WEBVTT

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AUDIO: Recording in progress.

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(silence)

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SANDRA SOO-JIN LEE: Good afternoon!

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Evening, or morning, depending on which part of

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the world you are Zooming into today. Welcome

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to ELSI Friday Forum. My name is Sandra

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Soo-Jin Lee; I am professor of medical

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humanities and ethics at Columbia University.

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I am absolutely delighted to welcome you back

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after our August break and hope you are all

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having a good start to the academic year.

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In this third year of ELSI Friday Forum,

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we will be focusing on global perspectives on

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genomics and related technologies and

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applications, and bringing into conversation

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scholars, scientists, practitioners, community

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members, and others from around the world to

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engage the critical ethical, legal, and social

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issues related to these, ah, technologies.

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I am particularly excited for today's

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forum, entitled Decoloniality and Genetic Ancestry: Situating the “African Genome.”

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we

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have over 500 people registered for this

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launch, so we are off to a good start.

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For those new to the forum, it is hosted by the Center for ELSI Resources and Analysis and held on the second Friday of every month for one hour starting at 12:00 noon Eastern Time.

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We also have a Zoom room reserved for more informal discussion immediately after the panel for 30 minutes.

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For those of you who might be new to the Center for ELSI Resources and Analysis or CERA, we provide resources to support research on the ethical, legal and social implications of genetics and genomics,

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or ELSI, and serve to connect scholars, scientists, policymakers, journalists, members of the public, and others to engage ELSI issues.

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CERA is funded by the National Human Genome Research Institute (NHGRI) at NIH, and is managed by teams at Stanford and Columbia Universities in partnership with The Hastings Center and Harvard University.

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I encourage you to visit CERA’s online platform ELSIhub.org for the recording and transcript of this forum and previous forums, as well as related references.

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Please use the link in the chat to access our newest ELSIhub Collection, Biocolonialism and Other “Western”-Centered Bioethical Failures Onto Indigenous Peoples, curated by Krystal Tsosie.

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and I encourage you to read this

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important collection.

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Please also go to the website to join the

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ELSI Scholar Directory, sign up for newsletters

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and other events like this one at ELSIhub.org,

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and receive daily updates and news on Twitter.

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So now for some housekeeping information.

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If you wish to use closed captioning, please

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turn on the CC button at the bottom of your

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screen. As is our format, the panelists'

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presentations will be very brief in order to

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conserve a significant portion of our time in

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discussion. Please use your Q&A button, which

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you will find at the bottom of your screen, to

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write in questions for the panelists at any

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point during the session. You can also

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register your enthusiasm for a question, and

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elevate it up the list, by using the upvote

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button in the Q&A box. The chat box is

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available for further engagement. We will post

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links to resources referenced in today's

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discussion there as well. And if you have any

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questions, please e-mail info@ELSIhub.org at

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any time.

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Now, it is my great honor to introduce

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today's forum moderator, Dr. Henri-Michel Yere.

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Dr. Yere is Zooming in from Basel, where he has

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lived since 2003.

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He is currently a researcher based at the Centre for African Studies at the University of Basel, and an adjunct lecturer at the Ecole Polytechnique Fédérale de Lausanne (EPFL).

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A trained historian, Henri has worked on questions of citizenship and nationality in the colonial and postcolonial contexts. His more recent work has taken a sociological slant, looking at the relationships between the natural sciences and society at large.

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His experiences include having worked for seven years at the headquarters of Pharma giant Novartis, in Basel, occupying various responsibilities in the field of Diversity and Inclusion (D&I).

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As a poet, Henri has published two books of poetry (2015), as well as poems and articles in various literary journals.

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I had the pleasure of meeting Dr. Yere a

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few years ago, and more recently at a workshop

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that he and Dr. Mavis Machirori focused on

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issues central to epistemic justice, power, and

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the production of genetic knowledge, and I am

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absolutely delighted that Dr. Yere has agreed

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to lead this important discussion today.

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Very happy to be turning it over to you,

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Henri.

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HENRI-MICHEL YERE: Sandra, thank you very

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much for your kind introduction. Good morning;

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good afternoon; good evening, everyone. So, as

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you know by now, my name is Henri-Michel Yere,

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based in Basel. And I'm very happy to, to pick

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it up where Sandra left it. Because, ah, you

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already spoke about the workshop that took

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place in Stellenbosch last March in South

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Africa, whose title was Situating the African

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Genome, which we conceptualized together with

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Dr. Lauren Paremoer, Dr. Machirori, and Dr.

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Schramm. And I will not continue further

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before thanking YOU, Sandra, for making

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possible all the conversation that takes place

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today. I'd also like to thank your team, dune

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Dounya Alami-Nassif and others, for your work

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in organizing today's forum.

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So, this workshop brought together

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scholars based in Africa and elsewhere in the

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world from the humanities, the social sciences,

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and the natural sciences. Whilst anchored each

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in our own perspectives, we collectively asked

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several questions around the idea of an

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African

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Genome: How is identity being conceptualized,

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particularly at a time during which ethnicity

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becomes an identifier to human disease and is

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subsequently seen as a pathway to precision and

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predictive medicine? To what extent are the

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problems associated with ethnicity taken into

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consideration in the natural sciences? What

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role can African epistemologies play in the

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theorization and understanding of genomics?

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Could African epistemologies influence notions

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of consent and other ethical questions

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currently at play in the space of genomic

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research? What are we to make of the ties

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between ethnicity in Africa and colonialism?

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So the question of ancestry is at home in

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the range of preoccupations which we discussed

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then. As some of you may have seen in some

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recently published articles, the notion of

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ancestry is currently discussed as a possibly

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more comprehensive notion in order to clarify

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genomic information, as opposed to the racial

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and ethnic categories that have been used thus

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far, notably in North America. But we also

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know that ancestry, in the context of African

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history and anthropology, refers to a social

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reality which goes beyond strict biological

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descent.

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So in view of this, how does the notion of

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ancestry resonate in the spaces of African

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genomic research? How does such a notion

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present itself on a day-to-day basis in an

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African setting? What would a decolonial

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approach mean in a concrete way to genomic

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research in Africa today?

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And ah, I'm very happy to introduce our

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two speakers who have accepted to come and deal

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with these questions with us today. I'm going

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to start by using Dr. Alice Matimba, who is

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Head of Courses and Global Training at Wellcome

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Connecting Science. She is based at the

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Wellcome Genome Campus in the UK.

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Dr. Matimba graduated with her Ph.D. in

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Human Genetics from the University of Cape Town

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in South Africa, and she pursued thereafter a

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postdoc in pharmacogenomics research at the

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Mayo Clinic in the United States before joining

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the University of Zimbabwe's College of Health

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Sciences, where she focused on health education

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and research in noncommunicable diseases,

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pharmacology, genomics and ethics.

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Currently Dr. Matimba leads a team of

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education developers, event organizers,

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training technology experts and laboratory

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specialists in the development and delivery of

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genomics and bio-informatics training, tools,

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and resources for scientists and health care

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professionals, where events are held either in

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Hinxton in the UK or in Africa, in Asia, and in

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Latin America.

