

IAVI ADVANCE Leadership Development Program 2021 Bios

Kenya



Elizabeth Wahome has been working at the KEMRI-Wellcome Trust Programme in Kilifi, Kenya, which is supported by IAVI as data manager. She attained her MSc in Epidemiology at the London School of Hygiene and Tropical Medicine in 2015. Over the years, she has been conducting statistical analysis and has also been actively contributing toward scientific manuscript writing. She became a SANTHE-Ph.D. fellow in 2017 and her Ph.D. research project has been focusing on pre-exposure prophylaxis (PrEP) eligibility, uptake, and adherence among men who have sex with men followed in an HIV-1 vaccine feasibility cohort study in coastal Kenya. She is particularly

interested in applying varying modelling techniques to establish impacts of PrEP on HIV infection and assess determinants and patterns of PrEP use.



Marianne Mureithi, Ph.D., is the current Ag. Chair, Department of Medical Microbiology, School of Medicine, College of Health Sciences at the University of Nairobi, Kenya. She is also the Basic Science Research Team Leader at KAVI-ICR, as well as a research fellow in the IAVI's Vaccine Immunology Science and Technology for Africa (VISTA) program. She holds degrees from the University of Essex and the University of Bristol, both in the U.K; a post-doctoral fellowship from the Ragon Institute of MGH, MIT and Harvard in the U.S.; and the University of KwaZulu-Natal, South Africa. At KAVI-ICR, University of Nairobi, she is part of a successful collaboration with the Northwestern University in the U.S., which was recently awarded a R01-NIH grant that seeks to

characterize the early stages of HIV infection and determine the phenotype of the initial target cells in various mucosal tissues and explore the possible mechanisms underlying the establishment of mucosal viral reservoirs. Additionally, Marianne is characterizing biological signatures in early HIV infection to advance vaccine and treatment design. She is also the Fleming Country Grant Biosafety and Biosecurity Lead at the University of Nairobi/Kenyatta National Hospital, in support of the National Antimicrobial Resistance strategy and One Health governance for Antimicrobial Resistance (AMR) surveillance in Kenya. She has authored several peer-reviewed publications and supervised several Masters and Ph.D. students at the University of Nairobi and is actively mentoring the next generation of young outstanding African scientific leaders and researchers, who will assist in solving some of the continent's greatest health and development challenges.



Robert Langat, Ph.D. is a scientist working at KAVI-Institute of Clinical Research, University of Nairobi. He holds a degree in Medical Laboratory Sciences from Mount Kenya University, a postgraduate diploma of the Imperial College London and a Ph.D. in Immunology from Imperial College London. Robert focuses on HIV mucosal immunology, transmission, and prevention sciences. His key interests are approaches that provide unique insights into spatio-temporal attributes generated from imageries that focus on earlier events of HIV transmission in human tissues. Robert is also involved in epidemiology and social behavioural science involving adolescent girls and young women and key populations. Regarding SARS-CoV-2, Robert is currently characterizing the antiviral humoral immunity that developed in Kenya to determine if

immunity is compromised in the context of emerging global and Kenyan/East African regional SARS-CoV-2 variants. Robert's goal is to become a fully fledged independent investigator at the University of Nairobi and beyond.



Makobu Kimani, Ph.D. is a trained medical doctor with post-graduate training in global public health. He recently submitted his Ph.D. thesis awaiting defence at the University of Amsterdam. His research focused on HIV prevention among men who have sex with men (MSM) and transgender women (TW). He demonstrated the first HIV incidence estimate among African TW. Additionally, he established strong desire by MSM and TW to access pre-exposure prophylaxis (PrEP). Subsequently, he demonstrated significant challenges to uptake, adherence, and retention on PrEP follow-up. Finally, he established public facility health care providers were unprepared for the national PrEP rollout program. Currently, Makobu is leading a cross-sectional study seeking to understand the HIV prevention preferences among MSM and TW. The findings could

inform manufacturers on ideal PrEP formulations and delivery. Finally, he is helping to build leadership capacity at a TW community-based organization (CBO). Eventually, he hopes the CBO leadership will be empowered to apply for research and programming funding.

