



Towards an Integrated African Vaccine Policy



22-26 July 2019

Southern Sun Newlands, Cape Town, South Africa



Background

Policy plays a critical role in setting the direction and speed of innovation by creating the necessary conditions and triggering financial and other resources necessary to support the adoption, adaptation and reengineering of innovative technologies with particular reference to upscaling local vaccine manufacturing capabilities on the African continent. Policy space combined with foresighting and investment strategies are important for crafting resilient and sustainable local vaccine innovation ecosystems, contribute to industry development, economic growth, and access to health for all. This entails local vaccine industries tapping into global value chains leading to long term global and local health security, whilst at the same time contributing to Sustainable Development Goals; **SDG 3** – Good Health and Wellbeing; **SDG 8** -Decent Work and Economic Growth; **SDG 9** - Industry Innovation and Infrastructure; and **SDG 10** – Reduced Inequalities.

The local production of medical health technologies is receiving more attention on the African continent as evidenced by continental strategies such as the Pharmaceutical Plan of Action, Pharmaceutical Manufacturing Business Plan and multiple roadmaps for attaining cGMP (current Good manufacturing Practice) status for most manufacturing plants. Policy makers in the African Union’s Development Agency (AUDA) formerly NEPAD advocate for an integrated approach to developing policies for medical health technologies on the continent. Although the African Union has the Model Law on Medical Health technologies, most of the focus at continental level has been on chemical drugs with less emphasis on local production of biological, mainly vaccines. The African Vaccine Manufactures Initiative (AVMI) composed of current manufactures on the continent (South Africa, Senegal, Tunisia) as well as aspiring producers (Ghana, Kenya, Nigeria, Ethiopia) was set up to promote African local vaccine manufacture. In pursuit of this initiative AVMI set up technical working groups on advocacy, local production and financing, and they identified lack of an Africa level policy on vaccines as a key impediment to accelerating local vaccine manufacture and linkage with health systems. This workshop contributes towards the first step of developing a vaccine policy for Africa by developing a road map with key milestones and considerations of what the Africa Vaccine Policy should encompass.

This workshop has been designed to bring together industry, policy makers, academia and global health agents (local and international) under the guidance of AVMI and AUDA/NEPAD with support from TIBA to map out a way of (i) a roadmap for designing and adopting an Africa level policy on vaccines, and (ii) integrating the vaccine policy in the AU’s model law on medical health technologies if possible.

Program aim

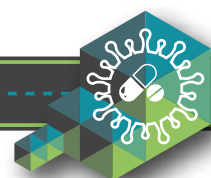
The specific aim of the workshop is the development of an integrated roadmap of an African vaccine policy, building on the expert input of vaccine manufacturing industries, national and continental policy makers, academia as well as national, continental and international vaccine programme representatives.

The roadmap will include and build on AVMI’s three high level impact goals as identified in their 2018 AGM held in Freetown, Sierra Leone.

AVMI Three key impact goals/targets : Three key impact goals were identified at the 2019 AVMI AGM in Freetown, Sierra Leone for the next 24 months.

1. Convene an African Manufacturers’ Workshop

The workshop with the current and aspiring African manufacturers will develop a strategy with respect to how manufacturers will collaborate and contribute to advancing vaccine development



and manufacturing capacity in Africa. The output of the engagement between manufacturers would also highlight where they would need assistance and support in building an enabling environment. The manufacturers' view would feed into the second impact goal.

2. Regional Economic Community Vaccine Platforms

Building on the REC vaccine platforms which have taken place in the EAC and Dubai, AVMI plans to expand the roll out of these discussion platforms within other African RECs e.g. ECOWAS, ECCAS and SADC. The aim is to raise awareness within the REC's and garner political support for advancing vaccine development and manufacture in Africa. Outcomes of these fora will be integrated into a report which will feed into the third impact goal, the MCDVMA.

3. Ministerial Conference on Vaccine Development and Manufacture in Africa (MCDVMA)

By Sep 2020 convene the MCDVMA as a follow up action to the MCIA in Addis Ababa in 2016. Identify champions who will secure support for the Conference with African Ministers of Health, Finance, Science and Technology. The MCDVMA aims to raise awareness of the need, challenge and opportunity and to generate support for advancing vaccine development and manufacture in Africa. Political buy-in will ensure that African governments create and open local markets to local vaccine manufacturers. This is THE critical success factor without which the local vaccine industry will not be viable.

Long-term workshop ambitions:

- Eventual development of an African vaccine policy
- Integration of African vaccine policy in the African Union model Law on Medical Health Technology
- Use of the African vaccine policy to promote an integrated and collaborative approach to local research and development as well as manufacture of vaccines on the continent.

Participants

The key participants for this programme are industry executives, health policy makers (national, regional and continental), and academia (in African countries and select scholars on global health from elsewhere:

- AVMI; AUDA/NEPAD; WHO AFRO; TIBA Edinburgh; Regional Economic Community (REC) Health Policy Makers; WAHO (West African Health Organisation); EDCTP;
- TIBA 9 countries Ministry of Health representatives (Botswana, Ghana, Kenya, Rwanda, South Africa, Sudan, Tanzania, Uganda, and Zimbabwe).

Venue: Southern Sun Newlands, Cape Town

The choice of the venue was driven by the fact that the current Executive Director and the Secretariat of AVMI is based in Cape Town, and in addition, Cape Town Airport handles flights from all over the world. Secondly, Biovac an innovative vaccine manufacturing plant is based in Cape Town South Africa.



