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VAnguard News

Foreword

Greetings and welcome to the first issue of The VAnguard News!

It has been an exciting few months since the launch of the project and we take this opportunity to share some insights as well as details about the project.

VAnguard is the NIHR Global Health Research Group on Vaccines for vulnerable people in Africa. It comprises a multidisciplinary group of vaccine researchers from East Africa and the UK, with expertise ranging from bioscience, social science and data analysis, to community engagement and research capacity building.

Overall the project aims to identify modifiable structural, social, and biological determinants of impaired vaccine impact in vulnerable African communities and inform the development of integrated strategies to address these, and to promote health equity.

In this issue, meet our vibrant team and the communities that we have engaged, and have already started working with towards achieving our ambitious health targets.
We look forward to continued engagement with all our stakeholders and your contribution to our overall objective. Hope you enjoy the read!

Community and project team members cutting cake during the launch in Kilifi, Kenya.

Professors Elliott and Kaleebu during the VAnguard launch at UVRI in Entebbe.

VAnguard is led by Professors **Pontiano Kaleebu** and **Alison Elliott.**

Professor Kaleebu is the Director of UVRI as well as the MRC/UVRI and LSHTM Uganda Research Unit with over 30 years' experience in vaccine research in Uganda. His roles in top level management at Uganda's MoH, and in national, Pan-African and international vaccine- relevant organisations, position him to provide strategic guidance to the programme, and to ensure maximum impact of the work.

Professor Elliott is the Head of Vaccine Research at MRC/UVRI and LSHTM Uganda Research Unit. She is a physician with main research interest in immunomodulating effects of chronic infections on responses to vaccines and other health outcomes. With over 25 years' experience of combining clinical, epidemiological and immunological research on infectious diseases, she is the project Principal Investigator with the responsibility of providing overall guidance on the implementation.

She has a particular interest in the mechanisms behind population differences in vaccine responses.

The unveiling

VAnguard was launched on the 28th of November 2022 in Entebbe at UVRI and in Kilifi at KEMRI|WellcomeTrust. The events happened simultaneously both physically and online to enable participants in both locations to engage in real time.

The multidisciplinary teams, with members from Kenya and Uganda, pledged their commitment to working with communities and implementation stakeholders to generate a sustainable, collaborative research culture and facilitate sustainable pathways to research impact.

These teams are comprised of experts and trainees in biological and social science and community engagement and they had the opportunity to present their structures and tasks for the project as well as engage with some members of the community. The community members were represented by the Community Advisory Board members in both countries.

To be able to achieve the project objectives, it was emphasized that there is need for the stakeholders to participate in the planning, implementation, and dissemination of project findings.

The specific objectives are:
1   To investigate biological drivers and mechanisms of population differences in vaccine response
2   To understand how structural, social and biological determinants of vaccine response interrelate to determine vaccine impact
3   To identify and model integrated strategies to inform development of future interventions to optimise vaccine impact among vulnerable populations
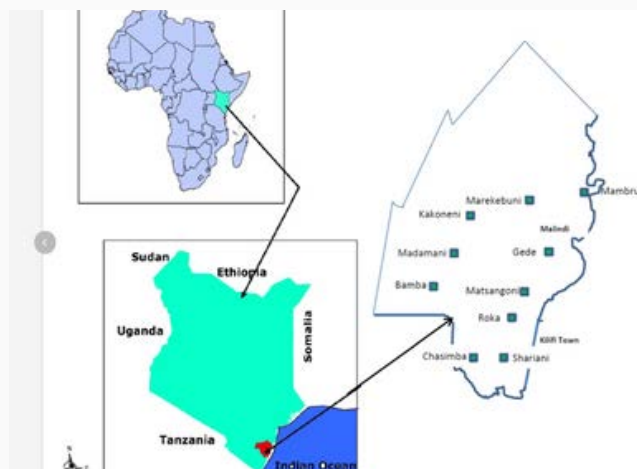
These will be achieved through the work to be implemented by the different Work Packages and below are the outcomes we are looking forward to:
- New knowledge on interacting factors that determine vaccine impact
- New strategies for optimising vaccine impact for vulnerable communities
- Strengthened capacity for multidisciplinary impactful vaccine research in Africa

Our community of Impact

In phase one of our project we aim to collate and review relevant literature and existing data and undertake formative work in two vibrant communities in Uganda and Kenya: Kilifi County, located in the South Eastern part of Kenya and Koome Islands in Eastern Uganda. The formative work will help us identify factors that may make communities particularly vulnerable to poor vaccine impact.

Kilifi County, Kenya

Kilifi is one of the 47 Counties of the devolved government system in Kenya. The County is situated on the coast of Kenya, 56 kilometres (35 mi) North-East of Mombasa. The town lies on the Kilifi Creek and sits on the estuary of the Goshi River. Kilifi town is the capital of the County. The County has a population of 1.4m people according to the 2019 census.