India



P.L. Natarajan is working as a principle scientist (Scientist 'C') at the National Institute for Research in Tuberculosis (NIRT) in the Dept. of HIV/AIDS. He has finished his medical degree (MBBS) and has done his Ph.D. in Medicine – Immunology (thesis title: “MAPKinase activation in Tuberculosis”). His research interests include clinical trials involving newer drugs or vaccines in TB/HIV, clinical immunology of HIV-TB, signaling pathways in inflammaging, and pharmacokinetics of anti-TB drugs. Apart from working as clinician-in-charge in various clinical set-ups including intensive care units for four years,

he has worked as clinician scientist in randomized controlled clinical trials evaluating treatment regimens in TB/HIV-TB. He has 10 years translational research experience (eight years postdoctoral) including three years in preclinical toxicology. He has publications in clinical trials or biomarker studies in high impact journals like JAMA Internal Medicine, Frontiers in Immunology, etc., His expertise includes TB/HIV-TB clinical drug/vaccine trial monitoring and cellular signaling pathways involved in inflammation/infections.



Suprit Deshpande, Ph.D., is a scientific project manager at the HIV Vaccine Translational Research (HVTR) Institute, Translational Health Science Technology Institute (THSTI), Faridabad, India. He joined the THSTI-IAVI program in 2013 as a post-doctoral research associate, moved to the position of scientist in 2016, and is currently working as a scientific project manager under DBT/ Wellcome Trust India Alliance Project at the HVTR lab at THSTI. His current research areas include HIV-1 virology, neutralizing antibodies, and antibody discovery and development. Prior to joining the HVTR, he served at the National AIDS Research Institute, Pune, as research associate under two different projects mainly

in the area of HIV-associated dementia and identifying miRNAs as a biomarker in the HIV-1 pathogenesis. Suprit has 13 publications and is holder of three patents.



A Vijayalakshmi completed M.A. Social Work in 1999 from Madras School of Social Work, University of Madras, and has recently submitted her Ph.D. thesis in Loyola College, University of Madras. Over the past two decades, she has been involved in coordination and implementation of research and developmental projects, and organization of trainings for researchers and practitioners. She is a research fellow at the Centre for Sexuality and Health Research and Policy (C-SHaRP), Chennai, India. Through C-SHaRP, she was involved in several research projects including sexual identity development among sexual minority youth, NIE/C-SHaRP/UNDP study on mapping and size estimation of Hijra/Transgender population in India, and VHS/C-SHaRP study on

employment opportunities for TGW/kothis in Tamil Nadu.



Thongadi R. Dinesha currently serves as assistant professor at the YRG Centre for AIDS Research and Education (YRG CARE), Chennai. He is a motivated researcher who has been involved in HIV & HBV/HCV research for more than eight years. His key area involves studying HIV immunology, HIV drug resistance, understanding HIV latency, and HIV mediated immune activation. In the past several years he has worked on different projects such as HIV drug resistance monitoring in Chennai, India; validation of cost-effective pooling HBV DNA PCR for detecting occult HBV among HIV-1 infected drug naïve individuals in southern India; and immunological discordance in virologically suppressed Indian HIV-infected patients. Currently, Thongadi works as an investigator in various projects of IAVI's ADVANCE program. His area of research involves bnAbs, HIV-1 latency, and HIV-1 vaccine immunogen design.

Zambia



Kawela Mumba-Mwangelwa is a study physician at the Center for Family Health Research in Zambia (CFHRZ), formerly known as ZEHRP. She is a medical doctor (MBChB) and graduated from the University of Algiers School of Medicine in Algeria in 2014. She is a CFHRZ study physician on the HIV Vaccine Trials Network (HVTN) 705 Phase IIb HIV vaccine efficacy trial, and the COVID-19 Prevention Network (CoVPN) 5001 observational study. She is currently involved in various studies which include: identifying acute HIV infections in a high-risk women's cohort; understanding the contribution of other genital disorders to risk of HIV infection; determining markers of disease progression in recent HIV seroconverters from cohort studies; and comparing the natural history of SARS-CoV-2 to the influenza A virus. Kawela hopes to become a gender equity activist in the scientific research world and work toward mentoring upcoming researchers and encourage women's participation.