Programme Outline (subject to change)

Monday 22 July	Organizing Committee Planning Session
Tuesday 23 July	Pre-Workshop Meeting: WHO Global Influenza Strategy and local production activities at WHO Site visit: Biovac
Wednesday 24 July	Road Mapping Workshop: Towards an Integrated African Vaccine Policy Day 1
Thursday 25 July	Road Mapping Workshop: Towards an Integrated African Vaccine Policy Day 2
Friday 26 July	Organizing Committee Wrap Up Session

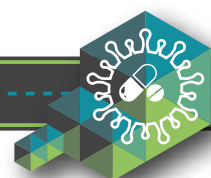
Monday 22nd July - Organising Committee Planning Session

08:30 - 09:00	Registration of Organizing Committee Participants
09:00 - 12:30	Road mapping Workshop: Towards an Integrated African Vaccine Policy Day 1 and Day 2
Coffee Break 10:30 - 11:00	<ul style="list-style-type: none"> • Confirm agenda items, speakers, facilitators, chairs, rapporteurs • Ensure workshop materials are prepared • Detailed planning of each of the sessions • Briefing of chairs/facilitators and rapporteurs
12:30 - 13:30	Lunch Break
13:30 - 16:00	If necessary, continuation of preparation work

Tuesday 23 July - Pre-workshop meetings

Pre-Meeting: WHO Global Influenza Strategy and local production activities at WHO

09:00 - 09:15	Welcome and Overview of session	William Ampofo
09:15 - 10:00	Overview of influenza at WHO <ul style="list-style-type: none"> • Overview of Global Influenza Strategy • Key policy challenges in vaccines and vaccination • Linkages to global and regional initiatives (e.g., African Network for Influenza Surveillance and Epidemiology) • Opportunities to strengthen pandemic preparedness • Linkages to global and regional initiatives 	Chris Chadwick
10:00 - 10:30	Group discussion <ul style="list-style-type: none"> • Opportunities for RECs/countries to consider for contribution to Africa's pandemic preparedness as it relates to influenza 	Chris Chadwick / William Ampofo
10:30 - 11:00	Coffee Break	
11:00 - 11:45	Overview of local production activities at WHO <ul style="list-style-type: none"> • Overview of technology transfer • Global Action Plan for Influenza Vaccines • Overview of WHO Prequalification Programme and linkages to quality 	Jicui Dong



Tuesday 23 July - Pre-workshop meetings

11:45 - 12:15	Manufacturers perspectives	Morena Makhoana
12:15 - 12:30	Next steps	Chris Chadwick / Jicui Dong
12:30 - 13:30	Lunch	

Tuesday 23 July - Visit to Biovac

13:30 - 14:00	Transfer to Biovac	
14:00 - 16:30	Site tour Biovac Overview	
16:30 -17:00	Transfer to Hotel	

Wednesday 24 July - Road Mapping Workshop Day 1

08:30 - 09:00	Registration	
<i>Morning Session moderated by Simbarashe Rusakaniko</i>		
09:00 - 09:15	Welcome and Introductions	Simbarashe Rusakaniko
09:15 - 09:30	Workshop Aim	Simbarashe Rusakaniko
09:30 - 10:00	Opening remarks • WHO • AVMI	Jicui Dong William Ampofo
10:00 - 10:30	Keynote address: Developing Innovation ecosystems that support the African Health-Industry Complex for Local Production of Medical Health Technologies	Geoff Banda
10:30 - 11:00	Coffee Break	
11:00 - 11:40	Efforts to advance vaccine development and manufacturing in Africa. • Vaccine Manufacturing and Procurement in Africa (VMPPA) Study • White Paper: Establishing Manufacturing Capabilities for Human Vaccines • Commercializing Vaccines: Case Study • Vaccine Production in Africa: A Feasible Business Model for Capacity Building and Sustainable New Vaccine Introduction	Patrick Tippoo Geoffrey Makenga
11:40 - 12:00	Africa Pharma Conference 2019 – Improve universal access to quality assured affordable essential medicines and catalyze local production in Africa.	Janet Byaruhanga
12:00 - 12:30	The African Medicines Agency and the African Medicines Regulatory Harmonization Initiative	Janet Byaruhanga
12:30 - 13:30	Lunch	



Wednesday 24 July - Road Mapping Workshop Day 1

Afternoon session moderated by Geoff Banda

13:30 - 15:00

African Manufacturers Engagement

Manufacturers and aspiring manufacturers will present and discuss their plans (and progress) in their countries and how it contributes to advancing Africa's vaccine development and manufacture capability.

- Biovac
- Institute Pasteur Dakar
- Institute Pasteur Tunis
- Vacsera
- Innovative Biotech
- Ethiopian Public Health Institute
- BioVaccines
- ASPIRx
- Biomedicalabs

15:00 - 15:30

Coffee Break

15:30 - 17:00

Action Planning 2020-2024

Considering the manufacturers' reports on their plans and progress with respect to shifting the needle in terms of Africa's vaccine development and manufacturing capability, the session will focus on gathering ideas to inform a 5 year plan of action. Groups spend 20-30 minutes at each table to discuss.

Table 1: What needs to be put in place to accelerate development and manufacture of vaccines in Africa. Identify gaps, missed opportunities, ideas for addressing challenges.

Table 2: How can policy catalyze the advancement of vaccine manufacture in Africa?

Table 3: What are the roles of the relevant stakeholders?

Outcome: Identify top 3 priority actions for each table topic.

Facilitator: Patrick Tippoo

Thursday 25th July - Road Mapping Workshop Day 2

Morning session moderated by Oyewale Tomori

09:00 - 09:15

Recap of day 1 and overview of program for day 2



Thursday 25th July - Road Mapping Workshop Day 2

Towards an integrated African Vaccine Policy

09:15 - 09:40	1. An African Vaccine Policy – A pipe dream?	Jean-Marie Okwo-Bele
09:40 - 10:05	2. Key considerations when implementing policy in a health system	Rufaro Chatora
10:05 - 10:30	3. Implementation of vaccine policies at National and Regional Levels, the roles of NITAGs and RITAGs	Elopy Sibanda
10:30 - 11:00	Coffee Break	
11:00 - 12:30	Break away sessions for groups to work on identified areas to be incorporated into an African Vaccine Policy to support local development and manufacture of vaccines	Group Leaders and Rapporteurs
12:30 - 13:30	Lunch	
<i>Afternoon session moderated by Omu Anzala</i>		
13:30 - 15:00	Presentations by groups on their deliberations in the form of a draft roadmap	All
15:00 - 15:30	Coffee Break	
15:30 - 16:30	Discussion and wrap up/next steps	All
	End of workshop for participants	

Friday 26th July - Organising Committee wrap up

09:00 - 12:30	Recap of days 1, 2, 3 and 4 - provided by the rapporteurs
	Summarize Manufacturers' Engagement – key points
	Summarize key areas identified by groups in breakaway sessions
	Create working draft of the Roadmap for the development of an African Vaccine Policy Towards the Advancement of Vaccine Development and Manufacture in Africa
	Develop Communication Plan
	Agree on next steps
	Lunch and workshop over



Presenter and Attendees Biographies (in last name order)

Dr Simon Agwale

Innovative Biotech, CEO



Simon Agwale, Ph.D is the founder and CEO of INNOVATIVE BIOTECH LTD, Keffi, Nigeria and Innovative Biotech USA Inc. Dr Agwale is a highly respected virologist/vaccinologist especially with regard to his work on HIV vaccine development. He has a vision for the development and investigation of HIV vaccine constructs from prevalent Nigerian strains which are relevant to Nigerians. Dr Agwale is currently working on development of novel vaccines against ebola, cervical cancer, malaria and HIV using innovative viral-like particles (VLPs).

