

Convening of the Cobb Scholars Program

Empowering the Next Generation: Precision Medicine and the NIH All of Us Research Program

A Program Dedicated to the Cobb Scholars, Myeloma Research Scholars, NMA Postgraduate Section, and the Student National Medical Association

Date & Time: Monday, August 5, 2024, 1:00-3:00 PM

Venue: Sheraton Hotel - New York Ballroom West



Convener and Moderator
*Winston Price, M.D.
The Cobb Institute &
Philadelphia College of
Osteopathic Medicine (PCOM)
South Georgia*



*Debra Murray, Ph.D.
Baylor College of Medicine*



*April Adams, M.D., M.S.
Baylor College of Medicine*



*Bernard W. Parker, M.D.
Division of Cancer
Prevention, NCI, NIH*



*LeShaundra N. Price, Ph.D.
National Institute of Allergy and
Infectious Diseases (NIAID)*

Overview

In order to achieve Precision Medicine for all, several critical improvements in the biomedical research landscape are necessary. The foremost priority is the inclusion of historically underrepresented groups in clinical trials and research studies, with researchers from these communities leading the efforts to ensure meaningful outcomes. These groups bear a disproportionate burden of chronic medical conditions, underscoring the urgency to address these disparities.

The *All of Us* Research Program Researcher Workbench boasts a substantial dataset encompassing numerous conditions relevant to clinical researchers, featuring approximately 780,000 participants, of which 80% are from underrepresented communities and about 50% are racial and ethnic minorities. Following last year's NMA

Convention and Scientific Assembly, the W. Montague Cobb Health Institute and the *All of Us* Evenings with Genetics Research Program will continue to raise awareness about the value of this cohort and database.

Learning Objectives

After participating in this activity, learners will be able to:

1. Describe the data types available in the *All of Us* Research Program database.
2. Identify disease conditions relevant to their personal research interests.
3. Understand the process of creating a Researcher Workbench account.

Event Schedule

Opening Remarks

Winston Price, M.D.
Chief Information Officer (The Montague Cobb Institute); Associate Professor of Pediatrics, Philadelphia College of Osteopathic Medicine (PCOM) South Georgia

Introduction to *All of Us* Evenings with Genetics Research Program

Debra Murray, Ph.D.
Multiple Principal investigator (MPI)-All of Us Evenings with Genetics Research Program; Assistant Professor Co-Director, Office of Community Engagement & Diversity Molecular and Human Genetics (Baylor College of Medicine)

Maternal Genetic Variants Associated with Recurrent Pregnancy Loss (RPL)

April Adams, M.D.
Program Faculty - All of Us Evenings with Genetics Research Program
Assistant Professor Obstetrics and Gynecology Division of Maternal Fetal Medicine Molecular and Human Genetics

Descriptions of Research Careers

LeShawndra Price, Ph.D., Director, Office of Research Training and Special Programs, National Institute of

Allergy and Infectious Diseases, NIH

Bernard Parker, M.D., F.A.C.P., Program Officer, Community Oncology and Prevention Trials, NCI

Presentation of Philadelphia College of Osteopathic Medicine - (PCOM) Student Papers (4 Total)

"Climate Health Community Project-EV Bus Impact on Child Learning" - London Wheeler, Doctor of Osteopathic Medicine (DO) Candidate

"Exploring the Potentials of Pulmonary Malignancy as a Contributing Factor to Pulmonary Edema" - Evelyn Orusa, DO Candidate

"Treatment of Systemic Lupus Erythematosus: A Current Review" - Ericka Westbrook, Savannah Finley, and Tyanna McCladdie, DO Candidates

"Variations in Lung Morphology and Their Clinical Correlations - A Cadaveric Study" - Saron Araya, DO Candidate; International Myeloma Foundation Scholar-2024

Audience Q&A

Closing Remarks

Randall Morgan, M.D., M.B.A.
President and CEO (The Cobb Institute)

Participant Biographies

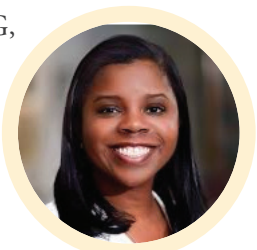
Debra D. Murray, Ph.D.

