

## **Faculty Biographies**

## **Co-Chairs**

Shari Barkin, M.D., M.S.H.S., is professor in the Department of Pediatrics and the chief of General Pediatrics at the Monroe Carell Jr. Children's Hospital at Vanderbilt. She earned her undergraduate degree at Duke University in 1986 and her medical degree at the University of Cincinnati in 1991, and she completed her pediatrics residency at Children's Hospital of Los Angeles in 1994. Dr. Barkin's research has focused on examining the effectiveness of pediatric office-based interventions. She was a Robert Wood Johnson clinical scholar at the University of California. Los Angeles and received a National Research Service Award from the Agency for Health Research and Quality, completing a 4-year fellowship in health services research. During this time, Dr. Barkin conducted both qualitative and quantitative research, examining the role of the pediatric provider in office-based violence prevention. She was chosen as one of 15 generalists from across the country to be a Robert Wood Johnson generalist faculty scholar (2000-2005). Dr. Barkin served as a

principal investigator (PI), funded by the National Institutes of Health (NIH), for a national randomized controlled trial, which was the first such large-scale trial to test the effectiveness of anticipatory guidance in general pediatrics. In collaboration with the Pediatric Research in Office Settings Network-the largest primary care practice-based research network in the United States-this national NIH-funded study evaluated the effectiveness of an office-based violence prevention intervention and included almost 5,000 families in 41 states, Puerto Rico, and Canada. Currently, Dr. Barkin serves as the PI for an NIH-funded study to evaluate the use of a recreation center as an extension of a doctor's office for treating childhood obesity in preadolescent Latino children. She is also the recipient of a Duke Endowment Grant that supported the building of the Collaborative to Strengthen Families and Neighborhoods, a learning laboratory designed to test a new model of community engagement that allows community and academic partners to develop and test meaningful interventions to improve child health outcomes. Dr. Barkin is developing a network of these collaboratives, with a second site in Nashville, in partnership with Metro Parks and Recreation. Building on her NIH studies, she has received a Tennessee State Implementation Grant to test the effect of a community-based, family-centered pediatric obesity intervention program for Latino families with young children. Dr. Barkin leads a group of pediatric obesity researchers to develop and test promising approaches to controlling the rate of pediatric obesity.



**Charles Burant, M.D., Ph.D.,** is professor of internal medicine and the Robert C. and Veronica Atkins Professor of Metabolism in the Section of Metabolism Endocrinology and Diabetes at the University of Michigan (UM) School of Public Health. He also has appointments in human nutrition and in integrative physiology and computational medicine and biology at the UM Medical School. Dr. Burant is the director of the Taubman Research Institute, which supports translational scientists and projects at UM. His research program centers on the interaction between genetics and environmental factors in the development of obesity, insulin resistance, and diabetes and on ways that intrinsic cardiorespiratory fitness can modulate the risk of metabolic diseases. Dr. Burant's studies integrate metabolomic and lipidomic profiling with other -omics technologies to understand the emergent clinical phenotypes and use them to predict individual responses to diet, exercise, and weight loss, with a goal of

individualizing interventions to improve metabolic health.



**Susan Carnell, Ph.D.,** is associate professor of psychiatry and behavioral sciences at the Johns Hopkins University School of Medicine. She received her B.A. in experimental psychology from The University of Oxford and completed a Ph.D. in health psychology, with a focus on parental feeding style and children's eating behavior at the University College London. Dr. Carnell then was awarded an interdisciplinary postdoctoral research fellowship by the Economic and Social Research Council and Medical Research Council, during which she used behavioral genetic data from a national twin study to examine genetic and environmental influences on child appetite and obesity. Upon completion of her fellowship, Dr. Carnell moved to the New

York Obesity Nutrition Research Center at Columbia University, where she spearheaded studies of circadian and stress-related variation in neural (functional magnetic resonance imaging [fMRI]) and hormonal responses to food and food cues among obese and lean adults with and without binge eating. While at Columbia University, she also was awarded a K99/R00 Pathway to Independence Award to investigate neural responses to food cues in obese and lean adolescents who have varying risk in familial and genetic obesity. In 2013, Dr. Carnell became faculty at the Division of Child and Adolescent Psychiatry, where she leads a program of research investigating eating behavior and obesity throughout the lifespan, including neuroimaging studies in infants, children, and adolescents. Her ongoing research projects include investigations of appetite and body weight in infants, children, adolescents, and adults, including studies of eating behavior in individuals with anorexia nervosa, attention-deficit/hyperactivity disorder, and cystic fibrosis, as well as in those undergoing bariatric surgery.

