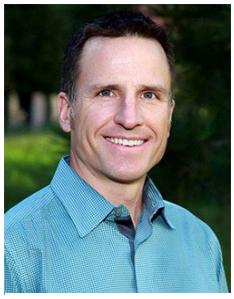
Suneet Agarwal, M.D., Ph.D.

Dr. Suneet Agarwal is a physician–scientist in the bone marrow failure and hematopoietic stem cell transplant (HSCT) programs in the Dana-Farber Cancer Institute (DFCI)/Boston Children's Hospital (BCH) Cancer and Blood Disorders Center. Dr. Agarwal is currently an associate professor of pediatrics at Harvard Medical School, Susan B. Shurin Chair in Pediatric Hematology/Oncology, Co-Program Leader for the Stem Cell Transplant Center at DFCI/BCH, Director of the Translational Research Program at BCH, and Principal Faculty member of the Harvard Stem Cell Institute and Harvard Initiative for RNA Medicine. Dr. Agarwal serves as attending physician on the HSCT service at BCH, Associate Director of the BCH hematology/oncology fellowship program, Program Director for the BCH Department of Pediatrics *Eunice Kennedy Shriver* National Institute of Child Health and Human Development K12 training grant, and chair of the medical advisory board of the patient advocacy group Team Telomere. Dr. Agarwal's National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)–funded research efforts at BCH are centered around telomere biology and associated human genetic diseases. Mendelian telomere biology disorders span pediatric syndromes, including dyskeratosis congenita (DC), to late adult–onset diseases, such as aplastic anemia, cirrhosis, and pulmonary fibrosis. Based on genetic studies, the Agarwal lab has uncovered new cellular pathways regulating telomere biology and identified novel targets for manipulating human telomere length, which are being translated into clinical trials. Dr. Agarwal is also overall principal investigator (PI) of an international, multicenter HSCT trial using a novel approach for DC and other bone marrow failure disorders associated with short telomeres. He completed his Sc.B. in biochemistry at Brown University, followed by his M.D. and Ph.D. in immunology at Harvard Medical School, where he studied epigenetic regulation of T cell effector function with Anjana Rao. He undertook pediatrics residency training in the Boston Combined Residency Program, followed by a fellowship in hematology/oncology at DFCI/BCH, where he served as Chief Fellow. He conducted postdoctoral research with George Daley at BCH on human disease modeling using patient-derived induced pluripotent stem cells.



Bryan Bergman, M.D.

Dr. Bryan Bergman is a professor in the Division of Endocrinology, Metabolism, and Diabetes at the University of Colorado School of Medicine. Dr. Bergman's research seeks to uncover novel therapeutic targets to prevent and treat type 2 diabetes, and his laboratory focuses on two main research themes: (1) understanding the relationship between the physical location of fat in skeletal muscle cells and diabetes risk, and (2) determining how adipose tissue outside of muscle impacts diabetes risk, muscle strength, and size in humans. He has been continuously funded by the National Institutes of Health (NIH) for 17 years, with three current R01s. His laboratory is becoming very interested in crosstalk between tissues in humans, as this is an understudied area with the potential to advance our understanding of metabolic regulation in health and disease. He received his Ph.D. in human biodynamics and M.S. in physical education at the University of California, Berkeley, and completed postdoctoral research in obesity and nutrition at the University of Colorado Health Sciences Center.

Arthur Beyder, M.D., Ph.D.

Dr. Art Beyder is a physician–scientist, a consultant in the Division of Gastroenterology and Hepatology, and an Associate Professor of Medicine and Physiology at the Mayo Clinic, Rochester, Minnesota. Dr. Beyder runs an NIH-funded research program that is working to determine the mechanisms of "gut feeling" and how these mechanisms can be used to understand and treat gastrointestinal motility disorders. Dr. Beyder's specific expertise is in the areas of mechanical and electrical aspects of digestive system function. His work has focused on the cellular and molecular aspects of ion channel physiology and biophysics in the gut and how forces are sensed and transduced by these ion channels. The Beyder group discovered gut touch, which is an intrinsic tactile sense in the gut that allows it to, like fingertips, determine the physical aspects of luminal contents to regulate motility and secretion. This work is transforming our knowledge of how the gut handles physical particulates and has important translational implications for disorders of gut–brain interaction. Dr. Beyder's research is funded by NIH, and his lab's work was recognized by the NIH Director's New Innovator Award. Dr. Beyder's group has published in high-impact journals, such as *Cell*, *The Proceedings of the National Academy of Sciences*, *The Journal of Clinical Investigation*, *Circulation*, *Gastroenterology*, and *Journal of Physiology*. Dr. Beyder also holds several U.S. patents reflecting the innovative nature of his research, and as such, he collaborates widely across disciplines and institutions. Dr. Beyder graduated *summa cum laude* from the State University of New York (SUNY), Buffalo in biophysics and mathematics. He stayed at SUNY–Buffalo for a combined M.D.-Ph.D. He then pursued further training at the Mayo Clinic in the clinician–investigator program and completed an internal medicine residency and gastroenterology and hepatology fellowship training and postdoctoral research.

