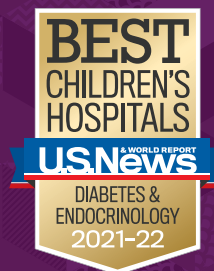


PEDIATRIC INSIGHTS

SPRING 2022 • An Update From the Division of Pediatric Endocrinology



A Message From the Division Director



Welcome to the Division of Pediatric Endocrinology at UPMC Children's Hospital of Pittsburgh. 2021 was another busy year here in the 'burgh, and 2022 has begun no less. As we have done over the past six decades, we continued to provide

care and services to children and families in the tristate area of southwestern Pennsylvania, Ohio, and West Virginia. Through the Covid-19 pandemic and the evolving landscape of care it precipitated, we supported our patients and families, nimbly switching to telemedicine as needed, and offered outpatient visits to approximately 24,000 children in the past year. Our inpatient service has been very busy as well; 283 children were diagnosed with diabetes in the past year at our hospital.

Our team continues to grow and currently includes 23 physicians, 11 APPs, nine fellows, 12 certified diabetes care and educator specialists (CDCES), nine endocrine nurses, six dietitians, two psychologists, and two social workers.

This year, we welcomed a new clinical director, **Dr. Wassim Chemaitilly**, and **Drs. Pinto, Shahid, and Novack** to the team. Our Division expanded our care network to central Pennsylvania, and UPMC Harrisburg now includes three full time pediatric endocrinologists, a CDCES, and a PA specialist.

We developed innovative, multidisciplinary clinical programs, such as our High-Fidelity Diabetes Wraparound Program, and new clinics for children with muscular dystrophies and metabolic bone disease. We also continued to provide care through long-standing Disorders of Sex Differentiation, cystic fibrosis-related endocrine disorders, endocrine late-effects of cancer treatment, and thyroid cancer clinics. We continued to work closely with our partners, including the UPMC Health Plan and other insurance providers to facilitate technology use among our young patients with diabetes. We are partnering with the JDRF, ADA, and PASNAP to engage in advocacy and community-orientated clinical care and research.

Our researchers, who lead robust, innovative, and collaborative programs, published more than 50 peer reviewed articles and abstracts, and gave numerous presentations and lectures at national conferences in 2021. Our faculty received several new grants, including two new NIH R01s, a KL2 award, and grants from the Cystic Fibrosis Foundation, American Heart Association, JDRF, ISPAD, pharmaceutical companies, and from philanthropic foundations.

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About The Division

The Division of Pediatric Endocrinology at UPMC Children's has more than eight decades of clinical care excellence, research discoveries, and training of countless clinicians through its education programs. An interdisciplinary team of physicians, scientists, and healthcare professionals provide outstanding health care, conduct novel research, and train future clinicians and researchers.

The Division is consistently recognized as one of the top pediatric endocrinology programs in the country by *U.S. News & World Report* Best Children's Hospitals and is currently #7 in the 2021-2022 rankings.

The National Institutes of Health (NIH), American Diabetes Association (ADA), Pediatric Endocrine Society (PES), UPMC Children's Hospital of Pittsburgh Research Administration Committee, Cochrane Weber Research Foundation and other philanthropic organizations fund the cutting-edge research conducted in the Division. The Division is committed to the training of fellows in pediatric endocrinology and is supported by a T32 Training Grant from NIH since 1995. Graduates of the program include seven chairs of Departments of Pediatrics (present or past), 25 Chiefs of Pediatric Endocrinology Divisions, six Center Directors, two leaders in industry, and an Associate Chief Information Officer, in addition to numerous academic pediatric endocrinologists.

Faculty members and graduates have served and continue to serve in leadership roles in the Pediatric Endocrine



Society, American Diabetes Association, the Endocrine Society, the International Society of Pediatric and Adolescent Diabetes (ISPAD), and the Androgen Excess-PCOS Society.

Meet the New Clinical Director, Wassim Chemaitilly, MD



In September 2021, the Division welcomed **Wassim Chemaitilly, MD**, as the new clinical director. Dr. Chemaitilly came to UPMC Children's from St. Jude Children's Research Hospital in Memphis, Tennessee, where he served as the

director of the Division of Endocrinology.