Dr. Carnell's laboratory uses a range of methods—including behavioral tests, self- and parent-reported questionnaires, genotyping, hormonal assays, and neuroimaging techniques (fMRI, magnetic resonance imaging, and positron emission tomography)—to understand the characteristics of appetite and eating behavior.

## **Speakers and Moderators**



**Kjersti Marie Aagaard, M.D., Ph.D., FACOG,** is the Henry and Emma Meyer professor and endowed chair in obstetrics and gynecology at the Baylor College of Medicine and Texas Children's Hospital. She serves as vice chair of research for Obstetrics and Gynecology and a professor in the Departments of Molecular and Human Genetics, Molecular and Cellular Biology, and Molecular Physiology and Biophysics. Dr. Aagaard is a member of the Center for Reproductive Medicine, Digestive Disease Center, Eisenberg Center for Decision Sciences, the Center for Microbiome and Metagenomics Research, and the School for Tropical Medicine. She is a co-director in the Baylor College of

Medicine Medical Scientist Training M.D.-Ph.D. program. Dr. Aagaard joined the faculty at Baylor College of Medicine and Texas Children's Hospital immediately after completing her fellowship in 2007. Her career as a physician-scientist has included active and supported efforts in research, clinical care, education, mentorship, and public health advocacy. Dr. Aagaard's clinical interests include emerging obstetrical infectious diseases, preterm birth, diabetes and hypertensive disorders in pregnancy, maternal smoking and environmental exposures, and the detection and diagnosis of congenital and genetic anomalies. Her clinical and translational research interests parallel her clinical interests and focus on the role of the microbiome in pregnancy and early developmental programming, as well as the impact of key exposures in pregnancy—such as nutrition, diabetes, maternal high-fat diet, smoking, and environmental chemical exposures—on fetal development and disease later in life. Since her fellowship, Dr. Aagaard has been funded continually by the National Institutes of Health (NIH) and has received additional support from the March of Dimes, Gates Foundation/U.S. Agency for International Development, Thrasher Foundation, and Burroughs Wellcome Preterm Birth Initiative. In 2007, she received the NIH Director's New Innovator Award. In 2015, Dr. Aagaard received the Michael E. Debakey Medal for Excellence in Research, and in 2018, she received the Nature mid-career Mentor of the Year Award. Dr. Aagaard was elected to the American Society for Clinical Investigators in 2019 and was selected to receive the Society for Reproductive Investigators President's Award in 2020.



**Ellen Demerath, Ph.D.,** is professor of epidemiology and community health at the University of Minnesota School of Public Health, where she directs the Maternal and Child Health M.P.H. program and teaches courses on genetics, maternal and child health, and nutrition/obesity. Dr. Demerath received her Ph.D. in biological anthropology from the University of Pennsylvania in 1997. Her research focuses on the developmental origins of obesity and chronic disease. Over the past 20 years, her research program funded by the National Institutes of Health has bridged maternal-infant nutrition, obesity genomics, child growth and development, and cardiovascular disease epidemiology. Currently, Dr. Demerath directs a longitudinal cohort of women and children, examining the role of maternal metabolic status in

breast milk variation and its relationship to infant and child health.



**Sharon Donovan, Ph.D., RD,** received her B.S. and Ph.D. in nutrition at the University of California, Davis and completed a postdoctoral fellowship in pediatric endocrinology at the Stanford University School of Medicine. In 1991, she joined the Department of Food Science and Human Nutrition at the University of Illinois at Urbana-Champaign, where she currently holds the Melissa M. Noel endowed chair in nutrition and health. In 2020, Dr. Donovan became the director of the newly established personalized nutrition initiative at the University of Illinois. Her laboratory conducts basic and translational research in the area of pediatric nutrition. Ongoing work focuses on nutritional

and pre- and probiotic approaches to optimizing modulating the microbiome gut-brain axis, as well as the prevention of childhood obesity and picky eating in children. Dr. Donovan has approximately 200 peer-reviewed publications and has garnered more than \$35 million in grant support from the National Institutes of Health, U.S. Department of Agriculture, foundations, and the food and pharmaceutical industry. She served as president of the American Society for Nutrition from 2011 to 2012 and of the International Society for Research on Human Milk and Lactation from 2018 to 2020. Dr. Donovan was a member of the 2020–2025 Dietary Guidelines for the Americans Advisory Committee, and she was elected to the National Academy of Medicine in 2017.