Deidra C. Crews, M.D., Sc.M., FASN, MACP

Dr. Deidra Crews is a professor of medicine in the Division of Nephrology at the Johns Hopkins University School of Medicine. She holds appointments with the Schools of Public Health and Nursing; the Welch Center for Prevention, Epidemiology and Clinical Research; the Center on Aging and Health; and the Center for Health Equity, where she is Deputy Director. Her work has elucidated root causes of the disproportionate burden of kidney disease among socially marginalized populations; addressed social and behavioral risk factors for adverse kidney outcomes through interventions; and informed guidelines for optimizing care processes for people with kidney failure. An elected member of the American Society for Clinical Investigation, the Association of American Physicians, and the National Academy of Medicine, Dr. Crews has received numerous awards for her research contributions, including the 2018 Johns Hopkins University President's Frontier Award—a $250,000 award given annually to a faculty member who demonstrates significant academic achievement and the potential for transformative future work. Dr. Crews received the W. Lester Henry Award for Diversity and Access to Care from the American College of Physicians (ACP) and is a Master of the ACP. The American Society of Nephrology (ASN) has honored Dr. Crews with its Distinguished Leader Award, and she currently serves as ASN president. Dr. Crews

received her B.A. in biology from the University of Virginia and her M.D. from Saint Louis University. A graduate of the Osler Medical Training Program, she completed a nephrology fellowship and Sc.M. in clinical epidemiology at Johns Hopkins University.

Diana Cummings, Ph.D.

Dr. Diana Cummings is a Program Director in the Division of Digestive Diseases and Nutrition at NIDDK who oversees a portfolio that includes basic, translational, and clinical research on bidirectional communication between the brain and gastrointestinal system that contributes to the regulation of food intake, nutrient sensing, and obesity in the context of gastrointestinal disorders. The portfolio encompasses research on central, autonomic, and bloodborne pathways; gastrointestinal interoception; and gut–brain–microbiome interactions involved in feeding behavior, digestive disorders, and the development of obesity. She also administers Career Development (or K) awards related to digestive diseases, nutrition, and obesity that include a neurobiology or neurogastroenterology focus. Dr. Cummings received her Ph.D. in neuroscience at the University of Virginia and conducted postdoctoral research at the University of Maryland School of Medicine and through the National Institute of Neurological Disorders and Stroke (NINDS) Intramural Program, where she successfully competed for a K01 grant. She has worked in support of NIH extramural research since 2013 and served as a scientific review officer at NINDS before joining NIDDK in 2022.

Merlin Nithya Gnanapragasam, Ph.D.

Dr. Nithya Gnanapragasam is an assistant professor at Cleveland State University in the Department of Gene Regulation in Health and Disease. The overarching goal of her laboratory is to delineate the processes that regulate tissue proliferation and differentiation and to understand how dysregulation of these pathways contributes to human diseases. Her research goals are threefold: (1) understand how the specialized transcriptional regulation in erythroid cells ensures that the cell cycle machinery can accommodate the rapid pace of the terminal cell divisions (specifically, her lab investigates how ubiquitous factors regulating DNA replication, centromere cohesion, and cytokinesis cater to the specialized demands of the rapid erythroid cell divisions); (2) investigate the molecular pathogenesis of CDA IV, which is a severe anemia caused by a hypomorphic mutation in EKLF/KLF1 (a master regulator of erythropoiesis) that arises due to a failure in terminal cell divisions and results in binucleate erythroblasts and erythroblasts with DNA bridges; and (3) understand the mechanisms of hemoglobin switching. An attractive therapeutic strategy to ameliorate and potentially cure beta thalassemia and sickle cell anemia is to manipulate the globin gene regulation by exploiting the biology behind hemoglobin switching. One of the long-term goals of her research program is to identify factors that induce fetal hemoglobin in adult erythroid cells due to its ameliorating effects in these anemias. She receives external funding from NIDDK and Cooley's Anemia Foundation. She earned her Ph.D. in human and molecular genetics at the Virginia Commonwealth University School of Medicine and an M.S. in human genetics at Sri Ramachandra Medical College and Research Institute. She completed her postdoctoral training at Icahn School of Medicine at Mount Sinai.