Dr. Chemaitilly first joined UPMC Children's in 2008 after completing his fellowship training at NewYork-Presbyterian, and he remained with the Division until 2011 when he accepted an appointment at St. Jude. His time with the Division in the early part of his career was a great influence on Dr. Chemaitilly returning to Pittsburgh to assume the role of clinical director.

Dr. Chemaitilly is a nationally and internationally renowned clinician, leader, and researcher whose work is focused on the endocrine complications and late effects observed in survivors of childhood cancers and brain tumors. He also has clinical and research interests in pituitary dysfunction disorders of puberty.

He has published more than 100 peer-reviewed articles, numerous abstracts, and book chapters. He serves on the leadership teams of national and international academic organizations, including the Pediatric Endocrine Society where he co-chairs the Tumor-related Endocrine and Neuro-endocrine Special Interest Group and the Children's Oncology Group where he chairs the Endocrine-Reproductive Long-term Follow-up Guidelines task force.

Division Leadership

Radhika Muzumdar, MD
Division Chief

Wassim Chemaitilly, MD, PhD
Clinical Director

Ingrid M. Libman, MD, PhD, MPH
Director, Diabetes Program

Silva Arslanian, MD
Scientific Director, Center for Pediatric Research in Obesity and Metabolism (CPROM)

Selma F. Witchel, MD
Fellowship Program Director

Faculty

Natalie H. Baldauff, DO

Dorothy J. Becker, MBBCh, FCP(PEDS)

Oscar Escobar, MD

Amanda C. Flint, MD

Luigi R. Garibaldi, MD

Alissa M. Guarneri, MD

Nursen Gurtunca, MD

Kara S. Hughan, MD, MHSc

Amy M. Jean, MD

Vered D. Lewy-Weiss, MD

Christine A. March, MD, MS

Amr Morsi, MD

Shira Rose Novack, MD

Bianca M. Pinto, MD, FAAP

Mohamed Saleh, MD

Nabiha Shahid, MD

Mary Ellen Vajravelu, MD, MHSP

Pushpa Viswanathan, MD, FAAP

Katherine Vu-Boast, MD

Research Faculty and Lab Members

Ariane Bruder do Nascimento, PhD

Thiago Bruder do Nascimento, PhD

Goma Chhetri, PhD

Henjiang (Henry) Dong, PhD

Joseph Galley, PhD

Zhenwei Gong, PhD

SoJin Lee, PhD

Kelsey Sadlek

Alina Saiyid

Shubhnita Singh, MD

Taofeek Usman, PhD

Xingchun Wang, MD, PhD

Kayla Williams, BS

Ting Zhang

Fellows

Weam Alnayem, MD

Tyler Colangelo, MBBS

Sneha Daniel, MD

Nkeiruka Mkparu, MD

Adriana Rodriguez Gonzalez, MD

Shruti Sastry, MD

Swetha Sriram, MD, FAAP

Zeinab Zorkot, MD

(See Page 10 for more information on fellows and training programs)

Advanced Practice Providers

Diana DeArment, PA-C
APP Supervisor

Erica Cordell, CRNP

Nicole DiBenedeti, DNP, CRNP

Brittaney Moore, CRNP

Elizabeth Ranella, CRNP

Brianna Rothbauer, PA-C

Haley Sager, PA-C

Alexandra Sharick, PA-C

Megan Tamilia, PA-C

John Weidinger, PA-C

Haley White, PA-C

Endocrine Nurses

Lauren Berry

Amy Gilliland

Erika McCann

Shaylyn McDaniel

Shannon Minydzak

Crystal Muth

Kristine Somers

Jennifer Upton

Jillian Whitfield

Psychology

Marah Coleman

Elizabeth Grandelis

Social Work

Emma Donnelly

Nichole Zimmerman

Dietitians

Brigitta Fieldhammer

Mikayla Keyser

Cara Reifschneider

Maria Yokopenic

Diabetes Educators

Leah Cervenak

Mauri Druash-Gladys

Rebecca Grecek

Gemma Herbert

Tracy Jumblat

Karen Kelly

Terri McGee

Christine Moon

Olivia Nourie

Kayla Raber

Adrienne Sapienza

Peggy Young

Clinical Research Team

Angel Akar

Samantha Cochenour

Kelli DeLallo

Ana Diaz

Nancy Guerra

Mary Beth Klein

Katie McDowell

Karen Riley

Carly Shelleby

Office and Support Staff

Marissa Barkus

Janet Bell

Diane Cline

Lindsay Fichthorn

Beth Gigliotti

Ashley Hecker

Crissy Laush

Rebecca Longo

Brooke Myers

Kathy Opel

Lynette Orlansky-Khan

Ashley Rust

Theresa Sciulli

Natalie Smith

Subha Srinivasan

Sharon Strohm

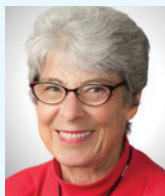
Brennan Vaughan

Rosa Weaver

Division and Faculty News

2021 was a challenging, yet productive year filled with many accomplishments from faculty and staff in the Division.