**Ihuoma Eneli, M.D., M.S., FAAP,** is a board-certified general pediatrician and professor of pediatrics at The Ohio State University College of Medicine and director of Center for Healthy Weight and Nutrition at Nationwide Children's Hospital, all in Columbus, Ohio. She oversees a comprehensive tertiary care pediatric obesity center with activities that include advocacy, prevention, medical and surgical weight management, education, and research. Dr. Eneli also directs the Primary Care Obesity Network, which provides obesity-related training, resources, and community integration to 25 primary care practices in Central Ohio. She is the associate director of American Academy of Pediatrics Institute for Healthy Childhood Weight and serves as vice chair of the National

Academy of Medicine Roundtable on Obesity Solutions. Dr. Eneli is interested in intervention research for pediatric obesity, for which she has received funding from several sources, including the National Institutes of Health (NIH) and Patient-Centered Outcomes Research Institute. She received her medical degree from the University of Nigeria and completed her a pediatric residency and a K30 NIH clinical research training program, as well as a Master of Science degree in epidemiology, at Michigan State University.



Lori Francis, Ph.D., is a developmental health scientist and an associate professor of biobehavioral health at The Pennsylvania State University, as well as the director of the Family and Child Health Project. Her research is at the intersection of developmental science and public health, with both basic and applied lines of research. Dr. Francis' basic research examines biobehavioral underpinnings of dysregulated eating and cardiometabolic risk, with an emphasis on the ways in which individual differences in self-regulation or executive function moderate risk for obesity. Her applied lines of research focus on training preschoolers to increase behavioral and eating regulatory capacity, with the goal of preventing the development of obesity. Dr. Francis examines regulation across multiple domains of development, including emotion regulation, behavioral regulation, eating regulation, and adrenocortical regulation and vagal regulation of the heart, as well as their relationship with obesity in childhood. She leads a multisite study funded by the National Institutes of Health (R01 HD074807) that examines the links between stress, executive function,

and cardiometabolic dysregulation in rural, poor adolescents. Dr. Francis also has used findings from her early and ongoing studies to inform the design of a preventive intervention study funded by the U.S. Department of Agriculture (2015-68001-23233) that uses the multiphase optimization strategy to test and select efficacious components for a childhood obesity prevention program.



**Diane Gilbert-Diamond, Sc.D.,** is an associate professor of epidemiology, medicine, and pediatrics at the Geisel School of Medicine at Dartmouth. She also directs Dartmouth's Quantitative Biomedical Sciences Graduate Program. Dr. Gilbert-Diamond graduated from Dartmouth College in Hanover, New Hampshire in 1998 with an A.B. in biology. She taught secondary school for several years before attending the Harvard T.H. Chan School of Public Health to obtain her doctorate in nutritional epidemiology. After completing her postdoctoral training in bioinformatics, Dr. Gilbert-Diamond joined Dartmouth's faculty in 2012. She runs a National Institutes of Health–funded research laboratory that studies genetic factors related to responsivity to food cues in children. Dr. Gilbert-Diamond's laboratory uses

a multimodal approach to study child obesity, including epidemiological, behavioral, functional neuroimaging, and eye-tracking methodologies.