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Her role focuses on stakeholder management

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and partnership building to foster

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collaborations that are key to developing

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effective capacity development for genomics

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research and applications in health care,

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Equity, diversity, AND inclusion are central to

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her daily work fostering skills development,

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empowerment, representation, and

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sustainability. Dr. Matimba is actively

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involved in designing and promoting

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implementation of strategies and policies that

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address global disparities towards equitable

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solutions to research, training, and global

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health.

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Now, our second speaker is Dr. Palwende

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Romuald Boua, who is a researcher at the

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Clinical Research Unit of Nanoro in Burkina

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Faso. Dr. Boua also holds a senior researcher

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position at the Sydney Brenner Institute for

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molecular bio-sciences at University of the

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Witwatetrand, South Africa. He has skills in statistical genetics, genomics and bioinformatics and is proficient in phenotype and genome data QC, genome-wide association study, polygenic risk score, gene-environment interaction analyses, and downstream in silico functional analyses.

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His experience in multi-disciplinary research projects has expanded his skills in nutrition, biochemistry, epidemiology and field work to include genomics and bioinformatics. He has interest in GWAS data, in the population genetics studies, in nutrition-related disorders, in the data analysis of smoking and alcohol consumption and body composition data in African populations.

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He is experienced in cardiometabolic phenotype and genetics, after extensive work in genetics of atherosclerosis in Africa. His aim is to contribute in statistical genetics methodological approach, analysis and precision public health translation/impact.

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He has initiated multiple training in genomics and bioinformatics in Burkina Faso. He has been an active member of the H3Africa Consortium, CHARGE Gene-Lifestyle Interaction Consortium, PRIMED Consortium and others.

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he has attracted nine research grants,

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on which he was the Principal Investigator on

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five of them.

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After these introductions, it is my

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pleasure to turn the floor to my colleague,

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Alice Matimba. Alice, the floor is yours.

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ALICE MATIMBA: Hello, everyone. I'm

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pleased to be here, and thanks, Henri, for the

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wonderful introduction.

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So, I'm going to, you know, talk to you

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today and pitch some ideas, ah, and

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stimulate -- hopefully stimulate! -- some

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questions about de-coloniality, African genome,

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and decolonization, and briefly propose a

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framework towards decolonizing the African

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genomics. So, first I'll start by explaining

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what is de-coloniality.

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So, I'm also obviously learning some of

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these terminologies, so I hope that people can

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correct me if I'm -- (chuckles) On the wrong

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track! But basically, de-coloniality is an

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ideology which aims to understand coloniality

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in order to undo -- undo it. And also create,

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ah, situation, just situations where unjust

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ones have been -- long prevailed.

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So, de-coloniality is premised on the --

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on coloniality, which is the basis and

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justification for the exploitation by dominant

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groups -- and in this case, perhaps like, you

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know, the Western countries, for example. Um,

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and later on, I will be talking more about

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decolonization, which talks more about the

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systemic issues and how we can shift power

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towards the subdued and develop more equitable

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solutions for the benefit of Africa.

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So, when we talk about the -- so, next

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slide? (soft laugh) Yeah. So when we talk

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about the African genome, ah, in this -- when I

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talk about the African genome in this session,

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I'm probably also interchanging it with African

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genomics or genomics in Africa. Um, I, I --

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also, to talk about the African genome is also

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to talk about the history, and the context.

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And my co-panelist, Palwende, will do a great

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job of talking about the many dimensions of

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ancestry and genomics and populations of Africa

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and so forth.

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But I want to talk about the African

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genome as an entity encompassing many, you

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know, other things, BEYOND just the biological

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context but other related features as well:

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phenotypes, geography, social and global

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environment.

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So, the connection of the African genome

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with de-coloniality is based on the, this

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ongoing inquiry around equity and justice for,

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for Africans... coming out of the, the -- the

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benefits of other products that are coming out

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of African genomic studies. And the widening

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gap, in terms of benefits of science, and how

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the -- how colonial -- colonialism or

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coloniality continues to prevail in different

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forms.

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So I relate to, to the perpetual struggle,

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for Africans, to take center stage in leading

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this agenda. And so the purpose here is not to

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put blame on anyone, but rather actually to

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acknowledge the great work that has been

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ongoing in the field of African genomics and

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for African populations as well. But rather,

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we want to ask the right, be writing the right

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questions. So we want to move these questions

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about decolonizations into action and into

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impact for results.

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So, um. So I want to shed a bit of light

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on what motivates me. Because I think this is

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important. Motivates me, and maybe other

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scientists as well, to question the status quo.

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To want better, you know, to build more

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equitable solutions in genomics, African

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genomics.

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So, my background work was in

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understanding genomic variation of populations

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and how this impacts response to medicines.

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So, pharmacogenomics. So doing this work

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actually helped me to articulate... at a very

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early stage, the value of the African genome.

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And at that time, it might have been not the

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most interesting, ah, you know, or trendiest

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type of work. So, we are now all aware of the

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importance of conducting African genomic

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studies, and this has become one of the most

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valued advances in the genetics field in the

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last decade. So, this wasn't always the case.

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So many scientists would say, oh, African

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genomics, this is complicated; there's too much

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variation; it's difficult to analyze. And also

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there were very few sample collections.

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So I remember this, because I was, you

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know, one of the scientists who was conducting

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these African-led studies to identify new

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variants. Right, by sequencing, for example,

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that had been -- NOT been discovered

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previously. And how this could then help group

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individuals who respond well to certain

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medicines versus others who don't.

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But several decades earlier, a lot of the

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important variants which are coded high

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frequency had already been discovered across

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populations. So that meant that when I was

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searching for new variants, I would -- most of

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the new ones would only occur at a very low

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frequency. So, in -- so this, the conclusion

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at the time was, what... you know. You're not

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finding anything interesting, because there

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isn't anything that is a blockbuster variant.

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You know.

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So, fast forward a few years later. Turns

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out there's high level of variation of the

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African genome that became the new gold rush.

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Right, so it became the tool that was now being

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used to identify, you know, association

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signals; to follow up on function and other

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discoveries. But what was interesting, and

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what IS interesting, is that some of these

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approaches would then be applied... but

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primarily to develop solutions, or find

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solutions, which were NOT putting the Africans

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at the top of the beneficiaries list.

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So, um. Next slide? Sorry, I forgot to

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use this slide, but anyway. I've explained

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this already. Next slide, then. Yeah.

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So. So now I'll just bring in the issue

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of decolonization. So many of you have been

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following the decolonization movement -- I

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think? Ah, I hope? To, from decolonizing

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education to science. But I think to

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DEcolonize means that we need to understand

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what IS colonization, right. So, colonization,

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um... by the dominant groups, for example, more

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powerful groups, has obviously shaped the

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language, the science language, the priorities,

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and the way science is conducted. The way we

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think, for example, about African genome; the

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translation and application of all the outputs.

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And I've recently read many articles about

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decolonizing global health, for example, and

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they all share the same message: largely

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highlighting the fears of a new wave of

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exploitation, given the history of exploitation

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and plunder of resources from Africa.

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So these issues in question, the questions

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that are asked, you know, that are raised are:

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Why is it that, for example, the leads of

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African genome projects are largely based

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outside of Africa? In a few selected!

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(chuckles) "Good" African countries, perhaps?