Dr Agwale was West Africa's representative on HIV/AIDS for Developing countries Coordinating Committee (DCCC) at European and Developing Countries Clinical Trials Programme (EDCTP; www.edctp.org), where he was also the chair of the African Scientists committee (DCCC). He has experience in vaccine development and large epidemiological projects management. He played a key role in the development of the Nigerian HIV vaccine plan and the creation of the Nigerian AIDS Vaccine Programme (NAVAP) both of which were adopted by Nigerian Stakeholders. He is an expert adviser to the Nigerian National Advisory Committee on Vaccines & Biologicals for the National Agency for Food and Drug Administration (NAFDAC). In 2004, 2005, and 2008 Dr Agwale served on the European Commission Framework Programme 6 (FP6) and FP7 grant review committee and currently a grant reviewer for the European and Developing Countries Clinical Trials Partnership (EDCTP). Furthermore, he was an active member of the West African Consortium (WANETAM) to prepare West Africa for the conduct of clinical trials of drugs/vaccines against TB, AIDS and Malaria.

Dr. Agwale was recently elected as a board member of the African Vaccine Manufacturing Initiative. He has also authored and co-authored numerous noteworthy publications.

Professor William Kwabena Ampofo

Noguchi Memorial Institute for Medical Research, Associate Professor



William Ampofo is Associate Professor and Head of the Virology Department, Noguchi Memorial Institute for Medical Research (NMIMR), College of Health Sciences, University of Ghana, Legon, Accra, Ghana. His research interests cover molecular and serological investigations of viruses, prevention of viral infections, anti-viral therapy and viral disease burden. Prof Ampofo's work has been in basic virology, epidemiology and prevention of viral infections and capacity building of laboratory medicine practitioners. Career milestones include the laboratory discovery of the first Ghanaian HIV case in 1986, oversight of initial avian influenza investigations in poultry in Ghana and senior investigator in a clinical trial in Ghana of a microbicide to prevent HIV infections in women. He has participated several studies and has over 100 publications covering the medical sciences. Professor Ampofo is focal point - national influenza center and HIV genotyping laboratory.

He coordinates participation of the NMIMR in the WHO African region emerging dangerous pathogens laboratory network. He is supporting the African Union Africa Centers for Disease Control to utilize



advanced molecular diagnoses for disease surveillance in the sub region. He has served on temporary assignments throughout Africa with WHO, Commonwealth Secretariat Health Division, US Department of Defense, German International Development Agency and the US Agency for International Development. William has represented Africa on WHO advisory groups for influenza immunization and pandemic influenza preparedness. He was advisor - WHO International Health Regulations Emergency Committee on Ebola in West Africa. Prof Ampofo recently coordinated UNDP capacity strengthening of five countries to monitor diseases of public health importance border districts in West Africa. He also recently helped establish zoonotic and public health laboratory services in Sierra. He is currently a Senior Editor, African Journal for Laboratory Medicine and Ghana Ambassador, African Society for Laboratory Medicine. At the present, he is serving with great passion as Chairperson, African Vaccine Manufacturing Initiative.

Professor Omu Anzala

Kavi Institute of Clinical Research, University Of Nairobi, Director



Professor Omu Anzala is a Professor of Virology and Immunology in the Department of Medical Microbiology; The Director & Senior Research Scientist at KAVI – Institute of Clinical Research (KAVI - ICR), University of Nairobi, Kenya. He holds a degree in MBChB from the University of Nairobi, Kenya; a Diploma in Epidemiology - Tufts University in USA; a PhD in virology and immunology - University of Manitoba, Canada and Postdoctoral Fellow at Molecular Immunology Institute, Institute of Molecular Medicine (IMM), Oxford University, UK.

Professor Anzala is the leading HIV vaccine investigator in Kenya and was one of the founders of KAVI in the year 1999 as the HIV Vaccine research Unit in Kenya and moving it to its current status as an Institute of Clinical Research in 2013. He was co-PI of the first HIV vaccine trial in Kenya, the second in Africa, using a DNA plasmid. He has subsequently been PI or co-PI for 11 IAVI-funded HIV vaccine trials in adults and the first paediatric HIV vaccine trial in Kenya. Additionally, Prof. Anzala has been the Principal Investigator for the just completed Phase I & Phase II Candida Ebola Vaccine Trials which were funded by Jenssen & Jenssen.

Professor Anzala has a diverse background in HIV prevention research and his research has focused on the immunological and genetic correlates of long-term survival and immunologic non-progression among HIV-infected sex workers in Kenya. Related experience includes a RCT of azithromycin prophylaxis for STI and HIV, an intermittent PrEP RCT as well as multiple epidemiology studies in at-risk populations including acute HIV infection, mucosal immunology and broadly neutralizing antibody identification in HIV-infected subjects.

Professor Anzala has trained in vaccinology with WHO and serves as a member of the Ministry of Health, Vaccination Experts Committee; National Polio Expert Committee, National Vaccine Safety Advisory Committee (all in Kenya) and African Vaccine Manufacturing Initiative (South Africa).

He has authored and co-authored over 120 peer-reviewed publications, supervised and mentored over 23 Masters and 6 PhD students to successful completion of their studies and continues to do the same for many more.