David J. Hackam, M.D., Ph.D.

Dr. David Hackam is the Garrett Professor and Chief of Pediatric Surgery at Johns Hopkins University and Pediatric Surgeon in Chief and co-director of the Johns Hopkins Children's Center. Dr. Hackam's clinical expertise is in the management of complex surgical disorders in newborns, including patients with necrotizing enterocolitis (NEC), which is the leading cause of death from gastrointestinal disease in premature infants. Dr. Hackam has written the definitive textbook on the management of necrotizing enterocolitis (CRC Press, 2022). Its authors include not only surgeons and neonatologists, but also nurses and the parents of patients who have suffered and died from this disease. In addition to his clinical, teaching, and leadership responsibilities, Dr. Hackam leads an active research program. His research team currently includes students, residents, postdoctoral fellows, and surgeons from the United States, Canada, the Netherlands, Lebanon, Japan, Germany, and the United Kingdom and includes two Vivian Thomas Trainees from groups who are traditionally underrepresented in science and medicine. His research is focused on understanding the pathogenesis of and developing novel therapies for NEC, and his laboratory has identified several potential drugs that can prevent its development in preclinical studies, resulting in several patents (U.S. and international). His research has been funded by NIH continuously for the past 22 years, and he currently holds a Discovery Award from the Maryland Stem Cell Research Foundation, as well as an R01 and an R35 (Maximizing Investigators' Research Award). He is the PI on a T32 training grant in the Johns Hopkins Department of Surgery that focuses on developing the next generation of surgeon–scientists. Dr. Hackam is also the past president of the Society of University Surgeons, past chair of the Research Committee at the American Pediatric Surgery Association, and past Secretary-Treasurer of the Surgical Biology Club. He is committed to developing standards of excellence in pediatric surgery and developing the next generation of surgical leaders. He received his M.D. from the University of Western Ontario in London, Ontario and both his Ph.D. in cell biology and general surgery training at the University of Toronto. He completed his pediatric surgery fellowship at the University of Pittsburgh.

Marisa Hilliard, Ph.D.

Dr. Marisa Hilliard is an associate professor in the Department of Pediatrics and Division of Psychology at Baylor College of Medicine and Texas Children's Hospital in Houston, Texas. Dr. Hilliard directs the Resilience and Diabetes Lab, where her NIDDK- and foundation-funded research focuses on strengths-based strategies to promote resilient psychosocial, behavioral, and health outcomes in youth and adults with type 1 diabetes and their families. She leads an active program of research and professional development mentorship for aspiring and early career scientists in diabetes, behavioral medicine, and other disciplines. In national service, Dr. Hilliard is the chair of the American Diabetes Association's Behavioral Medicine and Psychology Interest Group and an Associate Editor at the *Journal of Pediatric Psychology*. She received her Ph.D. in clinical psychology with a specialization in children, family, and culture from The Catholic University of America in Washington, D.C.

Stavroula (Voula) Osganian M.D., Sc.D., M.P.H.

Dr. Voula Osganian joined NIDDK in 2016 and is a program director in the Division of Digestive Diseases and Nutrition, where she provides scientific oversight and administration of a portfolio of grants, cooperative agreements, and contracts that encompass studies of the etiology, prevention, and treatment of pediatric obesity and its complications. She serves as scientific advisor on obesity and related disease research in children, providing advice to NIDDK and various cross-institutional NIH working groups. She is also a program official of Career Development (K) award clinical trials for the Division. These awards support individuals with an M.D., Ph.D., or equivalent degree to receive training in clinical research related to digestive and hepatobiliary diseases, nutrition, obesity, and pancreatic diseases. Dr. Osganian received her M.D. from the University of Massachusetts Medical Center, her M.P.H. from the University of Massachusetts Graduate School of Public Health, and her Sc.D. in epidemiology from the Harvard T.H. Chan School of Public Health. She completed her internship in pediatrics at the Boston Floating Hospital and a preventive medicine residency and preventive cardiology research fellowship at the University of Massachusetts Medical Center.