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Or why is a large portion of funding held via

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institutions outside of Africa? Why are

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samples always being shipped unidirectionally?

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Why is data always being stored somewhere else,

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not locally? Who owns this genomic data?

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And there are also a lot of ethical

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questions that are being raised. You know,

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questions about fairness, about equity and

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respect for African genome and the people.

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So, one of the questions that, ah, came up

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in the workshop that Henri mentioned earlier on

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was -- in fact, it was Henri who asked this:

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What does it mean to look at genomics from the

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African lens? And every day, I try to think...

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about this question, and I still don't have an

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answer; I'm sorry about that. But! (laughs)

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I've tried to, to find OTHER questions to

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help -- maybe! -- try to make this question

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clearer.

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So, I started thinking that maybe we

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should be asking, so, what does genomics MEAN

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to people of Africa? Who obviously harbor the

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key resource to this very important field.

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Especially with the background and experiences

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that are obviously an alternative to, to the

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people that are currently asking the questions.

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And also this brings to question further

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if, if un-colonization -- un-colonized Africa

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discovered genomics today, what would they do

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with it?

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So. And in all these discussions, don't

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get me wrong, there has been a LOT of positive

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outcomes, and a LOT of African scientists have

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been benefited a lot. You know, in gaining

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skills and knowledge. But perhaps, to look at

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genomics from an African lens means to

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decolonize the African mindset, or to redefine

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the value and existing priorities... and, ah,

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next slide? Yep, thanks. And to redirect that

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agenda, so that the real owners of the genomic

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resources can reap the critical amount of

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benefits, and to sustainably grow and reduce

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this gap.

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So, what ARE the opportunities to

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decolonize African genomics? So to start with,

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I really want to acknowledge the great work led

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by African scientists on the continent to raise

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such awareness, through MANY activities that

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are ongoing. So for example, the H3Africa,

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whose goal is to put Africans' needs and

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interests upfront. But much more is needed!

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And these conversations should be happening in

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the right places. So, you know, by having

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these conversations outside of Africa is

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already, ah, colonial in a way! (laughs) So!

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We really need to have these conversations

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filtering through to the next generation of

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scientists. Because while the experienced

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generation can lay this foundation and create

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these opportunities to discuss these issues,

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perhaps the younger scientists actually will

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have better answers, and hoping that many of

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them might be in this audience today.

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So. I finally conclude with a -- next

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slide -- just drawing upon a framework, which

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we -- no, next -- before -- before slide? Oh!

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It's missing! (laughs) There was another

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slide. So, ah, basically in this framework, I

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talk about, you know... how we could decolonize

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African genomics. And, um, this is through --

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you know, this obviously requires coordination,

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dedication, resources, and funding, and much,

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much more. But how can we decolonize, for

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example, the curriculum? I had a very nice

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figure, so. It's unfortunate it's not there,

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but. Um.

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So how do we decolonize the -- how do we

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decolonize the curriculum? I think there's

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been quite a lot of research and work ongoing

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in that field. And not only the genomics of

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the, you know, sort of like the curriculum

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itself, the research curriculum, but the

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history and the understanding of the people of

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Africa? And this includes how we can have, you

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know, scientists, or African scientists, in

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play about genomics, thinking about how they

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should identify priorities for their research,

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how they should translate that knowledge, as

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well as applying the existing knowledge and

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resources or infrastructure to solve the many

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glaring BASIC problems, such as food security,

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sanitation -- after which genomics can then be

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better applicable in the African context.

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So, building capacity should really not

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just be about, you know, building

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infrastructure and having more resources,

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having advanced technologies. It's really

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about building the skills, and use existing

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knowledge and resources to find solutions,

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which can in turn be scaled up or

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commercialized and actually help to build that

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economic freedom and move away from the

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prevailing dependency.

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So, government -- governance structures

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should favor African-led science, have more

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local ownership and accountability to the

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people. And I know it sounds like fiction,

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right? (laughs) To imagine what that would

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look like. But, um. So we now -- we know what

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we need to do. But how much of that is being

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done or being given the right level, um, of

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support?

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And I think, you know, I want to end by

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saying that I think there's a lot of reflection -- and part of this decolonization

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framework can only be completed by including a

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lot of reflection about what is MY role, what

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is the role of the institutions, what is the

00:25:54.000 --> 00:25:57.000

role of governments and funders, and how does

00:25:57.000 --> 00:25:58.000

this connect -- ALL these connect in a

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sustainable way?

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So before challenging everyone else, I

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start by challenging myself, as an African

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scientist who was trained under privileged

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environments and work within the system. And I

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acknowledge the role, obviously, that education

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training has given, you know, given me in terms

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of my career, my life, and building all this

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capacity for myself, but also globally. BUT, I

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also reflect often and wonder what I can or

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should be doing to really, ah, effectively

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contribute to the decolonizing of African

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genomics.

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So I have just, ah, completed. So,

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thanks, Henri.

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Um... so, I think before we take any

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questions, I should introduce Palwende? So,

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Palwende, are you ready?

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PALWENDE R. BOUA: Yes, Alice, I'm ready

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to go.

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ALICE MATIMBA: Okay, great.

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HENRI-MICHEL YERE: Please go ahead,

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Palwende.

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PALWENDE R. BOUA: Can you see my screen?

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HENRI-MICHEL YERE: Yes. Now we can't

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anymore, but we could see it just now.

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PALWENDE R. BOUA: Mm...

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(murmuring)

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HENRI-MICHEL YERE: We can see it now.

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PALWENDE R. BOUA: Great. All right, so.

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Um, it's kind of hard sometimes to wonder

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whether we should be doing more political

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science or more of the science of politics.

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And, I think bringing together de-coloniality

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and genetic ancestry on the same schematic is

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kind of like... yeah. Putting everything on

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the table. So, thanks for the organizer for

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inviting me to this panel.

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I'm gonna share with you some thoughts

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that we have, I think since our last meeting

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that we had in Stellenbosch, thinking about

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situating the African genome, about genetic

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ancestry in Africa. I think we both know that

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genetic ancestry in Africa is kind of really,

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ah... an important key to genomic research and

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Africa is the home for the diversity of the

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world and all mankind, which is making it quite

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relevant in terms of studies.

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What we DON'T, um... So, a couple of

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years ago, we published this paper, which has

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now become a landmark paper in terms of African

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genomic studies, which are looking at migration

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and how informative African genome can be in

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term of research and health and disease

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research. I remember when we were looking at

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the data of, from the analysis, we had the

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discussion with... one of my colleagues, and I

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was wondering why there were kind of, like,

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this clustering in term of like the different

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way to cluster the... the genomes. We are

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using an anachronistic way to put them

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together. And from my perspective, it was more

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important to highlight the diversity by having

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the basics in terms of also -- of both the

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ethnic and also the geographic. And, it made

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me pause. Okay, where does this

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ethnolinguistic classification comes, and what

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are the bases of it?

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One of the things that struck me is I can

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draw what most of you know as the Murdock maps,

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an anthropologist from the 1950s. And he

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published this map of ethnolinguistic groups in

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Africa without even being in Africa! So that

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comes again about the coloniality aspect of

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looking at some of the aspects, some of the

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sense that we're doing.