Dr Joachim Auerbach

GVGH / GSK (GSK Vaccines Institute for Global Health), Head Regulatory Affairs



Joachim Auerbach studied Veterinary Medicine in Germany. After a period of 4 years with virological diagnostics and research including his doctoral thesis, he joined Hoechst Roussel Vet as Regulatory Affairs Manager Vaccines. During the 8 years at Hoechst Roussel Vet Joachim was globally responsible for the RA aspects of the products and development program of Hoechst Roussel Vet at Behringwerke Marburg, Germany. In 2000 he moved to Chiron Vaccines (later Novartis Vaccines and Diagnostics) in Siena, Italy as RA Manager responsible for part of the Meningococcal development program and later as head of Regulatory Operations. After 5 years as RA Manager at Chiron / Novartis Vaccines, Joachim gained broad experiences in the area of technical operations and development by spending 5 years as project manager in Industrial Operations and later as responsible for global planning and strategy in Technology Development at Novartis Vaccines and Diagnostics. In his current position, Joachim is responsible for Regulatory Affairs of the GSK Vaccines Institute for Global Health, located in Siena Italy (previously Novartis Vaccines Institute for Global Health). The GSK Vaccines Institute for Global Health has the mission to develop effective and affordable vaccines for high burden neglected infectious diseases.

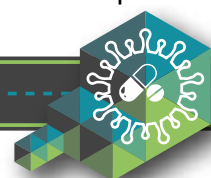
Dr Geoffrey Banda

University Of Edinburgh, Research Fellow and Co-Director of Health and Innovation



Dr Banda is the Co-Director of Health and Innovation at the Innogen Institute (<http://www.innogen.ac.uk/>) and also a Lecturer in Global Food Security in Innovation at the University of Edinburgh's Science Technology and Innovation Studies Group (<http://www.stis.ed.ac.uk/>). He is a multidisciplinary researcher on the social, practice and policy aspects of life sciences innovation, regulation and governance, especially emerging technologies. With early training in biological sciences and research experience in rapid diagnostics of Salmonella, and genetic fingerprinting in fish, he later gained food manufacturing quality assurance and laboratory management industrial experience. After postgraduate studies in biotechnology - virology and advanced plant genetic engineering, he made a mid-career change and joined the financial services industry. His experience as a corporate banker spans commercial lending, credit risk management, relationship management, structured trade finance, structured export finance and transactional banking financing. He crossed over to Social Sciences; his doctoral studies were on finance, innovation, and industrial development focusing on the financing of Zimbabwe's local pharmaceutical industry's antiretroviral drug production. His post-doctoral work covered African local pharmaceutical production and UK Cell Therapies and Regenerative Medicine commercialisation. He is currently actively involved in three research projects:

- Tackling Infectious Diseases for the Benefit of Africa (TIBA) <http://tiba-partnership.org/> an NIHR funded collaborative project between the University of Edinburgh and 9 African research institutions in Botswana, Ghana, Uganda, South Africa, Kenya, Sudan, Zimbabwe, Rwanda and Tanzania
- GCRF Inclusive societies: How to link industrial and social innovation for inclusive development:



lessons from tackling cancer care in Africa <http://www.open.ac.uk/ikd/research/health-innovation-and-equity/gcrf-inclusive-societies-how-link-industrial-and-social> . A collaborative research project with Open University, University of Sussex, KEMRI, Nairobi, Kenya, ESRF, Dar es Salaam, Tanzania, University College London and ICRIER, New Delhi, India.

- Improving root system architecture for enhanced drought tolerance and nutrient use efficiency in semi-arid agriculture of chickpea. A collaborative research project between the University of Edinburgh, Addis Ababa University, Ethiopian Biotechnology Institute at Ministry of Science and Technology, Ethiopian Institute of Agricultural Research and University of California-Davis.

Professor Cheikh Boye

Universite Dakar, Director of the Microbiology Research Lab



Cheikh Boye is the Director of the Microbiology Research Lab at Universite Dakar. From 1982 to 1985, he completed his internship in Biology & Microbiology at the University Teaching Hospital, Aristide Le Dantec, Dakar. After completing his graduate at Lycee Faidherbe in St Louis, he went to University Cheikh Anta Diop de Dakar (UCAD) and obtained his MSc in Microbiology in 1984. While completing his PhD in Virology in 1991, Cheikh was the first Senegalese to work on the Human Immunodeficiency Virus (HIV) with the Max Essex team who carried out the first study on HIV1 and HIV2 in the African regions. In 1994 he was appointed as the Associate Professor for Microbiology and in 1998 he was then appointed Professor, this position mostly involved Antimicrobials and Vaccines Research with a different patent on Microbial Diagnosis and antimicrobial susceptibility. He was associated in different activities by USAID, WHO, Sanofi Aventis, GSK

and different National and International Authorities and Organisms in Quality Control Training, Pedagogy and Vaccines /Antimicrobials Research. Prof. Boye was the previous Dean of the main Medical Faculty in Dakar, Senegal (2000-2010) and Vice Chancellor of new University of Thies, Senegal (2010-2013). He is one the co-founders of the African Vaccine Manufacturing Initiative (AVMI). Currently Prof. Boye's main interest is vaccines, biologicals and antimicrobials in developing countries, concentrating mainly Cancer and Respiratory Tract Infections Vaccines.

Dr Janet Byaruhanga

NEPAD/AUDA, Senior Programme Officer, Public Health



Dr Byaruhanga is a qualified medical doctor and public health expert that obtained her postgraduate diplomas in public health research and Management Studies from the University of Edinburgh and University of Cumbria respectively has over 13 years of experience in international development with special focus in human and social sectors. Served as health policy officer at the African Union Commission since 2007 where she provided technical leadership and oversight in development and delivery of key strategic continental policy frameworks, programmes and initiatives geared towards strengthening the continent's healthcare delivery system, food security and nutrition, and promoting the social well-being and rights of women and children.

Dr. Byaruhanga since 1st September 2017 joined the NEPAD Agency as a



Senior Programme Officer-Public health. She is in charge of coordinating and facilitating development and implementation of policies on health and medical products and ensuring their alignment with industrial development; trade; science, technology and innovation polices in advancement of the African Union's African Health Strategy and the Pharmaceutical Manufacturing Plan for Africa (PMPA).