Dorothy J. Becker, MBBCh, FCP(PEDS) Awarded Van Wyk Prize



Congratulations to **Dorothy J. Becker, MBBCh, FCP(PEDS)**, on receiving the prestigious Van Wyk Prize from the Pediatric Endocrine Society in recognition of her outstanding career and achievements in field of diabetes prevention, treatment, and research. The Judson J. Van Wyk Prize is the Pediatric Endocrine Society's (PES) most prestigious award in recognition of outstanding career achievement by a member in the field of pediatric endocrinology. This award, established in honor of Judson J. Van Wyk, MD, stands in tribute to an outstanding leader whose career is marked by scientific excellence, leadership, and dedication to the health of children.

Dr. Becker has been internationally recognized for her work in the treatment and prevention of diabetes in children for more than 30 years. Dr. Becker's clinical work and research has focused on diabetes and the application of new therapies. Among her many achievements, Dr. Becker has received the McElroy Award from the University of Pittsburgh Medical Alumni Association, the Founder's Award from the Midwest Society of Pediatric Research, and the Award for Outstanding Contribution to Diabetes in Youth from the American Diabetes Association.

Dr. Becker was honored at the PES 2021 annual meeting.

Welcoming New Faculty



Mary Ellen Vajravelu, MD, MSHP, joined the Division in July 2021. Dr. Vajravelu's clinical work involves the full spectrum of pediatric endocrine conditions, with an emphasis on type 2 diabetes and prediabetes in children and adolescents. Her research interests are primarily focused on type 2 diabetes and obesity in pediatric patients, where she studies best practices for using mobile health (mHealth) strategies to improve patient health and outcomes. Dr. Vajravelu combines her training and interests in epidemiology, biostatistics, quantitative research, and

quality improvement to study and improve the effectiveness of therapies for children and adolescents with endocrine-related disorders.



Bianca M. Pinto, MD, FAAP, joined the Division as an assistant professor of pediatrics on September 1, 2021, after completing her fellowship training in the Division. Dr. Pinto's primary clinical and research priorities involve improving the quality of life and overall health of gender-diverse children and adolescents. Dr. Pinto's clinical work is focused on general pediatric endocrinology, and working with transgender and gender non-conforming youth in the Gender and Sexual Development Program.

Division Faculty Take on New Leadership Roles

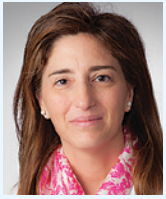


Alissa M. Guarneri, MD, assumed the lead for the Division's quality improvement initiatives. Dr. Guarneri joined the Division in September 2020. Dr. Guarneri's work, in the area of quality improvement, saw her awarded the 2020 AAP and PES Leona Cuttler Award. She is currently involved in developing quality improvement curricula for residents and fellows in the Division, quality improvement initiatives for the Division of Pediatric Endocrinology, and she works with the hospital-level QI team on large-scale hospital-wide initiatives.



Katherine Vu-Boast, MD, assumed the role of associate clinical director of diabetes in January 2022. Dr. Vu-Boast is passionate about providing compassionate, evidence-based, family-centered care for pediatric patients with diabetes, thyroid dysfunction, pituitary disease, and growth and pubertal disorders. With her interests in the psychological and sociological determinants of health outcomes, Dr. Vu-Boast will help to lead diabetes initiatives designed to improve the quality of health care delivery in the hospital, outpatient clinics, and in community settings for children with diabetes and their families.

Mentor/Mentee Team Awarded Teaching and Scholar Awards



Ingrid M. Libman, MD, MPH, PhD, associate professor of pediatrics and director of the Diabetes Program was awarded a Medical Student Research Mentoring Award from the University of Pittsburgh School of Medicine. This award recognizes faculty for their outstanding teaching and mentorship over the course of a longitudinal research project and is bestowed by the School of Medicine based on the recommendation of medical students.



