

Together for CHANGE Genomics and Equity Initiative Launched by a Coalition of Meharry Medical College, Regeneron Genetics Center, AstraZeneca, Novo Nordisk, and Roche to Improve Health Outcomes for People of African Ancestry

October 18, 2023 at 9:00 AM EDT

NIH data show that globally less than 2% of genetic information being studied today originates from people of African ancestry¹

The newly established Diaspora Human Genomics Institute (DHGI) will manage the Together for CHANGE initiative, which aims to increase available genomic data for people of African ancestry and enhance representation in STEM careers

NASHVILLE, Tenn. and TARRYTOWN, N.Y. and WILMINGTON, Del. and BAGSVAERD, Denmark and BASEL, Switzerland, Oct. 18, 2023 (GLOBE NEWSWIRE) -- Meharry Medical College, along with partners Regeneron Genetics Center[®] (RGC[™]) AstraZeneca, Novo Nordisk, and Roche, today announced the launch of the Together for CHANGE[™] ("Changing Healthcare for People of African Ancestry through an InterNational Genomics & Equity") initiative to create better health care and outcomes for all.

The Together for CHANGE initiative seeks to address inequities in STEM careers and research with a two-pronged approach. First, the Diaspora Human Genomics Institute (DHGI) will establish a grant program to support research and educational capacity in genomics and related fields at Meharry Medical College, as well as broader STEM programs in racially diverse communities for grade school-aged children. Second, in close consultation with the local Black community through listening sessions and ongoing input, the DHGI will help facilitate the building of the largest African ancestry genomics research database, composed of de-identified genomic and phenotypic data from up to 500,000 volunteer participants.

Meharry Medical College, one of the oldest and largest historically Black academic health sciences centers in the U.S., is a co-founder and academic convener of this initiative. The DHGI, a newly chartered non-profit organization, will serve as the governing organization for Together for CHANGE. Data collected from the Together for CHANGE initiative will be secured and managed by the DHGI to ensure the integrity and transparency of all activities of the initiative.

Additionally, the DHGI will form an ethics committee with leaders from the Black community to provide stewardship of the data. Accenture will also provide support as a strategic partner to the DHGI as the program rolls out.

"Historically, African Americans have been – and continue to be – underrepresented in scientific and medical research, as well as in STEM careers, negatively impacting both health outcomes and career opportunities for this population," said James E.K. Hildreth Sr., Ph.D., M.D., President and Chief Executive Officer, Meharry Medical College. "Working with our local community and biopharmaceutical partners, we are eager to bring to life a vision of more equitable health care through the Together for CHANGE initiative."

Meharry worked with Regeneron Genetics Center to convene three founding partners for the initiative, AstraZeneca, Novo Nordisk, and Roche, and welcome participation from additional partners. Each organization intends to make contributions worth \$20 million during the initiative, with Regeneron Genetics Center also undertaking and funding the sequencing of genetic samples. The DHGI launch is underway, with more information about study participation and grants to be available later this year.

"People of African ancestry have been underrepresented in genomics studies, which leads to clinical genetic testing that has less reference data and less confident testing results," said Aris Baras, M.D., Senior Vice President, Regeneron, and Head of Regeneron Genetics Center. "At RGC, we know that genetic databases function best as global resources when they reflect humanity's broad spectrum of ethnic and genetic diversity, so that the resulting research and medical innovation may benefit all populations. With one of the most diverse genomic datasets in the world, we are immensely proud to spearhead this impactful initiative that aims to shift the makeup of available genetic data and better equip promising students and researchers to create much-needed medicines of the future."

"We are proud to be part of this collaborative initiative that will strengthen our understanding of human disease and unlock scientific discovery, prioritizing inclusive science to reduce healthcare disparities for under-represented populations. This will enable us to develop medicines that reflect the needs of a diverse patient population," said Sharon Barr, Executive Vice President of BioPharmaceuticals R&D at AstraZeneca.

"The STEM career pipeline is lacking in Black professionals whose presence will bring more diverse thoughts to solving research problems, which will better inform care for people of African ancestry, as well as inspire others to pursue scientific and medical careers," said Lyndon Mitnaul, Ph.D., Executive Director, Research Initiatives, RGC. "Even though similar proportions of Black and white students start to pursue STEM degrees, far fewer Black students succeed in achieving them. This initiative is intentionally designed to inspire new Black scientists and changemakers."²

"Through this initiative, several new programs will be launched to nurture young people throughout their educational pathways, including the creation of a DNA Learning Center, mentorships, and a Master of Science program in Genetic Counseling. In addition, researchers from historically Black colleges and universities and Africa will have access to the first-ever reference genome of African ancestry people to build collaborative projects at the intersection of genomics and health equity research that will ensure that the breakthroughs represent a healthier future for everyone, including the global Black communities that have historically been ignored," said Anil Shanker, Ph.D., Senior Vice President for Research and Innovation, Meharry Medical College.

"This partnership provides a unique opportunity to work closely with the community to build on human genomics datasets and ensure they become truly representative of a global population, ultimately enhancing research and improving health outcomes. Diversity is a fundamental part of inclusive innovative health solutions. By building a robust STEM pipeline for individuals of African ancestry, we are ensuring those solutions can become a

reality in the future," said Marcus Schindler, PhD, Prof., EVP Research & Early Development and Chief Scientific Officer of Novo Nordisk.