Mr Christopher Chadwick

World Health Organisation (WHO). Technical Officer, Influenza Preparedness and Response, Infectious Hazard Management, WHO Health Emergencies Programme



Mr Christopher Chadwick is a technical officer for influenza preparedness and response at WHO where he focuses on strategy and programme management as it relates to influenza research and innovation. Previously, he served as a global health officer in the Office of Global Affairs at the US Department of Health and Human Services where he focused on policy and programmatic issues relating to pandemic influenza, biosafety and biosecurity, global health security, and data and sample sharing. Christopher has also worked on public health preparedness and response at the Association of Public Health Laboratories and Sanofi Pasteur. He received his Bachelor of Science degree in microbiology from Louisiana State University and a Master of Science degree in microbiology and emerging infectious diseases from George Washington University.

Dr Rufaro Chatora

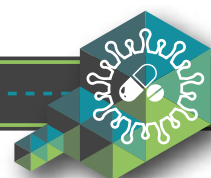
TIBA, Retired former WHO staff member



Dr Chatora has training in Medicine, Public Health and Health Economics.

Retired former WHO Staff member after 23 years. Last Assignment was as WHO Representative to South Africa. Has previously held similar positions in United Republic of Tanzania and in Kenya. As WHO Representative primarily focussed on Advocacy and Partnership building; Policy support and technical cooperation; as well as managing WHO resources in the country of assignment. Has worked at the WHO Regional Office for Africa Director during different periods leading technical teams working in AIDS, TB and Malaria; NCDs; and in Health Systems.

Before moving to WHO, had fifteen years' experience working in the Health Sector at District, Province and National levels in Zimbabwe. Last assignment was Permanent Secretary/Chief Health Officer. Has skills in managing public health programs at District, Regional and National level.



University of Zambia School of Medicine, Associate Professor of Paediatrics & Clinical Immunology and Assistant Dean for Research



Professor Chipeta is a graduate of the University of Zambia School of medicine where he obtained his Bachelor of Science in Human Biology in 1988 and then his Bachelor of Medicine and Surgery (MBChB) in 1990. He holds a PhD in Paediatrics and Clinical immunology from Mie National University Graduate School of Medicine, Japan (2000) and a Certificate of the World Health Organisation (WHO) advanced course in immunology and vaccinology as applied to infectious diseases with Luusanne University, Switzerland (2002). James Chipeta's career and professional life spans 29 years of clinical practice, academics and scholarly work. He is a recipient of two prestigious national awards; the National Science and Technology Council (NSTC) of Zambia Merit Award (2013), and the Zambia Medical Association (ZMA) Meritorious Award (2018).

He is currently an Associate Professor of Paediatrics and Clinical Immunology at the University of Zambia School of Medicine (UNZA-SOM) in the Department of Paediatrics and Child Health. Over the years, he has immensely been involved in research besides teaching, clinical practice and mentorship of several undergraduate and postgraduate students. From his postdoctoral World Health Organization and Multilateral Initiative on Malaria capacity development grant (MIM/TDR/WHO- A10631) awarded to him in 2003, he managed to establish an operations and clinical immunology focused research unit, the School of Medicine and University Teaching Hospital (UTH) Malaria research Unit (SMUTH-MRU: www.smuth-mru.org.zm). In search of novel disease point of clinical care diagnostics, therapeutic agents and prognostics indicators, James Chipeta's research focus at SMUTH-MRU, in collaboration with local and international colleagues, is primarily in the area of host cellular/ humoral immunity, autoimmunity and immunogenetics with the majority of the studies focusing on immune pathogenesis of paediatrics disease conditions (Malaria, Pneumonia, Measles, Schistosomiasis, Juvenile Idiopathic Arthritis, and Primary Immune Deficiency). The current studies are investigating the role of cytokine gene polymorphism in *Schistosoma Mansoni* disease complications elucidating the possible involvement of IL-17A gene polymorphism in *Schistosoma Mansoni* associated severe hepatic fibrosis.

In addition to research and mentorship/supervision activities, James is lead in several international/local research capacity building collaborations and grants. Notable of these include a) the International Atomic Energy Agency (IAEA) and the Government of the republic of Zambia (GRZ) funded National Newborn screening for congenital hypothyroidism and Nuclear medicine strengthening at UTH Projects (IAEA-ZAM 0-06-008 and IAEA-ZAM-06-0110), b) the International League of Associations for Rheumatology (ILAR) funded project-the Enhancement of Paediatrics and Adult Rheumatology Education and Practice (EPAREP) at UTH, and c) the Bill and Melinda Gates funded multi-site international Pneumonia Etiology Research For Child Health (PERCH) project. He sits on the Data safety Monitoring Board (DSMB) of International AIDS Vaccine Initiative (IAVI) clinical trial studies.



Mr Pedro Filipe Coito

Dawa Group, Kenya, Chief Executive Officer

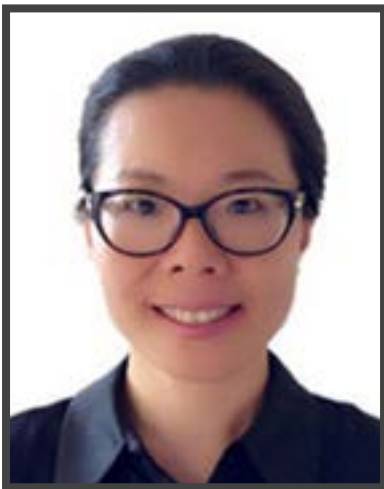


Pedro holds a degree in Naval Engineering from Instituto Superior Técnico, University of Lisbon but has built his career in Pharmaceuticals. He has vast experience in pharmaceuticals, with companies such Hikma, Generis, Roche Group and Natiris (Asia Group) and has built and commissioned several pharmaceutical facilities in his career.

Currently he is the CEO Pharma for Dawa Group and the General Manager, Shareholder & Senior Consultant at Biscobis, a regulatory consultancy.