The strength of Dr. Libman's mentorship and training dedication is evidenced by the work of mentee and Division colleague, **Christine A. March, MD, MS**, clinical instructor in the Division who was accepted into the University of Pittsburgh Clinical and Translational Science Scholar Program (KL2). The competitive Clinical and Translational Science Scholar Program supports junior faculty at the University of Pittsburgh with salary support for up to five years, and provides protected time for faculty to conduct preliminary research that will enable them to apply for a career development award (K Award) from the National Institutes of Health. Dr. March has a general interest in health services research focusing on the care and outcomes of children and adolescents with type 1 diabetes (T1D), specifically community-engaged research and school-based diabetes care. Her primary work focuses on optimizing the school-based management of T1D in the context of emerging diabetes technologies, including insulin pumps, continuous glucose monitors, and sensor-augmented insulin pumps.

Division Faculty Accepted to Leadership Programs



Three members from the Division of Pediatric Endocrinology at UPMC Children's were accepted to leadership development and training programs at UPMC and the University of Pittsburgh School of Medicine.

Wassim Chemaitilly, MD, PhD, was nominated to the University of Pittsburgh Katz School of Business and School of Medicine program, "The Foundations for Success: Healthcare Leadership and Business Fundamentals."

Christine March, MD, MS, was accepted into the 2022 Leadership Academy for Early Career Faculty at the University of Pittsburgh.

Katherine Vu-Boast, MD, was accepted into UPMC Physician Leadership Essentials Program.

Presentations and Lectures at Scientific Sessions

Faculty from the Division presented numerous research abstracts, presentations, and lectures at many of the field's most important national conventions, including the 2021 Scientific Sessions of the American Diabetes Association, the Pediatric Endocrine Society annual meeting, and the Endocrine Society annual meeting.

Pediatric Endocrine Society News

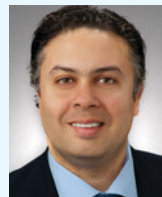


Selma F. Witchel, MD, was the co-chair of the national program committee for the 2022 Pediatric Endocrine Society annual meeting held from April 28 to May 1, 2022, in Chicago. The program committee's work involves organizing the scientific program of the meeting.

Division chief **Radhika Muzumdar, MD**, also sits on the Program Committee.

Dr. Witchel also was elected to the position of Director on the Pediatric Endocrine Society Board of Directors highlighting her continued commitment and leadership at the national level in pediatric endocrinology. She will serve a three-year term beginning in 2022.

Division Expands Pediatric Endocrine Subspecialty Care in Harrisburg



The Division of Pediatric Endocrinology greatly expanded its services and reach with a new full time pediatric endocrinology clinic at UPMC Children's in Harrisburg, Pennsylvania. The new comprehensive clinic is staffed by three of the Division's faculty, including (*left to right*) **Amr Morsi, MD**, **Shira Rose Novack, MD**, and **Nabiha Shahid, MD**, along with advance practice providers and nursing staff. The new clinic provides expert subspecialty endocrine care close to home for patients in the greater Harrisburg area.

Clinical Update: New and Notable Programs in the Division

The Division of Pediatric Endocrinology at UPMC Children's Hospital is one of the largest and busiest programs in the country with more than 80 years of clinical successes driving forward its clinical reputation of excellence and innovation. New clinical programs and multidisciplinary clinics are a hallmark of the Division. Some of the Division's newest and notable programs include:

High-Fidelity Diabetes Wraparound Program —

In 2018, the Division received funding for a new program to improve diabetes management and outcomes in high-risk children and adolescents who have type 1 diabetes. Dubbed the "Adapted Wraparound to Improve Type 1 Diabetes Management in Youth," this project is designed to test the adaptation of an evidence-based high-fidelity wraparound process, initially developed and used in the behavioral health community, to teach and empower patients and families to better self-manage their behavioral health conditions through a comprehensive, holistic, patient-centric approach. **Ingrid Libman, MD, PhD, MPH**, leads the program.

Total Pancreatectomy With Autologous Islet-Cell Transplantation —

UPMC Children's Hospital of Pittsburgh is one of only five pediatric centers in the US with an active program of Total Pancreatectomy With Autologous Islet-Cell Transplantation (TPAIT) for children with acute recurrent or chronic pancreatitis. The TPAIT Team includes providers from multiple pediatric divisions, including Pancreatic Center, Endocrinology, Transplant and Behavioral Health. Pediatric Endocrinology.