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And, I was struck, then, having this idea

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is giving you kind of, like, a really... let's

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say broad idea of what can... let's see. Using

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some type of clustering and so on, different

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from the countries and the borders, different

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from the geographical location and all of

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those, can really be -- I won't say misleading,

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but. It can bias the view that we're having

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about the classification that we make today.

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So. Usually in genetic research, we use

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words like population descriptors, and most of

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those population descriptors, they're used

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to -- they have evolved with time, depending on

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the history, and also depending on how our

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societies have evolved.

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So. What you can look here on the figure

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is it's showing from the 50s and the late 90s

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how the use of some of the terminology --

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ancestry, ethnicity, or race -- has evolved

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until 2019. And you can see that ancestry and

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ethnicity, while they have been more widely

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used as terminology as population descriptors,

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other terminology like race has been decreasing

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over the years. And one thing that has quite

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particular is that some of the terminology,

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like Latino or Hispanic, did appear very late

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in term of like, you know, the science. These

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figures are resuming all the papers that have

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been published in American Journal of Human

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Genetics over 70 years of genetics research.

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So, it really comes up to, okay. What are

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we using? What are we calling genetic

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ancestry? And then, what is our understanding,

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and what is the, what are the reason for using

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those kind of terminology or population levels?

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So. Obviously as a biologist, one of the

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thing to use as a population descriptor is to

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be able to compare the different samples that

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we have, or to be able to pull them together,

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to be able to make sure that what we are

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defining will not be resulting in things. But

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on the other side, the population descriptors

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can also be like an indication of a geographic,

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let's say, ah... area where the samples are

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being taken, but not be an indicator of really

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the, the sample per se. If you say, we're

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having an African sample, we're having a Black

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African sample, it can be African American!

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But, so you can talk about African sample,

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where it is coming from... the so-called

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continental African, or subSaharan African.

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But if you put them all together, we have an

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African sample; okay. Are these African

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samples which are being collected in the U.S.,

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or in Europe, in UK, or in Africa in an African

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country?

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So those population descriptors have

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really evolved. And it's not sometimes always

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telling you, giving you the right picture

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about... what... why we're using these

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descriptions.

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One of the main thing is that we need to

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describe the samples that we're having, because

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we're pulling a lot of things together. We

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need to communicate about the finding that

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we're having. We remember the hype that was

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the discovery of the FTO, some of the

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variants in the population, the high effects in

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terms of obesity and predicting it. And also,

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there is industrial genomic research all over

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the world, which is involved in ancestry

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testing and all of those things, and they're

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kind of really leveraging all of this

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terminology and classification to, let's say,

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to, to put forward some other project.

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But how does all of this translate? In,

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in practical, like, in practical research? A

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couple of years ago, we were analyzing a subset

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of the sample for, of the origin study that we

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were having. And WE realized that... more

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people who were self-identified as Black South

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African were having a certain level of

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admixture. So you can see here that people

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having an admixture level of 30%, 20%, or 10%

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of European admixture from other population.

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So, it's bringing really the idea about, okay,

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weren't we talking about ancestry and all of

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those things? Okay. Are we referring to what

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we culturally binded to, bind to? Or are

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everything really to the genetics and so on?

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And, from the perspective of a society, I

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think most of the time there is a high

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self-consciousness from communities about

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genetic ancestry. And they do understand it,

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they do understand the heredity, internal

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genetics, and all of those things. But, on the

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other aspect, I think genetic ancestry is also

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highly related to cultural ancestry. And to

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cultural heredity. And I think the example

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aforementioned is a particular example of how

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people are perceiving it.

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And on the other way, I think perceiving

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the genetic ancestry and so on, I remember when

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we were doing the community engagement in

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Nanafos back in 2014, that one of the community

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leaders was really highlighting the fact that,

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okay, it was important to implement such a

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rigid understanding of a demographic history of

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a population, understanding migrations, and

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maybe understanding where this whole community

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were coming from in terms of history and so on.

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And why he was highlighting the interest of

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generating this knowledge, one of the things

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was also about the sensitivity of talking about

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genetic ancestry and all of those things. And

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to say that it shouldn't BE something that

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should be leveraged in term of like, you know,

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let's say... putting away communities, but also

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more than bringing them together, and us making

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them understand that there is a common origin

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for all human being.

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But, something that is NOW of... I think,

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of concern, is that with globalization and the

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urbanization of the communities, we know that

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somehow, you know. People are mating... using

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different region. By the time we will be

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mating in the same village and so on, within

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the same ethnic group and so on. But nowadays,

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I think there is a -- yeah. There is a melting

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pot of all people and so on. So... it's

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handing out, so, having this. And we also use

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the ethnolinguistic -- some of the languages

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are being disappearing from our practice of

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everyday. So some of the people are not able

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to talk any other language other than France or

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English and so on. So if you ask this person

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about his identity and you're trying to use

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ethnolinguistic, to say he's belonging to some

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ethnolinguistic group to classify him, it's

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going to be very difficult.

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So, it brings us to use, to attempt to be

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using much more different metrics than, let's

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say, ethnolinguistic classification, OR the

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self-identification of the individuals. And to

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turn more to use some reference and, let's say,

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some comparative -- or some genetic similarity,

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rather from the genetic material that we will

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be governing during the studies, more than

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using the classical classifiers... which can be

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continental or, let's say, okay, these are

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white individuals and so on.

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So, it brings to that question, I think --

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this is... the idea that we should keep is that

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I think we are all admixed in such a way. And

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I think... most of the time, you know, it's

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very difficult to put in term of genetic

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ancestry something or someone, an individual in

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the box. Because we are a result of a long

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history.

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So I'm going to leave you with this

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question. And I think everyone maybe will

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start drawing his familial genetic tree,

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phenological tree! To try to understand more

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about where he is coming from and his ancestry

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of genetics. Thank you for listening.

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HENRI-MICHEL YERE: Palwende, thank you

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very much. Alice, thank you very much. From

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your -- from both your interventions, two

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strong ideas come to the fore. One is the

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notion of justice. Be it at an epistemic

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level, be it at a level of the benefits of the

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research that is being conducted in the

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genetics and the continent. And another strong

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idea that comes to the fore is that of changing

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sociocultural patterns that may carry an

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influence on the ways in which scientists

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actually engage with the activity of

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classifying the information that they collect

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in order to conduct their research.

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So, I just want to maybe, following your

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brilliant presentations, which I thought were

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very interesting and thought-provoking, put

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maybe one question to each of you --

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considering the time and considering that we

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really would like to have a discussion with the

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participants in this forum as well.

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So Alice, my question is: As I heard you

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speak, you... and, because we know each other!

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We speak a little bit about, you know, the

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excitement around the African genome. You tend

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to look at it with a certain distance. I

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wanted to hear more of your thoughts on that

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notion. What is it about the current

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excitement around the African genome that makes

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you feel that, ah... some discussions should

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take place at -- around that excitement?

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ALICE MATIMBA: Um, yeah. So -- yeah.

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That's an interesting question. So, it's...

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it's a bit like what -- you know, if you've

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been following like the, the conversations

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around decolonizing global health. Which is

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sort of like the, you know, the foreign gaze.