Dr Jicui Dong

World Health Organisation (WHO), Switzerland. Programme Manager (Local Production Programme), Regulation of Medicines and Other Health Technologies, Cluster of Access to Medicines, Vaccines and Pharmaceuticals



Dr Jicui Dong (BSc, MSc, PhD, MBA) is leading the WHO Local Production Programme to provide holistic and coordinated support to Member States in strengthening sustainable local production of quality-assured medical products to improve access. She is instrumental in coordinating WHO's efforts to support the development, launch and implementation of Ethiopia's National Strategy and Plan of Action for Pharmaceutical Manufacturing Development. She is leading and coordinating regular interagency consultations on local production with UN agencies and international partners and builds partnerships and collaborations under the context of north-south and south-south collaboration. Prior to leading the Local Production Programme, she managed the Global Health R&D Demonstration Projects under the context of the Global Strategy and Plan of Action on Public Health, Innovation and Intellectual Property, and worked for the International Nonproprietary Names Programme, etc. Prior

to joining WHO, she managed biomedical research and new drug R&D, coordinated new drug development projects, and coordinated institutional fund-raising in China and Switzerland.



Dr Nhamo Archibald Gona

Ministry of Health and Child Care Zimbabwe, Senior Paediatrician



Dr Nhamo Archibald Gona is a Senior Paediatrician with the Ministry of Health and Child Care Zimbabwe. He has been working as a Paediatrician with the Ministry since 1997.

He has been involved in child health programmes at National Level, namely, Immunisation Programme, Child Survival Strategy, IMNCI (Integrated Management of Childhood Illness) and Maternal and Child Health Road Map. Dr Gona is a Core member of the AMR (Anti-Microbial Resistance) Committee. He is a part-time lecturer with the University of Zimbabwe. He is involved in training of undergraduate medical students, post graduate students and clinical officers. He is the current Head of Paediatrics Division at Chitungwiza Central Hospital.

He is Chairperson of ZIMBABWE NITAG (Zimbabwe National Immunisation Technical Advisory Group) since 2014. He is a WHO trained NITAG Consultant for the WHO – AFRO region. He assists countries within the region in establishing and strengthening their NITAGs. He is also Chairperson of Zimbabwe NCC (National Certificate Committee) on Polio Eradication.

He is a member of the Paediatric Association of Zimbabwe (PAZ) and Zimbabwe Medical Association (ZIMA). Dr Gona is a member of the Global NITAG Network (GNN) and World Medical Association (WMA).

He has been involved in research on the safety and Pharmacokinetics of Nevirapine used in infants as prophylaxis in a breast feeding population. He has been a co-investigator in several published articles on Rotavirus related diarrhoeal diseases and the impact of Rotavirus Vaccine on children under 5 in Zimbabwe.

Dr Gona is a family man and a father of 4 children. He is an avid golfer and enjoys playing the game to relax his mind and to cope with his very busy schedule. He is a Christian and a member of Celebration International Ministries (CMI). His main dream is to see the improvised Societies (Countries) in this World prosper economically and to see PEACE AND PROSPERITY prevailing in the lives of all mankind.

Mr Akhona Gura

The Biovac Institute, Purification scientist



Akhona Gura is a Purification Scientist at Biovac. He has obtained his Master of Science Degree (M.Sc.) at University of Western Cape, where he specialised in Nano chemistry. Akhona's current interest is in the development of vaccines and his expertise lies in the purification, characterization and process development of these biologicals.

Since 2016, Akhona has been working with the African Vaccine Manufacturing Initiative (AVMI) Secretariat as administrative support.



Mr Sibusiso Hlatjwako

PATH, Advocacy and Partnership Manager



Sibusiso is the Advocacy and Partnership Manager at PATH. Prior to joining PATH he worked as a public health consultant and a Public Affairs Director for the Brunswick Group. He has worked as a Public Affairs Director for Aeris and has an extensive career in public health. He is one of the people that were involved in establishing the South African TB Caucus for Members of Parliament. He has worked for CDC in Pretoria as a Public Health Specialist and other organisations such as IntraHealth and Aurum.

Sibusiso holds a Masters in Public Health and a Post Graduate Diploma in Management. His expertise is in public health, stakeholder engagement, management, policy and advocacy.

Mr Birhanu Hurisa

Ethiopian Public Health Institute (EPHI), Director



Mr. Birhanu Hurisa is a researcher mainly focused on vaccine development and manufacturing. For the last ten years, he has been working on rabies vaccine development, anti-venom production, and technology transfer. Mr. Birhanu earned his MSc from Haramaya University in Biotechnology. He has a Diploma from Institute Pasteur, Paris, France, in Vaccinology.

Mr. Birhanu Hurisa has successfully produced cell culture-based rabies vaccine for the first time in Ethiopia (Birhanu Hurisa et al./Procedia in Vaccinology 7 (2013) 2-7). He successfully transferred cell culture-based rabies vaccine manufacturing process to the National Veterinary Institute. He was a team leader for cell culture-based rabies vaccine production before he was promoted to Director Position at Vaccine and Diagnostic Production Directorate in Ethiopian Public Health Institute in May 2015. He prepared, vaccine manufacturing roadmap for Federal Ministry of Health of Ethiopia.

He is a member of National One Health Steering Committee. Mr. Birhanu has prepared a 'National Canine Rabies Control and Elimination Strategy' in 2018. He has published more than nine original research works on internationally reputed peer-reviewed journals. He was awarded, Royal Society of Tropical Medicine and Hygiene small grant, grant program 2014, ISV CONFERENCE TRAVEL AWARDS, Bacti-Vac Grant Writing Workshop Award – 19 March 2019, Travel Bursary Award – Bacti-Vac 2nd Annual Network Meeting - March 2019. He has also received Institute Pasteur Vaccinology 3-28 March 2014 and 17th Advanced Vaccinology Course (ADVAC), from May 23, 2016, to June 03, 2016, Foundation Merieux's, LES PENSIERES, VEYRIER-DU—LAC, FRANCE fellowships.



Mr Charles Kamau

KEMRI – Wellcome, PhD Fellow



Charles Kamau is a PhD Fellow based at KEMRI – Wellcome currently looking at private sector engagement in vaccine research and development. Prior to his PhD fellowship, Charles was the communication and engagement lead at KEMRI – Wellcome’s Training Department. Charles holds a Postgraduate Diploma in Health Research Methods offered jointly by Pwani University & KEMRI – Wellcome Trust. His PgDip project focused on the situational analysis of Blood Transfusion Services in the Coastal Region of Kenya which in detail described the supply of blood by the Mombasa Regional Blood Transfusion Services and usage at Kilifi County Hospital.