Follow the link below for more information on Kilifi. https://en.wikipedia.org/wiki/Kilifi

Koome Island, Uganda

Koome Island is located in Mukono District, Uganda, in the North-Western part of Lake Victoria. The island is separated from Ssese Islands by the Koome Channel. Koome is the largest island in the North-Eastern group. There is a government health centre on the island, Koome Health Centre III, not far from Bugombe.

Follow the link for more information on Koome
https://en.wikipedia.org/wiki/Koome_Island

Brief of the Work Packages(WP)

Our multidisciplinary expert teams across Kenya and Uganda all work in diverse communities and engage with various stakeholders to generate a sustainable, collaborative research culture and facilitate sustainable pathways to research impact. Through seven structured work packages, these efforts are well coordinated and integrated for greater efficiency and impact. Meet the team leaders of each illustrious section.

Work Package 1: Bioscience led by Reagan Mogire

To facilitate the achievement of objective 1, WP1 is investigating the biological drivers and mechanisms of population differences in vaccine responses. Through data and literature review, they are identifying biomarkers and contributing to the VAnguard community study regarding sample collection and laboratory investigation.

Reagan specializes in genetic epidemiology, molecular biology, and bioinformatics. He earned a PhD in genetic epidemiology from The Open University, UK, focusing on the epidemiology and genetic architecture of vitamin D deficiency in African children.

Work Package 2: Social Science

WP2 is led by **Primus Che Chi** and seeks to understand how structural, social and biological determinants of vaccine response interrelate to determine vaccine impact.

Primus is the lead social science investigator with overall responsibility for social science components including the study design, data collection, analysis, write-up and publications, uptake into policy, and mentorship and supervision of the social science PhD student.

Work Package 3: Analysis and modelling

Agnes Natukunda leads WP3 in developing, modelling and testing community-based integrated strategies to optimise vaccine access, uptake and effectiveness among vulnerable populations.

Agnes is a statistician with expertise in applying statistical methodologies to address research questions, particularly in the field of vaccine research. Her key experiences and achievements revolve around her contributions to advancing the field through conducting high quality research, publications and impact on policy.

Work Package 4: VAnguard Community study planning and management

In WP4, the planning and implementation of field investigations (community surveys and qualitative studies) is led by **Ludoviko Zirimenya**. This team is tasked with exploring structural, social & biological determinants impairing vaccine impact.

Ludoviko is a medical doctor and a research fellow at London School of Hygiene and Tropical Medicine, with experience coordinating vaccine trials and observational studies in Uganda. He will lead the community survey in WP4 and is the overall scientific programme coordinator for VAnguard.

Work Package 5: Stakeholder, Community and Public Engagement and involvement

Monica Chibita leads WP5 which is tasked with empowering vulnerable communities to optimise vaccine impact for their people through a process of co-learning and co-creation between them and researchers. This is done in collaboration with WP1, 2, 3 and 4.

Monica is a professor of communication and the Dean of the School of Journalism, Media and Communication at Uganda Christian University. She will lead the social science and engagement work in Uganda, including the supervision of data collection, analysis, write-up and publications, uptake into policy, mentor and supervise the PhD student, seek the relevant study approvals and permissions for the social science and engagement work in Uganda.

Work Package 6: Capacity strengthening

WP6 is led by **Achilles Kiwanuka** and their aim is to build capacity for, and a culture of, consultative, collaborative multidisciplinary vaccine research in East Africa. It will mainly focus on research support capacity strengthening, leadership and academic training.

Achilles is a research capacity strengthening enthusiast and digital health specialist with over 8 years of capacity building experience. He has previously won research capacity strengthening grants from the Africa Research Excellence Fund (AREF). He is a co-investigator for the East and Southern African Consortium for Outbreak Epidemiology Training (ENTRANT) fellowship scheme funded by the EDCTP.

Work Package 7: Project management and governance

WP7, which involves project management and governance, is led by **Alison Elliott**

In the next issue

As we continue to engage and implement with our stakeholders, we look forward to

- Sharing our progress from all the work packages as they continue to implement the different strategies towards achieving our objectives.

- Introducing our PhD students who will be sharing their progress and how their work is woven into the overall project.

- We are also excited to share insights from our Community engagement activities as we co-create and implement with the community to generate a sustainable, collaborative research culture and facilitate sustainable pathways to research impact.

Pictures

Social media
Follow us on Twitter: @The_VAnguard22

Website
https://www.lshtm.ac.uk/research/centres-projects-groups/vanguard

VAnguard in the media
https://www.newvision.co.ug/category/news/researchers-explain-delay-in-developing-hiv-v-148643

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