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So, it's, it's looking at African genomics

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without being part of it, without being in it.

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And the excitement usually being around

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thinking about... you know, personal

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benefits -- particularly for, for researchers

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or scientists that are based, you know, that

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will be based in the West, and. That are NOT

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necessarily really engaging with the local

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communities, but are mostly interested in

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collecting just the samples or the data. And

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so that excitement, it IS exciting, because it

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means that they agree to, you know, receive

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some really important resources that are going

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to, you know, develop their careers, that are

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going to give them a lot of prestige and so

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forth.

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So... so it's not, it's not the same

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excitement as somebody who would be genuinely

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interested in studying in their local, you

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know, their local populations or their

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community. So, it's always -- and I don't

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blame them! 'Cause I mean, that's how --

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that's part of this structure, where... going

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out there to collect data, to collect

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information has always been... held high?

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(soft laugh) And, um. And I think it's the

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same for, um, for genomics -- particularly

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African genomics, or any other areas where

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there's a chance that there is, you know, a lot

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of value, or a lot of variation -- which is

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important for a lot of scientists, currently.

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So.

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HENRI-MICHEL YERE: Okay. I mean, I like

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the point that you're making, in terms of what

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you're describing could be summarized under the

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terms helicopter research, for instance. Where

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by coming in and collecting data and then going

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away. But then when I listen to Palwende, I'm

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under the impression that, from the kinds of

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social changes that he was talking about, the

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information that one is after is not as clear

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as it used to be anymore. So I would like for

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Palwende to maybe tell us a little bit more on

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the influence of the increased pace of

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urbanization in a country like Burkina Faso.

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The influence of that increased urbanization on

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perceptions of ancestry, WITHIN the wider

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population. And, for him as a genetic

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scientist, what does that increase, increased

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pace of social change due to the ways in which

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HE goes about engaging the information that he

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collects in his research?

00:43:28.000 --> 00:43:33.000

PALWENDE R. BOUA: Yeah. So, the -- we,

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we used to, let's say, try to do genetic

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research and, you know, trying to collect

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information from people, let's say, until their

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grandfather, their grand-grandfather, to the

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parents, to see where they're coming from and

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to try to understand maybe how, let's say, the

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demographic history of ancestry can play in

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neural, internal susceptibility to health and

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to disease. And, you know. Uh, more and more,

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we tend to have, let's see, a loss of

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information. That's something, first; there is

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a loss of information. And also, I think

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maybe... people are not perceiving the identity

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or the... the biological identity so much

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related to the, let's see, to... their

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ancestry, genetic ancestry that they're having.

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I think the more of a result, there is more of

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an influence of environmental things. Because,

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uh, you're much more likely now to look at the

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same individual exposed to some environment,

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and you will be having a different outcome when

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it is exposed to another environment.

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So, I don't -- it's bringing more

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complexity. One, because there is a level of

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information that's kind of like difficult

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together. And also more complexity because

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there is much more interplay, and within the

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world that we live in, not just because of the

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urbanization, but also because of

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globalization. The exposures are getting

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multiple and high. A different, let's say,

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time of the life course of individuals.

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Whereas when we're looking at the impacts of,

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let's say, the genetics and health, we'll be

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looking at the life course, because the

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exposure is also shaping our genetics and so on

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and how we're gonna respond to environmental

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exposure. So if someone is exposed to a

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certain environment in early childhood, and

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then in adolescence and in adult life, it's

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giving multiple, let's say, timeframe where.

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So, so it's bringing MORE complexity to the

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research we're doing.

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HENRI-MICHEL YERE: Thank you very much,

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Palwende. And I wanted to maybe... from the

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way you just answered the question I asked, put

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a question to the two of you, our panelists.

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Is ancestry -- and this is, ah, reprizing the

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the spirit of some of the questions that are

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now coming trickling in the Q&A box. Is

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ancestry, in the context of African genomics,

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strictly a biological reality? Is it something

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that can only be analyzed as a link between a

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person and their descendant? Because you

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mention environmental factors. So, who of you

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would like to take up that particular question

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first? You, Palwende? You, Alice?

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Alice, you're on mute.

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ALICE MATIMBA: Ah, yeah. I can quickly

00:46:36.000 --> 00:46:38.000

say something, but I think Palwende has a

00:46:38.000 --> 00:46:40.000

better response! (soft laugh) Yeah. So I

00:46:40.000 --> 00:46:44.000

think we've talked about this, and, um. You

00:46:44.000 --> 00:46:50.000

know, the issue of ancestry going beyond the

00:46:50.000 --> 00:46:54.000

biological connection. But also, the, you

00:46:54.000 --> 00:46:56.000

know, bearing in mind that... more like the

00:46:56.000 --> 00:46:58.000

inheritance of, you know, your ancestry, but

00:46:58.000 --> 00:47:00.000

covering different things. So, you know, I

00:47:00.000 --> 00:47:03.000

think it was mentioned the social ancestry, the

00:47:03.000 --> 00:47:06.000

cultural ancestry, the environmental

00:47:06.000 --> 00:47:12.000

ancestry -- and all these, how all these issues

00:47:12.000 --> 00:47:15.000

actually impact on... we all know is different

00:47:15.000 --> 00:47:17.000

impact on the expression of genes, for example,

00:47:17.000 --> 00:47:22.000

or epigenomics. So, there are a lot of other,

00:47:22.000 --> 00:47:24.000

other, um... I think other factors that

00:47:24.000 --> 00:47:26.000

contribute to, to the final ancestry that we

00:47:26.000 --> 00:47:27.000

inherit.

00:47:27.000 --> 00:47:29.000

HENRI-MICHEL YERE: Thank you for that.

00:47:29.000 --> 00:47:30.000

Palwende? Would you like to complete this

00:47:30.000 --> 00:47:31.000

answer?

00:47:31.000 --> 00:47:34.000

PALWENDE R. BOUA: No, I will just quickly

00:47:34.000 --> 00:47:38.000

add that, you know, demographic history of a

00:47:38.000 --> 00:47:40.000

population -- because whether it's, let's say,

00:47:40.000 --> 00:47:43.000

biological or genetic ancestry or cultural

00:47:43.000 --> 00:47:46.000

ancestry, I think we used to like kind of

00:47:46.000 --> 00:47:49.000

really refer to a couple of hundred years ago

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and so on, and trace back our history. And,

00:47:53.000 --> 00:47:55.000

whatever it is that's in our history has been

00:47:55.000 --> 00:47:57.000

shaped by what there is before. So the

00:47:57.000 --> 00:48:01.000

exposure that we had before, and... you know,

00:48:01.000 --> 00:48:05.000

the natural selection which occurred, you know,

00:48:05.000 --> 00:48:06.000

for some of the traits of some susceptibility,

00:48:06.000 --> 00:48:09.000

giving some resistance to some individuals,

00:48:09.000 --> 00:48:11.000

group of individuals, and giving more

00:48:11.000 --> 00:48:14.000

susceptibility to another group and so on.

00:48:14.000 --> 00:48:17.000

This selection pressure is kind of a very

00:48:17.000 --> 00:48:19.000

shared thing to be, let's say, how people are

00:48:19.000 --> 00:48:25.000

really, let's say... living in health or in

00:48:25.000 --> 00:48:26.000

disease. Ah, in their actual life.