Francisco J. Pasquel, M.D., M.P.H

Dr. Francisco J. Pasquel is an associate professor of medicine and global health at Emory University. He takes care of patients with diabetes at Grady Health System. His current research focuses on characterizing metabolic profiles of patients with heart disease (K23) and the use of technology for diabetes care. As PI for several clinical trials, Dr. Pasquel leads studies on technology use in outpatient and inpatient care, including an NIH-funded (R01) multicenter randomized controlled trial testing automated insulin delivery versus continuous glucose monitoring in hospitals (NCT06418880). He also served as chair for a pivotal trial that led to the first AID approval for type 2 diabetes. He co-directs the Regional Technology Core of the NIDDK-funded Georgia Center for Diabetes Translation Research and serves as Associate Editor for *JAMA Network Open*. He completed his training in Internal Medicine and Endocrinology at Emory University. He received his M.D. from Pontificia Universidad Católica del Ecuador and M.P.H. in epidemiology from the Rollins School of Public Health, at Emory University.

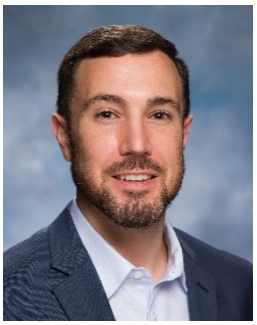
Sandra Quezada, M.D., M.S., AGAF

Dr. Sandra Quezada is Associate Dean for Admissions, Associate Dean for Faculty Diversity and Inclusion, and Professor of Medicine at the University of Maryland School of Medicine in Baltimore, Maryland. She is currently a professor and a practicing gastroenterologist in the Division of Gastroenterology and Hepatology. She is co-chair of the American Gastroenterological Association (AGA) Equity Project, Diversity, Equity, and Inclusion section editor for *Gastroenterology*, and co-PI for the NIH R-25–funded AGA FORWARD Program, which provides career development opportunities for early career underrepresented gastroenterologists. She is passionate about equity in academic medicine and gastroenterology and has worked locally, regionally, and nationally to amplify

physician workforce diversity and to impact the climate in which current and future physicians train and practice. She is a member of the Alpha Omega Alpha Medical Honor Society and the Gold Humanism Honor Society, the 2017 recipient of the Dean's Alumni Award for Diversity and Inclusion, the 2022 recipient of the American College of Gastroenterology Healio Disruptive Innovator Health Equity Award, and the 2023 recipient of the Association of American Medical Colleges Northeast Group on Student Affairs Outstanding Service Award. Dr. Quezada received her undergraduate degree from Hood College in Frederick, Maryland, and her M.D. from the University of Maryland School of Medicine. She completed her internal medicine residency and gastrointestinal fellowship training at the University of Maryland and Baltimore VA Medical Center. In addition, she obtained an M.S. in human nutrition at the Institute of Human Nutrition at the Columbia University College of Physicians and Surgeons in New York City and an M.S. in clinical research at the University of Maryland School of Medicine, Department of Epidemiology and Public Health.

Nataliya Razumilava, M.D.

Dr. Nataliya Razumilava is a physician–scientist and a tenure-track assistant professor at the University of Michigan with research and clinical expertise in cholangiopathies and liver cancer. At the University of Michigan, she serves as an Associate Director of the Liver Tumor Program and as a member of both the NIH T32 GI Fellow Advisory Committee and the Cellular and Molecular Biology Graduate Program Admissions Committee. Nationally, she serves on the editorial boards for *Hepatology* and the *American Journal of Physiology—Gastrointestinal and Liver Physiology*, on the American Association for the Study of Liver Diseases (AASLD) Continuing Medical Education Committee, and as a counselor for the American Gastroenterological Association Institute Council Gastrointestinal Oncology Section. Her lab focuses on fundamental questions regarding the mechanisms driving extrahepatic bile duct responses to injury—as these can result in tissue repair and pathogenic responses, such as cholangiopathy and cancer development—and on the development of innovative research tools dedicated to the bile duct. Dr. Razumilava's research has been supported by foundational grants (Pinnacle Research Award from AASLD, Gilead Sciences, and the American Heart Association); internal institutional awards, including Pilot awards from the P30 GI Center grant and the Advanced Genomics Core; and federal awards (NIDDK K08 [2019], R03 [2023], and R01 [2024]). A native of Belarus, she received her M.D. in Vitebsk, Belarus. She completed training in gastroenterology and hepatology at the Mayo Clinic in Rochester, Minnesota, where she was a fellow on a NIH T32 training grant.