Charles has a background in Nursing and Public Health with a Certification in Science Communication by the University of the West of England, UK. He is also a Global Affiliate of the Chartered Institute of Public Relations (UK).

He has over 6 years of free-lance communication experience spanning from events to social media to TV and Radio. He is currently responsible for all Communication and Public Engagement related activities within the Initiative.

His research interests revolve around communication and engagement activities in the field of vaccinology in Africa.

Professor Mandy Kader Konde

Foundation on Health & Sustainable Development (FOSAD), Chair



Professor Konde is the Chair of the Foundation on Health & Sustainable Development (FOSAD) and Executive Director of the Center of Research on priority diseases (CEFOPAG) in Guinea Conakry. He has over 40 years of experience cutting across academia, clinical trials, public health management, and epidemic preparedness and response.

Starting in 1977 as a district health manager, he moved into academia and served as Chair of the Department of Public Health at the University of Conakry (UGAN) between 1988 and 1995. He also concurrently held the position of Director of Health Services at the Guinea MoH (1990-1995), and led the implementation of the primary health program.

In 1995 he moved to the World Health Organization (WHO), starting with the response to the Ebola outbreak in Kikwit Zaire (DRC). He served as surveillance and immunization & vaccine development officer in various African countries with the WHO.

Between 2004 and 2009, he served as WHO focal point for the development, testing and introduction of the Men A conjugate vaccine under the Meningitis Vaccine Project based in Geneva and Ouagadougou. In this role, Professor Konde was involved in the Men A vaccine introduction and the African Regulatory & Ethical capacity building.

Professor Konde played a crucial role in the 2014-2016 Ebola outbreak, chairing the Guinea Ebola Research



Commission. He served as co-principal investigator for several clinical trials including the Guinea rVSV Ebola vaccine Phase 3 trial. He is currently involved in the Guinea Ebola survivors' immunology study working with Public Health England, as well as the development of primers in social science with Western University (Canada).

He received degrees in Medicine from University of Conakry, Pediatrics, Nutrition, Public health, Epidemiology from university of Nancy in France, and health economics from Boston University in the USA.

Dr James Hongo Kimotho

Kenya Medical Research Institute, Head of the KEMRI Production Department



Dr. James Kimotho is the head of KEMRI Production Department, which is responsible for management of innovation and technology transfer at the Kenya Medical Research Institute (KEMRI). Prior to joining KEMRI, James worked in pharmaceutical manufacturing sector in Kenya for more than thirteen years formulating various products and ensuring their quality. At KEMRI, James has been involved in development and commercialization of medical products that include: Reverse Hemagglutination-based kit for detection of Hepatitis B virus (HBV), Rapid diagnostic tests (RDTs) for HBV, HIV and Rift Valley Fever, Enzyme-linked Immunosorbent Assay (ELISA) for HBV, and Proficiency testing panels for HIV, among others. Currently, James is spearheading three key projects at KEMRI namely; the establishment of the capacity to conduct Bio-equivalent Studies in East Africa, development and production of snake antivenins in Kenya, and establishment of the capacity to develop and produce human vaccines in Kenya. James, who has

published more than twelve papers in peer-reviewed journals and two books, is also an Honorary Lecture of Molecular Pharmacology at the University of Nairobi, member of the National Technical Working group of Pharmacovigilance and the member of the National Committee of Experts on Clinical Trials.

Mr Ethney Kibet Kiprop

Dawa Group, Kenya, Strategy and Project Lead



Ethney holds a degree in Finance from Manhattanville College, New York and MBA from ESMT Berlin, Berlin. Started career in finance, then to PAYGO energy space and now building a career in Pharmaceuticals.

Currently leading the strategic projects for Dawa Group. Ethney believes in the future of the African continent and is passionate about projects that will have positive impact on the millions of the people, especially people at the bottom of the pyramid.



Ms Daria Kow

AVMI, Information Officer



Daria Kow has been involved in vaccine manufacture for the past 30 years, working in areas of production/processing, Quality Control Testing, Quality Assurance monitoring and the development of viral, bacterial and recombinant vaccines. Most recently, her activity has been the construction and organisation of a simple quality system based on the PIC/s GMP Guideline for the early stage of product development for vaccines. This is based on ensuring that all items are recorded and documented and most importantly, checked for both technical correctness and for intellectual property ownership, but with the flexibility required for quick changes within the processing area.

Daria has experience in knowledge management and to date mostly been focused on the storage of information but has plans to expand this to the organisation of the collected information. This includes explicit knowledge (which she has collected in various libraries and has trained individuals to find this) and to a more limited degree recording of tacit knowledge mostly as historical records.

Daria is currently employed at The Biovac Institute within the Science & Innovation department where she oversees the quality aspects of the development vaccines.

My assistance in AVMI has been on the collection of explicit knowledge and ideas on the storage and later presentation of the collected knowledge.

Dr Geoffrey Makenga

National Institute for Medical Research (NIMR), Tanzania. Research Scientist / PhD fellow.



Geoffrey Makenga is a medical doctor (M.D), vaccinologist and pharmaceutical clinical development specialist. He achieved his medical degree in 2010 at the Muhimbili University of Health and Allied Sciences (MUHAS) in Dar es Salaam, Tanzania. Dr. Makenga joined NIMR in the year 2012 as a study physician (Research Scientist) and grew his career on clinical trials of vaccines and pharmaceuticals. His interest is on infectious disease prevention and control. In this, he has been involved as an investigator in clinical trials of pneumococcal and Haemophilus influenza (Hib) vaccines, and pharmaceuticals for prevention of malaria in pregnancy and school children living in high endemic areas.

In 2016, Dr. Makenga successfully graduated a second level masters degree on Vaccinology and Pharmaceutical clinical development, at the University of Siena, Italy. During his masters training, he spent six months as an intern at the GSK Vaccine Institute for Global Health (GVGH), Italy, where he was involved in regulatory affairs, research and development of vaccines for shigella and invasive non-typhoidal salmonella (iNTS). He became curious to find out why African countries lag behind on vaccine manufacturing despite carrying a high burden of infectious disease globally. He then did a study on vaccine production in Africa: a feasible business model for capacity building



and sustainable new vaccine introduction [<https://doi.org/10.3389/fpubh.2019.00056>]. In this study, he explains the challenges and proposes possible solution for establishment of vaccine production in Africa. His dream and vision is to see Africa liberate itself especially from vaccine preventable diseases that are almost exclusive in Africa such as malaria, iNTS, Cholera, including frequent outbreaks of Ebola.