Debra D. Murray, Ph.D., a leader in diversity and inclusion, mentoring, and research education, is a 2021 recipient of the Norton Rose Fulbright Faculty Excellence Award in Educational Leadership. As a MPI, she recently was awarded the *All of Us* Evenings With Genetics Research Program from the NIH All of Us Research Program. Dr. Murray is Director of Education and Diversity Initiatives in the Human Genome Sequencing Center (HGSC), and an Associate Professor in the Molecular and Human Genetics Department and former co-Director of the Office of Community Engagement and Diversity at Baylor College of Medicine (BCM). In this role, she focuses on faculty training and increasing diversity in the medical genetics' programs. She is a part of the Engagement, Communication, and Education (ECE) Team that provides community engagement research and activities for the Intellectual and Developmental Disabilities Research Center (IDDRC) and is co-PI on a PCORI "Building Capacity in Hispanic Serving Institutions for PCOR/CER focused on Mental Health Impacts of COVID-19".



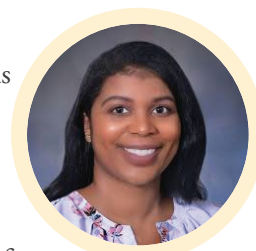
April Adams, M.D., M.S.

April Adams, M.D., M.S., FACOG, FACMG, is currently an assistant professor at Baylor College of Medicine in the departments of Obstetrics and Gynecology and Molecular and Human Genetics. She is also the associate program director for the maternal fetal medicine and combined maternal fetal medicine/medical genetics fellowship programs and the Maternal Medical Director for Quality and Safety at Ben Taub Hospital. She completed her residency training in obstetrics and gynecology at the University of Minnesota. She then completed fellowship training in both maternal fetal medicine and medical genetics at MedStar Washington Hospital Center and the National Human Genome Research Center. Her research and clinical interests are in placental development, pregnancy loss and stillbirth, health disparities in reproductive genetics.



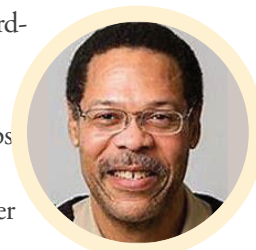
Jasmine Baker, Ph.D.

Jasmine Baker, Ph.D., is a bioinformatics scientist with a wealth of experience in genomic data analysis and computational biology. She holds a Ph.D. in Biological Sciences from Louisiana State University, where her research focused on the evolution of Alu elements in primate lineages. Throughout her career, Dr. Baker has demonstrated a strong proficiency in developing computational scripts for next generation sequencing data analysis, utilizing languages such as Python and R. With over a decade of experience, Dr. Baker has held various positions in organizations such as Baylor College of Medicine and SomaLogic, where she led projects in predictive modeling, disease state analysis, and data management. Notably, she played a pivotal role in the development of bioinformatics curriculums tailored for analyzing diverse datasets, including those from the All of Us program, encompassing EMR, genomic data, and environmental exposures. Dr. Baker's research contributions have been published in renowned scientific journals, including *Genome Biology and Evolution* and *Mobile DNA*. Her expertise extends beyond academia, as she actively engages in workshops and conferences, sharing her knowledge and insights with the scientific community. Passionate about leveraging data-driven approaches to address pressing challenges in healthcare and beyond, Dr. Baker is committed to advancing precision medicine and population health initiatives. With her interdisciplinary background and strong collaborative abilities, she continues to make significant contributions to the field of bioinformatics and computational biology.



Bernard W. Parker, M.D.

Bernard W. Parker is a physician board-certified in internal medicine and medical oncology who has recently retired from the Commissioned Corps of the US Public Health Service after 30-years of federal career spanned over various assignment types, including 9 years of clinical services and research within NIH's National Cancer Institute (NCI), 6 years



of drugs- and biologics-regulation in the Food and Drug Administration (FDA), 11 years of Commissioned Corps administration within the Office of the Surgeon General, and 4 years of federal policy within the Office of the Assistant Secretary of Health. Dr. Parker was also the DCP medical oncology consultant for 2 Cancer Moonshot Biobank studies launched by NCI's Biorepositories and Biospecimen Research Branch (BBRB).