**Marie-France Hivert, M.D., M.M.Sc.,** is an associate professor in the Department of Population Medicine at Harvard Medical School. She is a clinical investigator with a primary focus on the etiology and primordial prevention of obesity and related comorbidities, particularly type 2 diabetes and gestational diabetes. Dr. Hivert's interests also include fetal metabolic programming mechanisms and the integration of genetics, epigenetics, and environmental factors that contribute to obesity and related disorders. She is the principal investigator (PI) of Genetics of Glucose regulation in Gestation and Growth (Gen3G) and co-PI of Project Viva—two independent prospective pre-birth cohort studies that investigate the health determinants of mothers and

children. Dr. Hivert currently is involved in many international consortia investigating the genetic determinants of glycemic regulation during and outside of pregnancy, as well as epigenetic mechanisms linked to prenatal exposures and fetal programming. At Harvard Medical School, she is the director of the curricular theme "Nutrition and Lifestyle Medicine" and the co-director of the advance integrated science course "Metabolism, Nutrition, and Lifestyle Medicine."



**Monique LeBourgeois, Ph.D., M.A., M.S.,** is associate professor of integrative physiology at the University of Colorado Boulder. Overall, her research focuses on the intimate intertwining between the sleeping brain and health in early childhood. One line of research longitudinally examines developmental changes in sleep homeostasis and circadian rhythms across early childhood. Another line of research uses experimental protocols to determine the health and developmental consequences of young children who do not sleep enough or those who sleep at the wrong circadian time. Dr. LeBourgeois's most recent work focuses on children experiencing chronic inadequate sleep to understand the effects of sleep extension on the neural substrates of emotion processing. Other collaborative lines of

investigation involve large-scale studies of the social and demographic predictors of sleep, as well as relationships between sleep and health or developmental outcomes (e.g., asthma, obesity, emotion regulation, verbal ability) in at-risk children. The collective goal of this research is to develop an integrative longitudinal understanding of sleep-related brain and behavioral processes, which may uncover important points of entry for the prevention and treatment of mental illness and physical disease.



**Ruth Loos, Ph.D.**, is the Charles Bronfman Professor in Personalized Medicine at the Icahn School of Medicine at Mount Sinai in New York. Her research focuses on the etiology of obesity, in particular, on the identification of genes and genetic loci contributing to the risk of obesity, diabetes, and related metabolic traits. As a founding member of the GIANT (Genetic Investigation of ANThropometric traits) consortium, she has pioneered many of the large-scale gene-discovery efforts that have thus far identified more than 1,000 obesity-associated loci. She has a particular interest in studying more refined adiposity phenotypes and biomarkers to reveal biology that has not been uncovered by using traditional obesity outcomes. Ruth collaborates with bioinformaticians, molecular biologists, and physiologists to bridge the translation gap from variant to function. As more and more genome-wide loci are being discovered, she examines whether genotype information can be used to predict who is at risk of becoming

obese and to prescribe tailored prevention and treatment strategies. Furthermore, she uses genotype information to identify subtypes of obesity in the context of precision diagnosis.



**Julie Lumeng, M.D.,** is a professor of pediatrics at the University of Michigan Medical School and professor of nutritional sciences at the University of Michigan School of Public Health. She is trained as a developmental and behavioral pediatrician, and her research focuses on the developmental and behavioral predictors of obesity and appetite in early childhood. Dr. Lumeng's work has focused on understanding the contributions of both parent and child to child obesity risk, with an emphasis on individual differences in children's eating behaviors that are detectable very early in life.



Alison Miller, Ph.D., is a developmental psychologist who studies risk and resilience in children and families and who applies a developmental science framework to inform the understanding of child health outcomes, including obesity, and to translate research findings to interventions in family and community settings. Dr. Miller is an associate professor in the Department of Health Behavior and Health Education in the School of Public Health at the University of Michigan (UM). She is the steering committee chair of the UM Zero to Thrive Translational Network and the director of outreach and translation for UM's Children's Environmental Health Center. Dr. Miller's research focuses on child biobehavioral regulation, family functioning, and social context. She studies basic developmental processes, including selfregulation of emotions, sleep, eating behavior, and neuroendocrine stress responses in young children. Dr. Miller's work seeks to examine how child and family factors can shape health within the

context of risk, with a focus on basic developmental mechanisms related to stress and self-regulation and the intersections of biology, behavior, and social environment to identify risk and protective processes and the way they interact throughout development. Key contributions highlight early-life stress exposure, self-regulation, poor sleep, and parenting as pathways to childhood eating behaviors that can promote obesity (e.g., "stress eating") and how contextual factors, such as chaos in the home, may shape child health behaviors, including eating, sleep, media use, and self-regulation. Dr. Miller's work centers on young children living in poverty or facing other adversities, with the goal of improving their health and well-being and reducing the inequities for children and their families. To that end, she has conducted interventions in the areas of early childhood mental health, school readiness, positive youth development, parenting, and obesity prevention, all in collaboration with community partners ranging from grassroots community-based organizations to Head Start programs to school systems.