"Roche is fully committed to increasing health equity globally and reducing inequalities caused by insufficient global populations in trial and research data, especially as it relates to African populations. As part of our contribution to the consortium and as a component of our ongoing African Genomics Program, Roche will be leading efforts to collect up to 20,000 samples and related phenotype data from diverse regions of Africa," said James Sabry, Global Head of Pharma Partnering, Roche. "We are very excited to join this initiative with the goal of understanding genetic diversity within Africa and African-descent populations, and thereby increasing the opportunities to discover new human biology and better diagnose, prevent and treat human disease."

More information can be found at <u>TheDHGI.org</u>.

About the Together for CHANGE Initiative

The Together for CHANGE Initiative seeks to address inequities in STEM careers and research with a two-pronged approach. First, the DHGI will establish a grant program to support research and educational capacity in genomics and related fields at HBCUs, as well as broader STEM programs in minority communities for grade school-aged children. Providing opportunities throughout an individual's educational journey is key, as African Americans are more likely to attend a high-poverty school where mathematics and sciences scores are up to 90 points worse than low-poverty schools.³ By the time students are in undergraduate school, 40 percent of Black students switch out of STEM majors, compared with 29 percent of White students,⁴ and another study found that 54 percent of young African Americans would be a lot more likely to pursue STEM college degrees if there were more examples of high achievers in those fields who were Black.⁵

Second, in close consultation with the local Black community through listening sessions and ongoing input, the DHGI will help facilitate the building of the largest African ancestry genomics research database, composed of de-identified genomic and phenotypic data from up to 500,000 volunteer participants. People of African ancestry represent the most genetically diverse population in the world, and there is a massive underrepresentation of this group in available genomic data. The focus on increasing information around African ancestry strives to improve health outcomes for this community through deeper understanding of their genetics.

About Meharry Medical College

Located in Nashville, Tennessee, Meharry Medical College is the nation's largest private, independent historically Black academic health sciences center dedicated to educating physicians, dentists, researchers, and health policy experts. Founded in 1876 as the Medical Department of Central Tennessee College, Meharry was the first medical school in the South for African Americans. It was chartered separately in 1915.

Today, Meharry includes schools of medicine, dentistry, graduate studies and applied computational sciences and is home to The Institute for Global Public Health and Center for Health Policy. Degrees include Doctor of Medicine (M.D.), Doctor of Dental Surgery (D.D.S.), Master of Public Health (M.P.H.), Master of Health Science (M.H.S.), and Doctor of Philosophy (Ph.D.).

Meharry is a United Methodist Church related institution. A 2010 study published in the Annals of Internal Medicine ranked Meharry as one of the nation's top five producers of primary care physicians. Meharry is also a leading producer of African Americans with Ph.Ds. in biomedical sciences.

In addition to providing quality professional health care education, exemplary patient care, and compassionate community outreach, Meharry Medical College produces the *Journal of Health Care for the Poor and Underserved*, a public health journal.

About the Regeneron Genetics Center

The Regeneron Genetics Center LLC (RGC) is a wholly owned subsidiary of Regeneron Pharmaceuticals, Inc. that focuses on early gene discovery and functional genomics. The primary goal of RGC is to improve patient outcomes by identifying novel drug targets, clinical indications for development programs, and genomic biomarkers for pharmacogenomic applications. RGC is tackling large-scale sequencing and analytical approaches and has established numerous collaborations with leading human genetics researchers. To enable this large-scale sequencing and analysis program, RGC utilizes fully automated sample preparation and data processing, as well as cutting-edge cloud-based informatics.

At RGC, scientists around the globe with diverse skills and backgrounds work together to uncover the genetic basis of human disease. Their efforts have culminated in landmark discoveries like *CIDEB* in NASH and have led to multiple new therapeutic development programs at Regeneron across a range of therapeutic modalities. Since its inception in 2013 and through a network of over 120 collaborators globally, RGC has developed one of the largest and richest human genetics datasets in the world by sequencing more than 2 million exomes.

For more information, please visit www.Regeneron.com or follow Regeneron on LinkedIn.

About AstraZeneca

AstraZeneca (LSE/STO/Nasdaq: AZN) is a global, science-led biopharmaceutical company founded in 1999 that focuses on the discovery, development, and commercialisation of prescription medicines in Oncology, Rare Diseases, and BioPharmaceuticals, including Cardiovascular, Renal & Metabolism, and Respiratory & Immunology. Based in Cambridge, UK, AstraZeneca operates in over 100 countries and its innovative medicines are used by millions of patients worldwide. Please visit <u>astrazeneca.com</u> and follow the Company on social media @AstraZeneca.

About Novo Nordisk

Novo Nordisk is a leading global healthcare company, founded in 1923 and headquartered in Denmark. Our purpose is to drive change to defeat serious chronic diseases, built upon our heritage in diabetes. We do so by pioneering scientific breakthroughs, expanding access to our medicines, and working to prevent and ultimately cure disease. Novo Nordisk employs about 59,000 people in 80 countries and markets its products in around 170 countries. For more information, visit <u>novonordisk.com</u>, <u>Facebook</u>, <u>Instagram</u>, <u>X</u>, <u>LinkedIn</u> and <u>YouTube</u>.

About Roche

Founded in 1896 in Basel, Switzerland, as one of the first industrial manufacturers of branded medicines, Roche has grown into the world's largest biotechnology company and the global leader in in-vitro diagnostics. The company pursues scientific excellence to discover and develop medicines and diagnostics for improving and saving the lives of people around the world. We are a pioneer in personalised healthcare and want to further transform how healthcare is delivered to have an even greater impact. To provide the best care for each person we partner with many stakeholders and combine our strengths in Diagnostics and Pharma with data insights from the clinical practice.

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Investor Relations

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Source: Regeneron Pharmaceuticals, Inc.