Clive M. Michelo (BSc, MSc, Ph.D.) is the laboratory science head at the Center for Family Health Research in Zambia where he leads and facilitates the management of laboratory science aspects of research studies including training of staff in scientific procedures, SOP/SSP creation and review. His academic background is predominantly molecular biology and he is very enthusiastic about basic science research. However, he is also keen to learn the societal perceptions and dynamics that are key in defining and perhaps guiding the basic science research agenda for effective translation of said basic science. As such, some level of community engagement through effective communication is a skill he is hoping to develop along with his basic research experience. Ultimately, Clive hopes to build his capacity to devise original and innovative approaches for the generation of Africa centered biomedical interventions and provide some working framework for nurturing and mentoring more upcoming African scientists.



Chishiba Kabengele is a study physician and co-investigator at the Center for Family Health Research in Zambia. He received his bachelor's degrees in Human Biology and Medicine & Surgery from the University of Zambia. He holds a Master of Public Health degree from the University of Lusaka and is currently working on his master's degree in Epidemiology at the London School of Hygiene and Tropical Medicine. He is a research fellow with the Sub-Saharan African Network for TB/HIV Research Excellence (SANTHE) with a primary focus on research understanding HIV and sexually transmitted infections and contraceptive uptake and its influence on HIV vaccine efficacy for high risk women. He hopes to become a leading academician and researcher, with expertise in infectious diseases epidemiology and contribute to knowledge generation in the field of medical research.



Sepo Mwangelwa is a study physician at the Center for Family Health Research in Zambia (CFHRZ). He is a medical doctor (MBChB) and graduated from the University of Zambia School of Medicine in 2015, and a current MSc Global Health Policy candidate at the London School of Hygiene and Tropical Medicine. He is a CFHRZ co-principal investigator on the HIV Vaccine Trials Network (HVTN) 705 Phase IIb HIV vaccine efficacy trial, and a CFHRZ study physician on the COVID-19 Prevention Network (CoVPN) 5001 observational study. Other studies include identifying and determining risk factors of acute HIV infections in a high-risk women's cohort; and developing and pilot testing an innovative standardized diagnostic algorithm for female genital

schistosomiasis. Sepo hopes to someday be sitting on national panels, working alongside actors that inform national policy, due to the lack of this expertise in his country.



Constance Himukumbwa is a laboratory manager at the Center for Family Health Research Centre (CFHRZ) Ndola, Zambia. She has a BSc in Biological Sciences and is a candidate for an MSc in Medical Microbiology. In her current position, her primary roles are ensuring laboratory compliance to Good Clinical Laboratory Practice and other standards determined by our sponsors, as well as ensuring that the laboratory aligns with other departments to support the general CFHRZ operations and objectives. Her goal for the future is to obtain a Ph.D. in microbiology and to become a researcher in HIV/AIDS prevention studies. This is important to her as she would like to be part of the network of African scientists working on finding

solutions to the distinctive health problems that our continent and countries face.



Vernon Moonga Musale (BMLS, MSc Epidemiology) is a laboratory manager at the Center for Family Health and Research in Lusaka, Zambia. He looks forward to gaining more experience in molecular epidemiology and bioinformatics and transitioning into a world-class principal investigator contributing to the improvement of scientific research in Africa.