Anthony Okely, Ed.D., is a senior professor in the School of Health and Society and research director at Early Start at the University of Wollongong in Australia. He is a leadership fellow (Level 2) with the National Health and Medical Research Council and theme leader at the Illawarra Health and Medical Research Institute. Dr. Okely's research focuses on movement behaviors—physical activity, sedentary behavior, and sleep—in children, with a particular focus on low- and middleincome countries (LMICs). He led the team that developed the Australian 24-hour Movement Guidelines for children from birth to age 5 years. Dr. Okely was part of the Guideline Development Group for the World Health Organization's global guidelines on physical activity, as

well as sedentary and sleep behaviors, in children under 5 years of age and for similar guidelines in South Africa, Canada, and the United Kingdom. He currently leads an international study of movement behaviors in the early years called SUNRISE, which involves 38 countries—24 of which are LMICs.



Amelie Ramirez, Dr.P.H., M.P.H., is an internationally recognized health disparities researcher at UT Health San Antonio, where she is the founding chair and professor of population health sciences and the director of the Institute for Health Promotion Research. She has 30 years of experience conducting behavioral and communications projects to reduce cancer, increase screening and clinical trial participation, and improve healthy lifestyles to reduce obesity and diabetes among U.S. Latinos. Dr. Ramirez leads the *Salud America!* communication program for health equity for Latino children and families (www.salud-america.org). *Salud America!*, funded by the Robert Wood Johnson Foundation, has a national network of more than 300,000 community leaders, school personnel, parents, and health care professionals and researchers who are fueled with educational content

and tools to advocate equitable changes in policies, systems, and environments related to healthy food, green space, housing, transportation, education, social cohesion, and more in Latino communities. *Salud America!*'s core network members led to the passage of 179 Latino childhood health policy legislations, according to a 2018 evaluation report. She has received national recognition, including being elected to the National Academy of Medicine in 2007 and name2011 White House "Champion of Change." Dr. Ramirez is a native of Laredo, Texas.



Leonardo Trasande, M.D., M.P.P., is an internationally renowned leader in children's environmental health and directs the New York University (NYU) Center for the Investigation of Environmental Hazards. His research focuses on identifying the role of environmental exposures in childhood obesity and cardiovascular risks and documenting for policymakers the economic costs of failing to proactively prevent diseases of environmental origin in children. Dr. Trasande also holds appointments in the Wagner School of Public Service and NYU School of Global Public Health. He is perhaps best known for a series of studies published in *The Lancet Diabetes & Endocrinology* and the *Journal of Clinical Endocrinology and* 

*Metabolism* that documented the annual disease costs of \$340 billion and €163 billion that are attributed to endocrine-disrupting chemicals in the United States and Europe, respectively. Dr. Trasande leads one of 31 centers across the country as part of the National Institute of Health's Environmental influences on Child Health Outcomes program. After receiving his bachelor, medical, and public policy degrees from Harvard University, Dr. Trasande completed the Boston combined residency program in pediatrics and a legislative fellowship in the Office of Senator Hillary Rodham Clinton. Before joining NYU, he completed fellowship training in environmental pediatrics. For 5 years, Dr. Trasande also served as a lead investigator at one of the original (Vanguard) locations of the National Children's Study and as deputy director for the largest (of eight locations) study center, spanning a region from upstate New York to central New Jersey.