Dr. Parker earned his B.S. at Virginia State University, M.D. at Eastern Virginia Medical School, completed internal medicine training at Howard University Hospital and completed medical oncology fellowship at the National Cancer Institute of NIH. Dr. Parker is also board-certified in clinical pharmacology after completing a clinical pharmacology fellowship at Georgetown University Medical Center.

LeShawndra N. Price, Ph.D.

LeShawndra Price, Ph.D., Director of the Office of Research Training and Special Programs (ORTSP) at the National Institute of Allergy and Infectious Diseases (NIAID), is a leading expert in the fields of health equity, global health, and implementation science, with more than 20 years of experience at the NIH. She supports research training programs to develop the next generation of researchers and physician scientists, including promoting diversity within the biomedical research workforce, within NIAID's mission areas. Dr. Price also manages NIAID's Small Business Innovation Research and Small Business Technology Transfer programs and implements the Institute's international outreach and compliance program, including overseeing the NIAID Global Infectious Disease Research Administration Award for Low- and Middle-Income Country Institutions (G11).

In partnership with academic medical centers and universities, ministries of health, NGOs, and other research institutions, Dr. Price has built collaborative research programs across multiple sectors with the aim of reducing disease in vulnerable populations and improving healthcare delivery around the world. Her work has spanned the entire lifespan from childhood to adulthood across infectious diseases, and several chronic



diseases, including mental health, substance abuse, and heart, lung, and blood diseases. Immediately prior to joining NIAID, Dr. Price was Chief of the Health Inequities and Global Health Branch at the National Heart, Lung, and Blood Institute, where she developed the Institute's strategy to build a transdisciplinary research portfolio focused on implementation, evaluation, and dissemination of evidence-based interventions targeted at reducing health inequities across the lifespan in low resource settings in the U.S. and globally.

After receiving her B.A. degree in Psychology with Honors from Wake Forest University, Dr. Price attended the University of North Carolina at Chapel Hill, where she earned her M.A. and Ph.D. in Developmental Psychology.

Winston Price, M.D.

Winston Price, M.D., FACPE is a dedicated pediatrician and associate professor, exemplifying a steadfast commitment to diversity and inclusivity in cultivating strong and healthy communities. As Chief Technology & Information Officer for the W. Montague Cobb/NMA Health Institute, Price leads the integration of technology to support the Institute's mission of promoting health equity and collaborating with the NIH All of Us Research Program. In addition, in his role as Chair of the Cobb Scholars Advisory Committee, he passionately advocates for diversity and equitable representation within healthcare and the scientific workforce. His leadership extends to serving as the 105th President of the National Medical Association (NMA) in 2004-2005, a testament to his dedication to advancing healthcare and integrating technology toward eliminating disparities. Beyond these roles, Price's contributions are numerous. He serves as President and Chair of the National African American Drug Policy Coalition and as Chair of the Southwest Georgia Area Health Education Center (SOWEGA-AHEC). Price actively engages in advisory boards, including the The Childhood Influenza Immunization Coalition, The Adult Vaccine Advisory Group, and the Medical Society Consortium on Climate & Health. He represents the NMA on the National Adult and Influenza Immunization Summit (NAIIS) and offers medical/technology advice to the Collaborative Impact Decatur County (CIDC), a non-profit community



health promotion initiative. Price holds the position of Associate Professor in the Department of Pediatrics at the Philadelphia College of Osteopathic Medicine-South Georgia Campus. He also serves as an Assistant Professor of Pediatrics at the Medical College of Georgia. Outside of his professional endeavors, Price remains committed to clinical medicine, providing preventive care to the population in Southwest Georgia. Price earned his medical degree from Weill Cornell Medical College and

completed a residency in pediatrics at The New York Hospital-Sloan Kettering Cancer Center. His unwavering dedication to diversity, equity, and inclusion, combined with his extensive experience, makes him a true champion for positive change in the healthcare landscape. His recognition as the National Medical Association's 2021 Practitioner of the Year further emphasizes the impact of his efforts and the inspiration he brings to others in pursuit of a healthier and more equitable society.