00:48:26.000 --> 00:48:29.000

HENRI-MICHEL YERE: Thank you for this

00:48:29.000 --> 00:48:34.000

answer. I'm now going to go into the Q&A box

00:48:34.000 --> 00:48:36.000

to convey questions to you that have come from

00:48:36.000 --> 00:48:38.000

the participants.

00:48:38.000 --> 00:48:41.000

There's a question directed to Alice, but

00:48:41.000 --> 00:48:42.000

of course, Palwende, that does not mean that

00:48:42.000 --> 00:48:48.000

you cannot bring in your perspective on this

00:48:48.000 --> 00:48:51.000

question. From Carly Marten: Dr. Matimba, you

00:48:51.000 --> 00:48:55.000

mentioned that funding and resources, when they

00:48:55.000 --> 00:48:56.000

DO flow to the African continent, often go to

00:48:56.000 --> 00:48:58.000

institutions or individuals in a few select

00:48:58.000 --> 00:49:00.000

countries. Why do you think it is that some

00:49:00.000 --> 00:49:02.000

countries or institutions or individuals are

00:49:02.000 --> 00:49:05.000

constructed as "worthy recipients"? Thank

00:49:05.000 --> 00:49:06.000

you, by the way, for a great presentation. So,

00:49:06.000 --> 00:49:07.000

why is that?

00:49:07.000 --> 00:49:11.000

ALICE MATIMBA: Uh, I think it's

00:49:11.000 --> 00:49:16.000

historical as well? (chuckles) With certain,

00:49:16.000 --> 00:49:19.000

ah... countries have, ah, possibly developed --

00:49:19.000 --> 00:49:22.000

probably, developed a lot more links and

00:49:22.000 --> 00:49:28.000

networks, and infrastructure. Um, that has

00:49:28.000 --> 00:49:30.000

been brought by their previous... colonizers,

00:49:30.000 --> 00:49:33.000

for example. Or, they've been able to set up

00:49:33.000 --> 00:49:36.000

the infrastructure that is more trustworthy,

00:49:36.000 --> 00:49:38.000

for example, in the eyes of the funders or

00:49:38.000 --> 00:49:39.000

the... you know, the people that are giving the

00:49:39.000 --> 00:49:42.000

money.

00:49:42.000 --> 00:49:46.000

So, there's some -- so I think most of it

00:49:46.000 --> 00:49:48.000

is, has a historical reason. It's not to say

00:49:48.000 --> 00:49:51.000

that other countries can't also start to

00:49:51.000 --> 00:49:54.000

receive funding, but they have to prove

00:49:54.000 --> 00:49:57.000

themselves in order for them to get, um, to get

00:49:57.000 --> 00:49:59.000

access to funding. I think we all know that

00:49:59.000 --> 00:50:01.000

there's certain countries that, even when

00:50:01.000 --> 00:50:03.000

there's funding for the whole continent, that

00:50:03.000 --> 00:50:07.000

certain countries will get the chunk of it.

00:50:07.000 --> 00:50:10.000

Just because they probably have a lot --

00:50:10.000 --> 00:50:12.000

supposedly, better. Better setup or

00:50:12.000 --> 00:50:15.000

infrastructure or more trustworthy systems.

00:50:15.000 --> 00:50:19.000

So... and, but I think that should start

00:50:19.000 --> 00:50:21.000

changing. Because there ARE other countries

00:50:21.000 --> 00:50:24.000

that are trying to also get into the mix, and

00:50:24.000 --> 00:50:26.000

it's not always easy to compete with those.

00:50:26.000 --> 00:50:27.000

Which makes it unfair, of course.

00:50:27.000 --> 00:50:30.000

HENRI-MICHEL YERE: Thank you, Alice.

00:50:30.000 --> 00:50:33.000

Palwende, would you like to say something to

00:50:33.000 --> 00:50:34.000

this?

00:50:34.000 --> 00:50:37.000

PALWENDE R. BOUA: No, I think Alice cover

00:50:37.000 --> 00:50:39.000

it.

00:50:39.000 --> 00:50:42.000

HENRI-MICHEL YERE: Okay. I'm reading a

00:50:42.000 --> 00:50:54.000

question here which relates -- the question

00:50:54.000 --> 00:51:02.000

comes from Jennifer Troyer, and is about do you

00:51:02.000 --> 00:51:03.000

envision using tribes to ameliorate political

00:51:03.000 --> 00:51:05.000

strife on the continent? So basically in the

00:51:05.000 --> 00:51:08.000

research being carried out in the field of

00:51:08.000 --> 00:51:10.000

genomics may or may not have a consequence or

00:51:10.000 --> 00:51:18.000

interaction with the political reality of the

00:51:18.000 --> 00:51:19.000

African continent. Uh, Palwende.

00:51:19.000 --> 00:51:20.000

PALWENDE R. BOUA: Yeah. I think the

00:51:20.000 --> 00:51:29.000

translation of this research is kind of

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really -- let's see. I'm coming back to one of

00:51:32.000 --> 00:51:35.000

my coauthors about, you know, the framing of

00:51:35.000 --> 00:51:37.000

stating "African genome." I think -- yeah.

00:51:37.000 --> 00:51:45.000

You're completely right. When you're saying

00:51:45.000 --> 00:51:47.000

"African genome," it's very proveocating. But

00:51:47.000 --> 00:51:49.000

the truth is it's a global genome, because all

00:51:49.000 --> 00:51:50.000

in the world come from it. And I think that's

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the right terminology to say.

00:51:55.000 --> 00:51:58.000

But, um. So about how, you know,

00:51:58.000 --> 00:52:01.000

translating the... the result of the research

00:52:01.000 --> 00:52:03.000

that we're doing. I think it's gonna put more

00:52:03.000 --> 00:52:07.000

ties between communities and populations. And

00:52:07.000 --> 00:52:10.000

I think that's not really, I think, much --

00:52:10.000 --> 00:52:12.000

most of the time, it's not about the message or

00:52:12.000 --> 00:52:16.000

the scientific basis of it, but is maybe how

00:52:16.000 --> 00:52:17.000

some people are maybe leveraging or

00:52:17.000 --> 00:52:23.000

communicating the result that might be an issue

00:52:23.000 --> 00:52:25.000

or a problem. I think during the last 10

00:52:25.000 --> 00:52:31.000

years, there have been a lot of work relating

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to, ah, to ethics and to ELSI, about

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communicating genetic research results.

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Whether it's aggregated or framed... some of

00:52:42.000 --> 00:52:46.000

the framework on communicating individual

00:52:46.000 --> 00:52:49.000

results. And. You know, and maybe even to

00:52:49.000 --> 00:52:52.000

prepare our countries for, our communities to

00:52:52.000 --> 00:52:54.000

be receiving this information! Because

00:52:54.000 --> 00:52:57.000

somehow, I think people were not really

00:52:57.000 --> 00:53:00.000

familiar with genomic research and how it can

00:53:00.000 --> 00:53:03.000

be translated within our communities. So,

00:53:03.000 --> 00:53:07.000

there is a lot of advocacy and a lot of work

00:53:07.000 --> 00:53:09.000

that has been done to try to understand, and to

00:53:09.000 --> 00:53:13.000

define, let's say, a way whereas really it can

00:53:13.000 --> 00:53:14.000

be leveraged for something that is -- that will

00:53:14.000 --> 00:53:21.000

be constructive, rather than something that

00:53:21.000 --> 00:53:24.000

will be, let's say... a cause of any disorder

00:53:24.000 --> 00:53:26.000

or disaster. Maybe result some political

00:53:26.000 --> 00:53:29.000

issues between communities.