Linda Van Horn, Ph.D., RD, is professor and chief of the nutrition division at the Department of Preventive Medicine at the Northwestern University Feinberg School of Medicine, in Chicago. She is a clinical nutrition epidemiologist whose research focuses on primary prevention of cardiometabolic and other chronic diseases, beginning in utero and continuing throughout the life course. Dr. Van Horn's research includes the study of Cardiovascular Risk Development in Young Adults (CARDIA), the Multiple Risk Factor Intervention Trial (MRFIT), the Hispanic Community Health Study/Study of Latinos (SOL), and the follow-up ancillary study of SOL Youth. She is currently a Chicago field site principal investigator (PI) on another SOL ancillary study of children

ages 5 to 9 years who were born to SOL women participants after their baseline visits. As a PI, Dr. Van Horn has served on several multicenter collaborative trials, including the Diet Intervention Study in Children (DISC), the Women's Health Initiative (WHI), and, currently, the International Study of Macronutrients and Blood Pressure (INTERMAP), investigating in four countries a metabolomics-related Dietary Approaches to Stop Hypertension (DASH)-type diet associated with blood pressure. She currently studies DASH diet intervention among the children ages 3–5 years (KIDFIT) of prenatally overweight or obese mothers who participated in the National Institutes of Health (NIH)-funded LIFE-Moms consortium and a clinical trial called MOMFIT that aimed to prevent excessive gestational weight gain in this cohort. Dr. Van Horn served as editor of the *Journal of the Academy of Nutrition and Dietetics* from 2003 to 2013. She chaired the 2010 U.S. Dietary Guidelines Advisory Committee (DGAC) and recently served on the 2020 U.S. DGAC, with subsequent publication of the 2020 Dietary Guidelines for Americans released in December 2020. Dr. Van Horn also chaired or served on several NIH task forces and workshops, including the National Heart, Lung, and Blood Institute's Workshop on Medical Nutrition Education in 2017. She is an active member of the American Heart Association's Council on Epidemiology and Lifestyle, serving as a member of the Nutrition Committee.



Melissa Wake, M.D., MB.ChB., FAHMS, is a scientific director of the Generation Victoria (GenV) initiative, aiming to create very large, parallel whole-of-state birth and parent cohorts for discovery and interventional research in Victoria, Australia. She is the group leader of the Murdoch Children's Research Institute's Prevention Innovation Research Group and holds professorial positions with the Universities of Melbourne and Auckland (The Liggins Institute). Dr. Wake's "population pediatrics" research spans common childhood conditions and antecedents of diseases of aging. In addition to community-based randomized trials, she leads the Longitudinal Study of Australian Children's biophysical repository—the Child Health CheckPoint. A

major focus is on building large-scale platforms to support faster, better observational, and interventional children's research. Her awards include the 2009 Australian Health Minister's Prize for Excellence in Health and Medical Research and consecutive National Health and Medical Research Council Excellence Awards (2009–2012, 2013–2016) as a top-ranked research fellow in Australia. She maintained and enjoyed her clinical practice in outpatient pediatrics until February 2017.



**Rosalind Wright, M.D., M.P.H.,** is the Horace W. Goldsmith Professor of Children's Health Research at Kravis Children's Hospital in the Department of Pediatrics and the dean for translational biomedical research at the Icahn School of Medicine at Mount Sinai in New York City. She obtained her M.D. from the University of Michigan in Ann Arbor. Dr. Wright completed an internship in internal medicine at the Beth Israel Hospital, Harvard Medical School and her residency program—including a year as chief medical resident—at Northwestern University in Chicago, Illinois. She then completed fellowship training in pulmonary and critical care medicine at Harvard Medical School. During her

fellowship, Dr. Wright also received a Master's degree in public health from the Harvard T.H. Chan School of Public Health. Dr. Wright is a transdisciplinary life-course epidemiologist, with a primary interest in prenatal and early childhood predictors of developmental disorders, including asthma, obesity, neurobehavioral outcomes, and antecedents of chronic cardiometabolic disorders. She has expertise in environmental health, stress research, genetics, epigenetics, and nutritional epidemiology. Dr. Wright's research considers environmental interactions (e.g., stress, nutritional factors, air pollution, aeroallergens, chemicals, tobacco smoke), as well as gene and environment interactions, in disease programming. She has pioneered longitudinal epidemiological studies demonstrating the role of toxic stress in perinatal programming of chronic disease risk and elucidation of the mechanisms underlying this association. Dr. Wright's group also conducts research examining the importance of specific micronutrients in prenatal programming of long-term health and ways that various dietary components may mitigate or enhance the impact of chemical and nonchemical stressors during early development. More recent work focuses on the role of nurturing caregiving environments in early life in mitigating effects of environmental toxins.