Gender and Sexual Development Program —

The Gender and Sexual Development Program is an integrated and coordinated collaboration of the between the Division of Adolescent and Young Adult Medicine, Pediatric Endocrinology and Behavioral Health. **Selma F. Witchel, MD**, leads the endocrinology aspects of the program. The program provides gender affirming care for children and youth with questions around gender and sexual identity development and transgender care.

ELECT (Endocrine Late Effects After Cancer Therapy) Clinic —

The ELECT clinic, led by **Nursen Gurtunca, MD**, and **Wassim Chemaitilly, MD, PhD**, offers comprehensive clinical care and research in the management of endocrine late effects in childhood cancer survivors. In addition to pediatric endocrinology, the multidisciplinary team includes hematology/oncology, neuro-oncology, bone-marrow transplantation, cancer survivorship, and the fertility preservation team.

Center for Pediatric Research on Obesity and Metabolism (CPROM) —

Established in 2017 under the distinguished leadership of **Silva Arslanian, MD**, CPROM fosters cutting-edge research in medical science related to obesity and metabolism in pediatrics. The Center is a hub for collaborative, interdisciplinary research to study childhood obesity and co-morbidities, such as type 2 diabetes and pre-diabetes, non-alcoholic fatty liver disease (NAFLD), polycystic ovary syndrome (PCOS), sleep apnea, brain functional and structural alterations, cardiovascular disease, adipocyte biology and inflammation, and gene-environment interaction, among others. We pursue novel discoveries while challenging dogma and conventional wisdom, ultimately leading to paradigm shifts in pediatric medicine resulting in improved health of children.

Multidisciplinary Pediatric Thyroid Center —

This multidisciplinary center coordinates the care of children with thyroid nodules and thyroid cancers. A multidisciplinary thyroid conference is organized annually in which fellows present interesting and complicated cases for discussion. Patients at the Pediatric Thyroid Center experience an integrated team approach for the evaluation and treatment of thyroid disease and related conditions, and advanced imaging and molecular diagnostic studies are used to help clinicians develop innovative treatment plans. The clinic is currently led by Division clinical director, **Wassim Chemaitilly, MD, PhD**.

Metabolic Bone Disorders Clinic —

Led by **Natalie Baldauff, DO**, the Metabolic Bone Disorders Clinic provides comprehensive care for pediatric patients with a variety of genetic and metabolic bone disorders, including osteogenesis imperfecta, osteopenia of prematurity, Vitamin D disorders, and rickets. The clinic also has a growing practice treating patients in the UPMC Children's multidisciplinary Duchenne muscular dystrophy clinic.

Other Specialty Clinics and Programs

- UPMC Children's Hospital of Pittsburgh Diabetes Transition Program
- Cystic Fibrosis Related Diabetes (CFRD)
- Muscular Dystrophy Clinic
- Prader Willi Clinic
- Lipid Clinic
- Wellness Clinic
- Diabetes Retinopathy Screening Program

Research Update

The Division of Pediatric Endocrinology pursues cutting-edge research across a broad spectrum of clinical, basic science, and translational studies. 2021 was a very productive year for the research programs and laboratories in the Division. Below is a selection of new grants awarded to Division faculty, and a selection of recently published research.

R01 to Study Brain Health in Youth at Risk for Type 2 Diabetes



Silva Arslanian, MD, was awarded a National Institutes of Health multi-principal investigator R01 grant aimed at studying brain health in youth at risk for type 2 diabetes. The multidisciplinary and multicenter investigation will work to

determine if obesity, insulin resistance, and beta cell dysfunction with or without dysglycemia are associated with altered brain structure as depicted on magnetic resonance imaging (MRI), and brain function measured through a battery of cognitive tests. The research teams will follow changes over time in participants to determine predictors of change in brain outcomes among youth with obesity, prediabetes, and type 2 diabetes compared with normal weight youth.

AHA Career Development Award



University of Pittsburgh Department of Pediatrics researcher **Thiago Bruder do Nascimento, PhD**, was awarded a Career Development Award from the American Heart Association. The award will provide Dr. Bruder three years of funding for his research project “Progranulin on Kawasaki’s diseases-induced vascular damage.” Dr. Bruder is a member of the Center for Pediatric Research in Obesity and Metabolism (CPROM).