00:53:29.000 --> 00:53:33.000

HENRI-MICHEL YERE: Thank you for that. I

00:53:33.000 --> 00:53:36.000

want to take the conversation to... to more

00:53:36.000 --> 00:53:43.000

maybe practical, a more practical dimension.

00:53:43.000 --> 00:53:48.000

And there's a question here from Samantha

00:53:48.000 --> 00:53:52.000

Esselmann, and I'll read it to you so you

00:53:52.000 --> 00:53:53.000

understand what I'm trying to say. If the

00:53:53.000 --> 00:53:56.000

financial and intellectual center of genomic

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research HAD started within Africa, what do you

00:53:58.000 --> 00:54:00.000

imagine are some examples of the ways that

00:54:00.000 --> 00:54:03.000

global populations could be defined differently

00:54:03.000 --> 00:54:05.000

from how they are defined from a Eurocentric

00:54:05.000 --> 00:54:06.000

perspective today? Or could there be a

00:54:06.000 --> 00:54:08.000

completely different paradigm?

00:54:08.000 --> 00:54:10.000

This ties up with what we had been

00:54:10.000 --> 00:54:13.000

discussing, Alice. (chuckles) Ah, a little

00:54:13.000 --> 00:54:18.000

earlier. In preparation for this conversation.

00:54:18.000 --> 00:54:20.000

So, I mean, any thoughts on this?

00:54:20.000 --> 00:54:24.000

ALICE MATIMBA: Yeah, I guess none other

00:54:24.000 --> 00:54:27.000

than I think it would be, ah, different?

00:54:27.000 --> 00:54:29.000

(chuckles) Because, I think -- I mean, we all

00:54:29.000 --> 00:54:32.000

agree that our, the way we see the world is

00:54:32.000 --> 00:54:35.000

going to shape our ideas of how we're going to,

00:54:35.000 --> 00:54:38.000

you know, structure research or translate it,

00:54:38.000 --> 00:54:44.000

or how we prioritize, you know, the... the

00:54:44.000 --> 00:54:47.000

research or the work that we do. So. And,

00:54:47.000 --> 00:54:53.000

would -- could they be a completely different

00:54:53.000 --> 00:54:55.000

paradigm...? (trilling chuckle) I, I can't

00:54:55.000 --> 00:54:57.000

say, but I suspect that there would be a

00:54:57.000 --> 00:54:59.000

different paradigm. But um, I'd be also

00:54:59.000 --> 00:55:05.000

curious to know what other people think, or if

00:55:05.000 --> 00:55:11.000

Palwende has anything to add to that.

00:55:11.000 --> 00:55:12.000

PALWENDE R. BOUA: Yeah. I think

00:55:12.000 --> 00:55:16.000

population descriptors are something that's

00:55:16.000 --> 00:55:19.000

kind of... it's evolving, and nowadays, if you

00:55:19.000 --> 00:55:22.000

decide to collect some sample from a person and

00:55:22.000 --> 00:55:26.000

just refer to the location? Well, the sample

00:55:26.000 --> 00:55:29.000

has been collected. Okay, from Berkeley na

00:55:29.000 --> 00:55:31.000

--

00:55:31.000 --> 00:55:35.000

Burkina Faso. Okay. And then, if you look,

00:55:35.000 --> 00:55:39.000

maybe that person was in Burkina Faso 20 years

00:55:39.000 --> 00:55:43.000

before your sample collections. And so on! So

00:55:43.000 --> 00:55:45.000

it's really difficult, because it's very

00:55:45.000 --> 00:55:47.000

dynamic. And those descriptors, I think,

00:55:47.000 --> 00:55:55.000

should not be -- I think we should move away

00:55:55.000 --> 00:55:58.000

from the a priory

00:55:58.000 --> 00:56:02.000

description, but rather be informed by the data

00:56:02.000 --> 00:56:05.000

we're having! If I take information in terms

00:56:05.000 --> 00:56:10.000

of genetic ancestry and then I'm trying to use

00:56:10.000 --> 00:56:12.000

his control study, I'm going to have a very

00:56:12.000 --> 00:56:14.000

genetically mashed individual. I'm floating

00:56:14.000 --> 00:56:22.000

the individual and the genetics... I will have,

00:56:22.000 --> 00:56:25.000

let's say, my cases and control clustering

00:56:25.000 --> 00:56:28.000

together. Rather than saying, because I have

00:56:28.000 --> 00:56:30.000

some sample, that I've collected 200 kilometers

00:56:30.000 --> 00:56:33.000

away from where I've collected my sample --

00:56:33.000 --> 00:56:36.000

which might not even overlap in term of genetic

00:56:36.000 --> 00:56:41.000

similarity. And I think we should rather move

00:56:41.000 --> 00:56:44.000

away from, like, the a priori labeling,

00:56:44.000 --> 00:56:49.000

towards... let's say... the

00:56:49.000 --> 00:56:53.000

genetically-informed. Let's say. Clustering

00:56:53.000 --> 00:56:56.000

of the individuals. And... completely moving

00:56:56.000 --> 00:57:00.000

away from! Let's say, population descriptors!

00:57:00.000 --> 00:57:02.000

Because somehow, it's... it's important when

00:57:02.000 --> 00:57:04.000

you're looking at, if you're going to look at

00:57:04.000 --> 00:57:07.000

demographic history, somehow it's important

00:57:07.000 --> 00:57:10.000

to... to, to analyze it from the population

00:57:10.000 --> 00:57:13.000

perspective and so on. But. Other than THAT,

00:57:13.000 --> 00:57:17.000

I think, let's say... when you're looking at

00:57:17.000 --> 00:57:20.000

disease and so on, it's really... it become

00:57:20.000 --> 00:57:26.000

less important to, let's say, to label a

00:57:26.000 --> 00:57:29.000

population, to say this belongs to an ethnical,

00:57:29.000 --> 00:57:31.000

ethnolinguistic group, and so on. And I think

00:57:31.000 --> 00:57:33.000

we should be doing that more often in terms of

00:57:33.000 --> 00:57:35.000

precision health, in genomics research.

00:57:35.000 --> 00:57:39.000

ALICE MATIMBA: Yeah, so I want to add to

00:57:39.000 --> 00:57:43.000

Palwende that I think if, if Palwende had his

00:57:43.000 --> 00:57:44.000

say, that's how he would shape the paradigm!

