor of Pediatrics and Associate Dean for Inclusion and Diversity
For her passion and achievements in promoting diversity and inclusion in academic medicine



CHANCELLOR STAFF SUPPORT AWARD

Donna Weeks, BS, PHR, Program Administrator
For her many years of dedicated service to the clinical mission of RBHS



ROBERT WOOD JOHNSON MEDICAL SCHOOL EMPLOYEE OF THE MONTH RECOGNITION

Diana D'Aiello, LPN – April 2021

Faculty Practice

Damaris Soto – March 2021

Divisions of Medical Genetics and Rheumatology

ADDITIONAL RECOGNITION/AWARDS

Deborah Spitalnik, PhD

Leadership Impact Award: Family Resource Network, November 2020

Peter Cole, MD

Elected member: The American Pediatric Society, October 2020

THE SOCIETY FOR PEDIATRIC RESEARCH MEMBERS

Thomas Hegyi, MD - 1982

Michael Lewis, PhD - 1990

Sally Radovick, MD - 1995

Thomas Scanlin, MD - 1996

M. Douglas Baker, MD - 1997

Rajeev Mehta, MD - 2003

Peter Cole, MD - 2009

Daniel Horton, MD - 2016

Manuel Jimenez, MD - 2016

Lawrence Kleinman, MD - 2019

Lisa Denzin, PhD - 2021

Sunanda Gaur, MD - 2021

Deepak Jain, MD - 2021

Simon Li, MD - 2021

L. Nandini Moorthy, MD - 2021

Maya Ramagopal, MD - 2021

Nancy Reichman, PhD - 2021

Derek Sant'Angelo, PhD - 2021

Events

COVID VACCINE TRIALS

In July 2021, Dr. Minh Tu Do's two sons, ages four and nine, participated in a Covid vaccine clinical trial, which was conducted at the Rutgers Robert Wood Johnson Medical School's Clinical Research Center. Dr. Do is Assistant Professor of Pediatrics, Emergency Medicine Division.



TENTH ANNUAL PEDIATRICS RESEARCH DAY – MAY 13, 2021

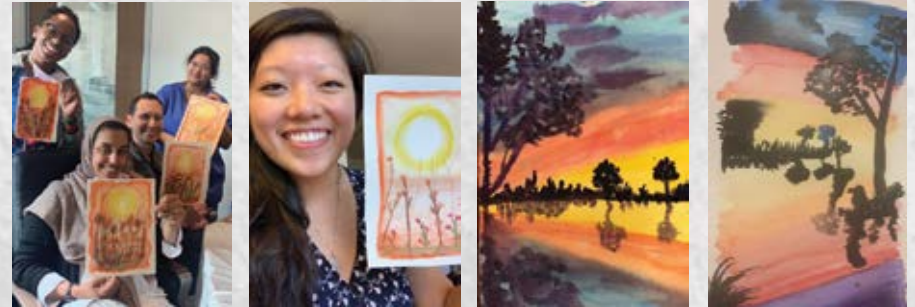
This year's tenth annual Pediatrics Research Day was conducted online and featured Dr. Lawrence C. Kleinman as the keynote speaker, six platform presentations and two resident presentations.

Lawrence C. Kleinman, MD, MPH, FAAP, professor, vice chair for academic development and director, Division of Population Health, Quality, and Implementation Science (PopQuIS), presented on "Assembling CLOCK: Developing a National Collaboration to Study COVID-19 Outcomes in Children." The plenary session was moderated by Joann Carlson, MD, and Anna Petrova, MD, PhD, MPH.

Students, residents, fellows, and faculty shared 39 high quality poster presentations, using the CANVAS online platform, which proved to be flexible and interactive, and the Research Day booklet featured an impressive collection of 51 abstracts. The poster and plenary sessions combined for a high-energy day helping to further establish the community of scholarship shared among our faculty and our learners. The 2021 Pediatric Research Day was organized by the planning committee under the leadership of Dr. Kleinman. The planning committee included: Joann Carlson, MD; Thomas Hegyi, MD; Michael Lewis, PhD; L. Nandini Moorthy, MD, MS, FAAP; Anna Petrova MD, PhD, MPH; Suzanne Anderson; Sandra Moroso-Fela, MA; Maricel Quiñones and Donna L. Weeks, BS, PHR.

RESIDENT WELLNESS SESSIONS

June 17, 2020: Reflections and Study in Orange



August 19, 2020: Wellness with Watercolor



7TH EVIDENCE-BASED PEDIATRIC UPDATE SYMPOSIUM

Saturday, November 14, 2020

CME/CE Certified Activity – Benjamin Lentzner, MD – Symposium Director





RUTGERS

Robert Wood Johnson
Medical School

Department of Pediatrics
125 Paterson Street
Clinical Academic Building
New Brunswick, NJ 08901