R01 Awarded for Study in Gestational Diabetes



Division researcher **Henry H. Dong, PhD**, was awarded a National Institutes of Health R01 grant to study the role of the transcription factor FOXO1 in gestational diabetes. Dr. Dong’s laboratory studies the mechanisms underlying beta-cell

compensation, known as an adaptive mechanism by which pancreatic beta-cells increase insulin secretion to overcome insulin resistance for maintaining normal blood sugar levels in individuals with overweight or obesity. The new study is exploring how pancreatic beta cells compensate for

pregnancy to gain mechanistic insights into beta cell failure in gestational diabetes

Pediatric Endocrinology Researcher Awarded ISPAD-JDFR Fellowship for Diabetes Research



UPMC Children’s Hospital of Pittsburgh Division of Pediatric Endocrinology, Diabetes, and Metabolism researcher **Christine March, MD, MS**, was awarded one of the International Society for Pediatric and Adolescent Diabetes —

Juvenile Diabetes Foundation Research (ISPAD-JDFR) fellowship in 2020. Dr. March was one of four recipients of the annual fellowship award. Dr. March’s ISPAD-JDFR fellowship will support her investigation titled, “Examining Factors Associated With Glycemic Control in School for Children with Type 1 Diabetes: A Pilot Study.” Dr. March’s study is designed to obtain preliminary data on the factors contributing to diabetes control during the school day in children and adolescents. Dr. March also was awarded a University of Pittsburgh Clinical and Translational Science Scholar Program (KL2). See page 5 for more details on the KL2 award.

New R01 Grant to Study Effects of Humanin on Myocardial Injury and Heart Failure



Radhika Muzumdar, MD, chief of the Division of Pediatric Endocrinology, Diabetes, and Metabolism at UPMC Children’s Hospital of Pittsburgh, was awarded a new National Institutes of Health R01 grant to study the

cardioprotective effects of humanin, a novel small peptide generated by mitochondria. Dr. Muzumdar is a professor of pediatrics and cell biology at the University of Pittsburgh School of Medicine. Dr. Muzumdar’s research will investigate how humanin treatment may improve cardiac function in animal models of myocardial ischemia-reperfusion (MI-R) injury or MI-induced heart failure in the setting of aging.

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Selected Publications From Division Faculty

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Stades AM, van Vuurden D, Janssens GO, Thomas-Teinturier C, Murray RD, Di Iorgi N, Neggers SJCMM, Thompson J, Toogood AA, Gleeson H, Follin C, Bardi E, Torno L, Patterson B, Morsellino V, Sommer G, Clement SC, Srivastava D, Kiserud CE, Fernandez A, Scheinemann K, Raman S, Yuen KCJ, Wallace WH, Constine LS, Skinner R, Hudson MM, Kremer LCM, Chemaitilly W, van Santen HM. Hypothalamic-Pituitary and Other Endocrine Surveillance Among Childhood Cancer Survivors. *Endocr Rev*. 2021 Nov 20: bnab040.

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Research Update Continued from Page 7

Mobile Health Intervention Clinical Trial Aimed at Improving Activity Levels in Adolescents With Obesity and Type 2 Diabetes



Mary Ellen Vajravelu, MD, is currently working under a National Institutes of Health K23 award testing a novel approach to help motivate behavioral change and increase levels of activity in children and adolescent with prediabetes and diabetes. Dr. Vajravelu's study entails a 12-week factorial trial in which patients wear activity trackers to measure physical activity levels during the day. After conducting baseline physical activity assessment, study participants are randomized into one of 16 different scenarios where they will receive step count goals, text messages reminders, and behavioral economics-informed financial incentives. Dr. Vajravelu's study will analyze the data to see which intervention scenarios were most

effective at promoting increased activity levels with the goal of further refining and testing the interventions in larger trials.

K08 Application to Study Novel Treatment of Chronic Pancreatitis



Mohamed Saleh, MD, conducted a new study investigating a novel, nonsurgical approach to treating chronic pancreatitis and its related complications. The study, published in February 2021 in the *Journal of Clinical Investigation*, details their approach and preclinical studies in mouse and nonhuman primate models of a chemical pancreatectomy designed to treat chronic pancreatitis, a condition for which few effective treatments exist. Based on this work, Dr. Saleh has submitted a grant application to the NIH for K08 funding to continue these studies.