00:57:44.000 --> 00:57:47.000

(chuckles) Of looking at classification and

00:57:47.000 --> 00:57:49.000

African genomics. So. Yes, indeed! I think

00:57:49.000 --> 00:57:51.000

just to add that, obviously, depending on where

00:57:51.000 --> 00:57:55.000

you're sitting, you're going to have a

00:57:55.000 --> 00:57:58.000

different setup, and. What we, we all -- the

00:57:58.000 --> 00:58:01.000

fact that we all ask and we question the

00:58:01.000 --> 00:58:04.000

current... you know, classifications, or how we

00:58:04.000 --> 00:58:08.000

view the African genome and so forth, means

00:58:08.000 --> 00:58:10.000

that if other, you know, groups were given the

00:58:10.000 --> 00:58:13.000

opportunity to shape that, that it would

00:58:13.000 --> 00:58:16.000

probably look quite different.

00:58:16.000 --> 00:58:18.000

HENRI-MICHEL YERE: All right. And

00:58:18.000 --> 00:58:20.000

looking at time, and I'm looking at the number

00:58:20.000 --> 00:58:23.000

of questions that are being posted. Um.

00:58:23.000 --> 00:58:26.000

There's a question for Palwende that says: You

00:58:26.000 --> 00:58:29.000

mentioned the use of ethnolinguistics in

00:58:29.000 --> 00:58:30.000

genetic and biomedical research as very risky.

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I understand this point, having worked in the

00:58:33.000 --> 00:58:35.000

field for many years. One of the main issues

00:58:35.000 --> 00:58:39.000

during the sample collection and data analysis

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is that there are no terms EXCEPT for the

00:58:43.000 --> 00:58:45.000

ethnolinguistic terms. Do we geneticists have

00:58:45.000 --> 00:58:47.000

to come up with new terms, after the genetic

00:58:47.000 --> 00:58:51.000

analysis, based on the genetic structure

00:58:51.000 --> 00:58:53.000

results?

00:58:53.000 --> 00:58:55.000

PALWENDE R. BOUA: Ah, ah... I think

00:58:55.000 --> 00:58:58.000

coming up with another classification is kind

00:58:58.000 --> 00:59:01.000

of really -- let's see... let's see. Moving

00:59:01.000 --> 00:59:04.000

from one problem to another. Because the

00:59:04.000 --> 00:59:07.000

descriptors -- it can also -- yes! Because

00:59:07.000 --> 00:59:10.000

whether it's a, let's say, an a priori

00:59:10.000 --> 00:59:13.000

classification using an ethnolinguistic basis,

00:59:13.000 --> 00:59:17.000

or whether it's towards a classification that

00:59:17.000 --> 00:59:20.000

we do, I think... what is important to keep in

00:59:20.000 --> 00:59:23.000

mind: We need to move towards precision

00:59:23.000 --> 00:59:26.000

medicine, which is more individual-based, and

00:59:26.000 --> 00:59:29.000

then less, let's say, group level. Because

00:59:29.000 --> 00:59:33.000

somehow, you know. When -- if I have some

00:59:33.000 --> 00:59:36.000

finding about some susceptibility of such to

00:59:36.000 --> 00:59:39.000

specific disease within a group of individuals,

00:59:39.000 --> 00:59:41.000

and... whichever descriptors are used to, let's

00:59:41.000 --> 00:59:46.000

say, to describe this group of individuals, it

00:59:46.000 --> 00:59:47.000

can be a source of stigma! I think.

00:59:47.000 --> 00:59:48.000

HENRI-MICHEL YERE: But when you say --

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okay?

00:59:49.000 --> 00:59:52.000

PALWENDE R. BOUA: -- to communicate. In,

00:59:52.000 --> 00:59:55.000

in the way that we're communicating the result.

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We don't have to highlight, let's say... a

00:59:59.000 --> 01:00:03.000

group. It's important because, okay. It might

01:00:03.000 --> 01:00:06.000

be of relevance in the disturbance stage and,

01:00:06.000 --> 01:00:07.000

let's see, to know where to look. But once we

01:00:07.000 --> 01:00:12.000

understand the process and we know what's going

01:00:12.000 --> 01:00:15.000

on, I think, let's say... putting again, and,

01:00:15.000 --> 01:00:19.000

let's say... pointing at a group...! Whether

01:00:19.000 --> 01:00:21.000

the, it's an advantage or disadvantage. It's

01:00:21.000 --> 01:00:24.000

kind of really another source of, let's see,

01:00:24.000 --> 01:00:27.000

classification. So, whichever classification

01:00:27.000 --> 01:00:30.000

it is, I think we should be, let's say, being

01:00:30.000 --> 01:00:32.000

very conscious and moving towards, let's say,

01:00:32.000 --> 01:00:34.000

leaving out classifications. For population

01:00:34.000 --> 01:00:35.000

descriptions.

01:00:35.000 --> 01:00:39.000

HENRI-MICHEL YERE: Okay. Thank you very

01:00:39.000 --> 01:00:40.000

much. I... see that we were not able to

01:00:40.000 --> 01:00:45.000

exhaust all the very interesting questions that

01:00:45.000 --> 01:00:49.000

have been asked. And the time is out, so I'm

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going to hand over the floor to Sandra.

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SANDRA SOO-JIN LEE: Thank you. I'd like

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to thank our panelists today for their

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presentations, and sharing generously for what

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I think was a really rich discussion. Thank

01:01:00.000 --> 01:01:03.000

you to everyone for your questions, and we

01:01:03.000 --> 01:01:06.000

absolutely could not get to even half of them.

01:01:06.000 --> 01:01:10.000

So, I'm hoping that many of you will be able to

01:01:10.000 --> 01:01:13.000

join our post-event discussion -- and you'll

01:01:13.000 --> 01:01:14.000

see the link in the chat. This is a 30-minute

01:01:14.000 --> 01:01:18.000

informal discussion where we're able to

01:01:18.000 --> 01:01:20.000

continue to engage our three guests today.

01:01:20.000 --> 01:01:24.000

I'm also hoping that we will see you on

01:01:24.000 --> 01:01:28.000

October 14th for our next ELSI Friday Forum.

01:01:28.000 --> 01:01:32.000

This will focus on Advocacy and Allyship in

01:01:32.000 --> 01:01:34.000

ELSI: Opportunities and Challenges. It's gonna

01:01:34.000 --> 01:01:35.000

be a critical discussion, and I hope you will

01:01:35.000 --> 01:01:38.000

mark your calendars.

01:01:38.000 --> 01:01:41.000

Please visit ELSIhub.org and subscribe to

01:01:41.000 --> 01:01:44.000

our newsletter for more details of events to

01:01:44.000 --> 01:01:47.000

come. And um, please note that we are gonna be

01:01:47.000 --> 01:01:50.000

sending you a post-event survey, and I really

01:01:50.000 --> 01:01:52.000

encourage you to complete this, as our

01:01:52.000 --> 01:01:56.000

organizing committee takes your comments and

01:01:56.000 --> 01:01:59.000

suggestions very seriously. It has informed us

01:01:59.000 --> 01:02:01.000

on how we do things with the forum; it brings

01:02:01.000 --> 01:02:03.000

new topics and speakers to you. So please do

01:02:03.000 --> 01:02:07.000

fill that out.

01:02:07.000 --> 01:02:10.000

But thank you again to everyone, and we

01:02:10.000 --> 01:02:12.000

wish you a wonderful weekend. Please do take

01:02:12.000 --> 01:02:14.000

care.