Mark Rossi, Ph.D.

Dr. Mark Rossi is an assistant professor in the Departments of Neuroscience & Cell Biology and Psychiatry at Robert Wood Johnson Medical School and Rutgers University. He is also a resident faculty member of the Child Health Institute of New Jersey and a core member of the Rutgers Brain Health Institute. His research focuses on the neurobiological systems controlling motivation and how dysfunction within these systems contributes to obesity pathogenesis. His lab uses rodent models of human disease to study neurocircuit control of energy balance and to link brain activity to behavior.

Central to his research program is the development of methods to allow longitudinal tracking of individual neurons in deep brain regions using *in vivo* multiphoton microscopy. His research has uncovered mechanisms by which subcortical neurocircuits integrate information about motivational state to guide feeding behavior during obesity. The Rossi lab is currently investigating the contributions of distinct lateral hypothalamic neuron populations to obesity pathogenesis to discover novel therapeutic entry points. Additionally, the Rossi lab is mapping how individual aspects of feeding behavior and energy balance are controlled by distributed networks of interconnected neuronal populations. Dr. Rossi completed his undergraduate studies at the University of Michigan. He then completed his Ph.D. in psychology and neuroscience from the Systems and Integrative Neuroscience Program at Duke University, followed by postdoctoral training in neurobiology at The University of North Carolina and University of Washington.

Brittany L. Smalls, Ph.D., M.H.S.A., M.S.H.Psych.
Dr. Brittany Smalls is a health services researcher with training in anthropology and health psychology whose expertise involves the social and cultural aspects of health behavior. She has leveraged this background and expertise to assess how the social environment affects health behaviors and outcomes for vulnerable populations with complex chronic conditions. Dr. Smalls' transdisciplinary background and diverse work experiences have prepared her to undertake complex and innovative research focused on vulnerable populations. She also has participated in various research and leadership training activities focused on health disparities and addressing health inequities among vulnerable populations, including being selected as an Advanced Health Disparities Scholar for the AZ-PRIDE program and a Fellow for both the American Psychological Association's Leadership and Education Advancement Program (LEAP) and the NIH/National Medical Association Career Development Program. These opportunities provided invaluable skills that have been integral to her role as a mentor and facilitator for career development activities for early-career investigators. Notably, Dr. Smalls was the recipient of an NIDDK K01 Career Development Award (5K01DK116923; 2019–2023) that facilitated her ability to successfully compete for an NIDDK R01 (5R01DK135885; 2023–2026). She is currently an inaugural awardee of the NIDDK Investigator Award to Support Early Career Researchers from Diverse Backgrounds (5K26DK138370; 2023–2028). She received her B.S in anthropology at College of Charleston, master's in health service administration at Strayer University, master's in health psychology at Northcentral University, and Ph.D. in health and rehabilitation science at the Medical University of South Carolina.

Nathan Tykocki, Ph.D.
Dr. Nathan Tykocki, Ph.D., is a tenured associate professor in the Department of Pharmacology and Toxicology at Michigan State University. His scientific training explored vascular smooth muscle biology, physiology, and pharmacology, specifically in terms of calcium signaling pathways as regulators of smooth muscle contractility. The Tykocki lab employs a multidisciplinary approach, including biochemical, pharmacological, physiological and genetic tools, to understand how the bladder muscle,

nerves, vasculature, and urothelium communicate to impact bladder function. Presently, discoveries from their research include that (1) the vasculature of the urinary bladder, due to the unique physiological demands it experiences during bladder filling, possesses distinct contractile properties versus other vessels of similar size; (2) transient contractions of the bladder wall generate bursts of afferent nerve activity that dominate sensory outflow from the bladder; and (3) social stress causes progressive bladder dysfunction that is dependent on TRPV1 channel activation and augmented sensory outflow to the central nervous system. Dr. Tykocki and his team are now working to understand how the biomechanics of the bladder wall itself influence the sensation of fullness and smooth muscle contractility during bladder filling. He received his B.S. in science and technology studies at Lyman Briggs College, Michigan State University, and his Ph.D. in pharmacology and toxicology at Michigan State University.