Education and Training News

The Division of Pediatric Endocrinology at UPMC Children's offers one of the largest training programs for residents and fellows in the United States. The Division is committed to the training of fellows in pediatric endocrinology and has been supported by a T32 Training Grant from the National Institutes of Health since 1995.

The Fellowship Program provides three years of clinical and research fellowship training. The program is ACGME accredited and accepts three fellows per year. We offer two tracks, clinician educator and research. The first year of the program is dedicated to the acquisition of clinical expertise in pediatric endocrinology and diabetes. For fellows on the research track, the second and third years of the fellowship are devoted almost entirely to research and course work under the mentorship of a faculty member. Fellows on the clinician educator track will have additional clinical time during the second and third years with a focus on clinical research, quality improvement, and teaching.

Meet the Current Fellows

The current class of fellows in the Division of Pediatric Endocrinology have a diverse mix of clinical and research goals. All chose UPMC Children's to conduct their training because of its impeccable credentials and outstanding faculty. Meet the fellows and learn a little bit about their work.

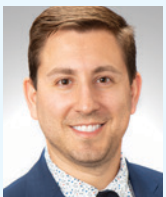
Weam Alnayem, MD



Dr. Alnayem is a second-year fellow. "I chose UPMC Children's for my fellowship because it's one of the highest ranked children's hospitals for diabetes, the area I am most passionate about. I have been exposed to a wide variety of conditions and constant

learning from the expert faculty members. My fellowship experience has been rich and joyful," says Dr. Alnayem. Her clinical area of focus is diabetes and she has conducted research in the areas of transitions of care for diabetes patients and quality improvement.

Tyler Colangelo, MBBS



Dr. Colangelo is a first-year fellow. He completed his pediatric residency at Upstate University Hospital in Syracuse, New York. Dr. Colangelo has clinical interests in working with transgender youth.

Sneha Daniel, MD

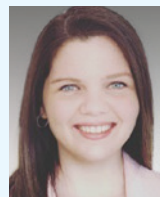
Dr. Daniel is a first-year fellow. She earned her medical degree from Ross University School of Medicine. She has a clinical interest in thyroid disorders and diabetes. Her fellowship research will focus on the health benefits of early behavioral health services when provided early after a diabetes diagnosis. "UPMC Children's is a world leader for many innovative technologies and cutting-edge medical practices. It also serves a large population that gives me the opportunity to see various pathologies," says Dr. Daniel.

Nkeiruka Mkpuru, MD



Dr. Mkpuru is a third year fellow. Her clinical interests have largely involved diabetes, adolescent medicine, and newborn medicine, and her research interests have gravitated toward health-care disparities in youth with diabetes and endocrine disrupting chemicals in personal care products. "I attended residency at UPMC Children's and enjoyed my experience and the diverse learning opportunities. This experience led me to continue my training here for my endocrinology fellowship," says Dr. Mkpuru.

Adriana Rodriguez Gonzalez, MD



Dr. Rodriguez Gonzalez is a first-year fellow. Her main clinical interests are in endocrine late effects of childhood cancer treatment, thyroid cancer, and obesity related to genetics. "I wanted to come to UPMC Children's because of the welcoming nature and top-notch knowledge that the attendings had. The city is also picturesque with a little town vibe while being big," says Dr. Rodriguez Gonzalez.

Shruti Sastry, MD



Dr. Sastry is a second-year fellow. Her clinical and research priorities revolve around obesity, transgender medicine, and posterior pituitary disorders. "UPMC Children's offers great training and research opportunities," says Dr. Sastry.

Swetha Sriram, MD, FAAP



Dr. Sriram is a third-year fellow. Her clinical interests are focused on childhood obesity and transgender care, and she has experience with the psychosocial aspects of diabetes care. “I chose UPMC Children’s for fellowship because of the vast clinical and research opportunities available,” says Dr. Sriram.

Zeinab Zorkot, MD



Dr. Zorkot is a third-year fellow. Her clinical interests have been focused on Turner syndrome and disorders of sex development. She has been working on several quality improvement projects dealing with improving patients’ awareness about Turner syndrome cardiac health, and another projection on improving growth measurements in the endocrine and diabetes clinics. “A highlight for me at UPMC Children’s has been working with great mentors who are invested in helping fellows gain independence as they progress through training, and providing a learning environment that allows them to thrive,” says Dr. Zorkot.