Uganda



Sheila Nina Balinda, Ph.D., is a Ugandan molecular virologist with experience in 'One Health.' She studied both animal (foot-and-mouth disease) and human (HIV-1) viruses for over 15 years. Dr. Balinda is an awardee of the IAVI/ADVANCE postdoctoral fellowship where she studied HIV-1 transmitted/founder viruses to identify targets for HIV-1 vaccines. She won two awards to further explore this work, the SANTHE Pathway to Independence Award (Sub-Saharan African Network For TB/HIV Research Excellence) and IAVI/IIR (Investigator Initiated Research Program) totaling US\$250,000. Currently, Sheila is leading the team developing a local COVID-19 vaccine funded by the Presidential Scientific Initiative on Epidemics (PRESIDE), Government of Uganda. In 2001, Sheila completed basic training in biochemistry at Makerere University, Uganda, before proceeding to University of Nottingham, U.K., to accomplish an MSc. in molecular virology through a Chevening

scholarship. She returned to Makerere and graduated with a doctorate in molecular virology in 2011 and has over 20 peer-reviewed publications.



Juliet Mpendo, (MChB, MPH) is currently working at the UVRI-IAVI Vaccine Program as the medical director since 2009. Her main roles include overseeing research activities in the clinical trials unit in compliance with ICH/GCP, ensuring delivery of quality health services to research participants and the communities where research is being conducted. She is also responsible for the medical care of trial participants; permit monitoring and auditing by the sponsor; inspection by the appropriate regulatory bodies; ensuring findings are addressed and communicated with the IRB; ensuring study documents are approved before the trial; seeking annual renewals for various protocols; and reporting SAEs and protocol deviations. In liaison with the sponsor, Juliet prepares study reports for regulatory bodies and presentation in scientific fora. She has vast experience in conducting HIV vaccine clinical trials where she has served as principal investigator (PI) for four Phase I/II HIV vaccine trials and currently the PI for the first Phase III (PrEP efficacy trial) which is being conducted in fishing communities. She has also participated in conducting epidemiological studies in high-risk fishing communities. She's very passionate about understanding the dynamics of working with fishing communities to prepare them for future efficacy trials. Juliet also hopes to contribute to research findings that will inform policies that will eventually improve the livelihood of the fisherfolk. In the future, she hopes to have the skills to write scientific grant proposals to widen the funding base of their program.



Gertrude Nanyonjo (MPH, BA Social Sciences, MA Development Studies) is the Social Sciences/Community Engagement coordinator at UVRI-IAVI. She designs and conducts social behavioral studies, contributing to understanding disease burden and proposing effective interventions. She develops community engagement strategies and plans to ensure ethical and compassionate community treatment to maximize their support for UVRI-IAVI activities. Her liaison and engagement with communities ensures a conducive environment for current and future research. Gertrude identifies opportunities for social and behavioral research, then develops and delivers training to improve participant performance, application of new knowledge and skills or to make good choices. She also supports fundraising and donor liaison activities. Her ambition is to write and win substantial grants in social behavioral research to positively impact the fishing communities by preventing new HIV infections among adolescents and adults.



Andrew Ekii Obuku, Ph.D., has an MSc in Molecular Biology, a Certificate in Advanced Immunology and a Ph.D. in Molecular Immunology. He works at the MRC/UVRI & LSHTM, Uganda Research Unit where he provides leadership to the Kilgoris study. He supervises the epidemiology, immunology, and virology aspects of the study. In particular, he develops the hypotheses to be tested, study objectives, design assays, and experiments for the study. Andrew also provides leadership in the analysis of T-cell responses induced by the Ad26.ZEBOV/MVA-BN®-Filo vaccine. He is the main supervisor for three master of science students attached to his EDCTP career development award. His ambition for the future is to make a significant contribution to the design, validation, and testing of HIV vaccines and to understand why Africans have poor vaccine-induced responses and to design interventions to improve these poor vaccine-induced responses.

South Africa



Thandeka Moyo-Gwete, Ph.D., senior medical scientist at the National Institute for Communicable Diseases, South Africa, holds a Ph.D. in Clinical Science and Immunology from the University of Cape Town where she looked at the mechanisms used by various HIV strains to gain resistance to broadly neutralizing antibody responses. Thandeka's current research involves understanding the structure and function of HIV neutralizing antibodies by X-ray crystallography. More recently, she has added SARS-CoV-2 to her research focus, developing serological assays to measure humoral responses to infection and vaccination. She aims to obtain challenging and meaningful positions that will enable her to utilize her knowledge within the fields of immunology and structural biology to conduct research, teach others, and influence health policies in either an academic environment or in industry.



Omolara Olujimi Baiyegunhi (B.Sc, M.Sc, Ph.D.) is a postdoctoral research fellow at the Africa Health Research Institute, Durban, South Africa, while also an honorary research fellow at the Division of Infection and Immunity, University College London, U.K. Her responsibilities include conceptualizing, designing, planning, and executing basic immunology and virology research under the supervision of a mentor; manuscript preparation; grant applications; mentorship of interns and postgraduate students; and occasional community public engagement. Her research interests are defining the immunological and virological mechanisms underlying the transmitted/founder virus bottle neck and spread of HIV-1 subtypes; characterizing host immune responses that promote HIV-1 latency and persistence during hyperacute-treated HIV-1 infection; and understanding the metabolic determinants of HIV-1 associated pathogenesis. Omolara is passionate about excellence in scientific research and the training of the next generation of African scientists. Her long-term goal is to generate scientific knowledge on infectious diseases such as HIV-1 infection, that will translate to the design of therapeutics and vaccines to improve the health of high disease burden communities.



Dale Kitchin, Ph.D., obtained his Ph.D. in microbiology and biotechnology from the University of the Witwatersrand, Johannesburg in 2017, following undergraduate degrees in biochemistry and cell biology at the same institution. After completing his Ph.D., he joined the HIV Virology Section at the National Institute for Communicable Diseases in Johannesburg as a postdoctoral research fellow, under the mentorship of Prof. Penny Moore. His postdoctoral research focused on delineating the ontogeny of anti-HIV-1 broadly neutralizing antibody lineages, using a combination of cellular assays, sequencing, and bioinformatic methods. Since January 2021 he has been a senior scientist in the same unit, where he is responsible for managing several HIV research projects, including the virus surveillance component of the IAVI ADVANCE program, supervising postgraduate students and mentoring junior staff members. He would like to continue to be an active research scientist, studying B-cell responses to viral diseases and vaccination, that have direct public health implications for African populations.



Judie Magura is a postdoctoral research fellow at the Africa Health Research Institute, Durban, South Africa. Her research expertise spans various techniques, including molecular biology (cancer biology, cell culture, and PCR), nanotechnology (drug formulation), chemistry (spectroscopy), and most recently B-cell immunology. She is interested in understanding the cellular and molecular basis of diseases and the implementation of relevant therapeutic strategies, and currently she is focused on evaluating the B-cell and antibody responses capacities in Africa to inform the establishment of new HIV immunogens for the prevention of HIV-1 through vaccines. Her ambition is to grow into a Noble prize-winning scientist, making groundbreaking interventions in HIV and beyond.



Pholo Maenetje, Ph.D. holds a Ph.D. in immunology and is currently employed as a scientist at The Aurum Institute, Clinical Research Division. He has over 10 years' experience in clinical trial research and basic science research with keen interest in host immune responses against infectious diseases such as HIV and TB. Pholo is a principal recipient of a Strategic Health Innovation Partnerships (SHIP) unit of the South African Medical Research Council (MRC) grant that aims to understand the role of CD4+ and CD8+ $\alpha\beta$ T cells and $\gamma\delta 2$ T cells in protective TB immunity in the context of household contacts that remain persistently uninfected with TB despite repeated exposure to TB. His research interests are in HIV and TB immunology, where he seeks to understand protective host immune function during natural infection with the aim of informing the development of effective HIV or TB vaccines and therapeutic strategies to prevent infection.



Mandla Mlotshwa, M.Tech, MPH, Ph.D., is scientist and head of the biomedical research laboratory based at the Aurum Institute Tembisa Clinical Research Site. He is registered with HPCSA as a medical biologist scientist and is a member of Biobanks Ethics Committee of the University of the Witwatersrand. Previously, Mandla worked at the National Institute for Communicable Diseases, where he completed his Ph.D. in immunology looking at the correlates of immune protection in individuals recently infected HIV. Mandla has worked extensively on various projects including HIV Vaccine Trial Network (HVTN) studies, Microbicide Trial Network (MTN) studies, Microbicide Safety Biomarker studies, and HPV in Africa Research Partnership (HARP) studies. Before to joining The Aurum Institute in 2016, Mandla was a field epidemiologist resident seconded to the Foundation for Professional Development, where he gained extensive experience on epidemiological methods to conduct outbreak investigations and evaluate surveillance systems, and statistical tools that are used to analyze big data sets. He has over 15 years of experience working as a research scientist and he has setup various laboratory facilities to comply with good clinical laboratory practices and other South African regulations.