Other Training News at UPMC Children’s

Other notable training programs for clinicians and researchers available at UPMC Children’s Hospital of Pittsburgh include:

Bridges: Personalized Mentoring Program

Initiated in 2015 to provide formal, personalized mentoring for residents, fellows, and junior faculty. All new trainees and junior faculty are carefully matched to a senior faculty

mentor who provides oversight, general advice, and guidance through the year. The mentor-trainee pair develop an individualized learning plan reflecting the trainee’s scientific and career goals, including emphasis on Wellness and Resilience. This Program supplements the Scholarship Oversight Committee and Individual Mentoring offered by the senior leadership of the Pediatric Endocrine Fellowship program.

R. K. Mellon Foundation Institute for Pediatric Research



Led by **George K. Gittes, MD**, Surgeon-in-Chief Emeritus and Co-Scientific Director at UPMC Children’s, the Institute was revamped in 2018 and provides resources and career development programming for all tenure-stream assistant professors at UPMC Children’s. All Mellon scholars receive intensive mentoring in the preparation of grant proposals, acquisition of leadership skills, and career development.

Pediatric Scientist Development Program (PedSDP)



Co-directed by **Jacqueline Ho, MD, MSc** and **Andrew J. Nowalk, MD, PhD**, the PedSDP was initiated in 2016 to train research-oriented pediatric residents. The program recruits interns with significant scientific experience and commitment to research (most are MD-PhDs) into a combined, six-year pediatric residency and subspecialty fellowship, with three years of protected time for research.

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A Message From the Division Director *Continued from Page 1*

Educating the next generation of clinicians and researchers is of the utmost importance to our Division. We continue to strive to achieve excellence in this domain with education programs for undergraduate and graduate students, medical students, residents, and fellows. Our program supports three fellows per year (total of 9 fellows), who are actively engaged in clinical care, research, teaching, and advocacy efforts. We also have an innovative Advanced Practice Provider fellowship program in pediatric endocrinology and have graduated five fellows from that program since its inception in 2019.

The crowning achievement of 2021 was **Dr. Dorothy Becker** receiving the prestigious Van Wyk Award for her lifetime

commitment and service to the field! Of note, UPMC Children's emeritus faculty were the recipients of this award two years in a row (Dr. Mark Sperling received this high honor in 2020) highlighting the rich history of commitment and contribution to the field.

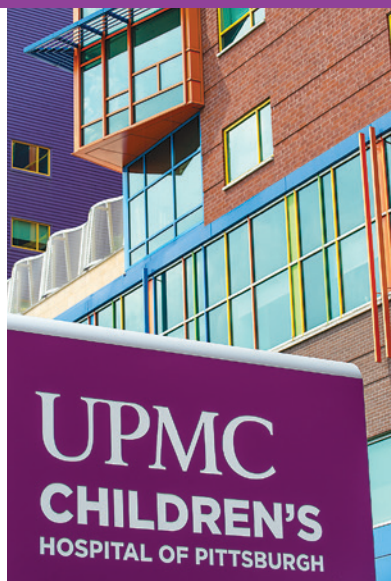
We look forward to continuing to build on our efforts in 2022!

Respectfully,

Radhika Muzumdar, MD

*Chief, Division of Endocrinology and Diabetes,
UPMC Children's Hospital of Pittsburgh
Professor of Pediatrics and Cell Biology,
University of Pittsburgh School of Medicine*

Affiliated with the University of Pittsburgh School of Medicine and ranked among the nation's best children's hospitals by *U.S. News & World Report*.



About UPMC Children's Hospital of Pittsburgh

Regionally, nationally, and globally, UPMC Children's Hospital of Pittsburgh is a leader in the treatment of childhood conditions and diseases, a pioneer in the development of new and improved therapies, and a top educator of the next generation of pediatricians and pediatric subspecialists. With generous community support, UPMC Children's Hospital has fulfilled this mission since its founding in 1890. UPMC Children's is recognized consistently for its clinical, research, educational, and advocacy-related accomplishments, including ranking 15th among children's hospitals and schools of medicine in funding for pediatric research provided by the National Institutes of Health (FY2019) and ranking on *U.S. News & World Report's* Honor Roll of Best Children's Hospitals (2021-22).