William Brumskine is clinical research site leader at The Aurum Institute NPC, Rustenburg, South Africa. He is a trained medical doctor with a Bachelor of Medicine and Surgery, and postgraduate training in the field of HIV management, focused on the improvement of the standards of medical practice and patient care in rural and urban communities. He is the CRS leader and principal investigator on all DAIDS sponsored clinical trials at the site. He has extensive experience in clinical research management and oversight of multi-site trials, including Investigational Drug (IND) trials. From 2016 to 2021, he has contributed scientifically to infectious disease publications. William is an ambitious and goal-oriented young researcher who would like to take a position of leadership in research of public health importance in the areas of HIV prevention/treatment, TB prevention/treatment, and vaccine development.

Rwanda



Julien M. Nyombayire has been working as a research physician at the Center for Family Health Research (formerly known as Projet San Francisco) since 2010. During these past 11 years, he has been an investigator in several HIV observational studies and clinical trials conducted by the institution. These include studies on heterosexual transmission of HIV among discordant couples,; studies on the natural history of HIV; large observational studies with at-risk populations such as female sex workers (FSWs), men who have sex with men (MSM), and patients with sexually transmitted infections; HIV and Ebola vaccine trials; and malaria therapeutic trials. He has experience in large public health programs implementation including HIV prevention service delivery to >20,000 FSW and MSM as well as mass Ebola vaccination campaigns aimed at vaccinating 200,000 Rwandans living in at-risk areas. Since 2012, Julien has been serving as the director of medical department where he has managed research and program related clinical

operations and oversees a team of over 50 medical staff that includes clinicians, nurses, social and community health workers, as well as pharmacists. He aspires to be the lead investigator for clinical research implementation in Rwanda and to contribute building CFHR as a clinical research center of excellence on the continent. Julien holds a bachelor's degree in general medicine and surgery from the National University of Rwanda and a master of sciences degree in clinical trials from the London School of Hygiene and Tropical Medicine.



Marie Aimée Unyuzimana is a medical doctor trained from the University of Rwanda. After her graduation in 2012, she worked as a General Practitioner at Ruhengeri Hospital for four years. In 2016, her passion for research took her to join Projet San Francisco (PSF/CFHR), where she got involved in HIV vaccine and malaria treatment clinical trials as a study physician. She's been one of the managers of the program focusing on defining high risk biological and behavioral patterns in key populations. From January 2020 to April 2021, Dr. Marie Aimée enrolled in a one year WHO/TDR Clinical Research and Development Fellowship at GSK Vaccines in Belgium, to build a solid foundation for her long-term goal to become a leader in clinical research design and practice. Currently she joined back with PSF/CFHR, and she is working on the active HIV vaccine trials and those in LTE, and also manages the STI clinic activities.



Moses Sebaana Kasigazi is a pharmacist with an MSc in global health and infectious diseases from the University of Edinburgh and a master's degree in medicines regulatory affairs from the University of Copenhagen. He has been with Projet San Francisco/Center for Family Health Research for over 10 years involved in HIV prevention research supervising clinical trial protocol implementation, management, and linkage to ARV care for HIV-positive female sex workers and STI patients. He is also responsible for the supply chain and the management of remote pharmacy activities for an Ebola mass preventive vaccination campaign and medicine regulatory affairs of the different studies and programs. His ambition for the future is to be in position

to lobby or attract and manage teams ensuring the funding and implementing of clinical trials in the region and ensuring that countries have systems, regulations, and local capacities for the introduction of new medicines and clinical studies.