Currently Dr. Makenga is a PhD fellow majoring clinical epidemiology at the University of Antwerp, Belgium. His study is a clinical trial focusing on intermittent preventive treatment of malaria in school children of high endemic areas in Tanzania.

Ms Ethel Makila

International AIDS Vaccine Initiative (IAVI), Associate Director Advocacy Policy and Communications



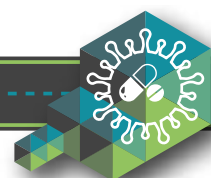
Ethel Makila is the Associate Director for Advocacy Policy and Communications at the International AIDS Vaccine Initiative. She is responsible for leading IAVI African programs in political, policy and science advocacy; designing and implementing innovative policy initiatives that accelerate vaccine research and development, and HIV biomedical prevention research options in Africa; and designing and implementing communications initiatives related to Africa programs. A high-level professional with over 10 years working in communications and partnership engagement for both profit and non-profit agencies, she worked largely in Strategic Communications before transitioning to Policy Advocacy and Community Engagement. She holds a Bachelors of Arts Degree in Design from the University of Nairobi and is currently completing her MSc in Agricultural Information and Communications Management from the same institution.

Dr Morena Makhoana

The Biovac Institute, Chief Executive Officer



Morena Makhoana is the Chief Executive Officer of The Biovac Institute, Southern Africa's only human vaccine manufacturer. Biovac has successfully built modern biotech infrastructure in partnership with the South African government and has successfully entered into partnership with global vaccine organisations for the development of new vaccines as well as technology transfers for the local manufacture of leading vaccines. Morena's primary focus has been to ensure that the strategy of end to end capability in vaccine development and manufacture is realised in Southern Africa through Biovac. Prior to the current position, he was the deputy CEO of Biovac and before that Medical Affairs Manager of Biovac. Morena is a qualified medical graduate from the University of Cape Town (UCT). He has also participated in Senior Executive Program studies with both Stanford Graduate School of Business and most recently with Harvard Business School.



Mr Tarisayi Matongo

The Biovac Institute, AVMI Administrative support



Tarisayi Matongo is a qualified bioprocess engineer (MSC, UCT) by training. He is currently employed in the Science & Innovation department at The Biovac Institute in South Africa as an Upstream Scientist, where he is involved in the development, optimization, scale-up and technology transfer of process unit operations for production of target APIs.

In addition to work at the Biovac Institute, he volunteers his time to the African Vaccine Manufacturing Initiative (AVMI) Secretariat as administrative support.

Mr Zinabu Temesgen Melsebo

John Snow Research and Training Inc, Regional Immunization Manager



Zinabu Temesgen Melsebol is an Ethiopian public health expert by profession (BSc in public health officer and MPH).

He has a total of ten years of working experience as an expert, clinician and district health manager for the Ethiopian Ministry of Health. Zinabu has worked at different international NGOs like MSF- Belgium, World Vision USA, and Bill and Melinda Gate foundation/JSI. During his career he has directly worked on public health activities like nutrition, maternal and child health, operational research, immunization and vaccine management.

He is currently attending MSc Medicine in the field of Vaccinology at Witwatersrand University.

Dr Ebrahim Mohamed

AVMI, Director



Ebrahim Mohamed is a Synthetic Organic Chemist by training. After completing his PhD from the University of Cape Town in 2009, he joined the Science and Innovation (S&I) Department at the Biovac Institute (BIOVAC) where he established his expertise in the development of glycoconjugate vaccines. As Group Leader he currently manages all the CMC related activities with the Science and Innovation department. He has accumulated experience in both inward and outward bound technology transfers and his responsibilities have expanded further to include support to manufacturing operations at Biovac.

In 2015 Ebrahim became a key member of the secretariat team of the African Vaccine Manufacturing Initiative (AVMI) where he has played a pivotal part



in assisting with the coordination of the AVMI Vaccine Manufacturing and Procurement in Africa (VMPA) study. He was elected as a member of the board, representing the Southern African Region in 2016. Ebrahim has published several publications in reputable peer-reviewed journals.

Dr Nabil Mohamed Amin

Biomisr group, CEO



Dr Nabil Mohamed Amin is one of the Egyptian experts in the production and commercialization of human vaccines and sera. He was born in Assuit, Egypt in June 27, 1956. After high school, Nabil enrolled at the University of Assuit, and graduated in 1980 with a Bachelor of Science in Microbiology.

He joined VACSERA (at that time The Egyptian Organization for Vaccines and Sera) since September 1980 and worked in the production of Tetanus Toxoids. He gained the knowledge and experience in fermentation, filtration, concentration processes etc. Starting from 1990, he was the supervising officer for the production of Diphtheria - Tetanus -Pertussis (DTP) vaccine.

In 1995 he was promoted to Manager of the central area of preparation and filling of bacterial vaccines where he kept training his subordinates on production and quality control. In 2006 he held the position of the vice chairman for the technical office.

In 2013, Dr Nabil took a new challenge as he was elected as Chairman of ECAP (The Egyptian Company for Advanced Pharmaceuticals) the first specialized pharmaceutical aerosols production company in the Middle East.

Dr Nabil moved back to VACSERA in 2017 and was nominated as the Chairman of the company.

Dr Vera Mugittu

University of Edinburgh, Research Fellow



Dr Mugittu holds a PhD in Science, Technology and Innovation Studies from the University of Edinburgh where she is a Research Fellow working to improve diagnostic technologies for a better use of antibiotics in livestock farming in an international context. Dr. Mugittu's professional experience spans two decades of engaging with actors in different countries in Africa, Asia, Europe, USA and Latin America. Her major focus is to promote cross-learning and to stimulate demand and utilization of new knowledge, technology and innovation for rural growth. Between 2006 and 2007 she worked with the Ford Foundation and the Brazilian Government to design innovative (including technological) solutions to increase access to quality health and education in the Amazonia State. Throughout her career, Vera analyzed, promoted and lobbied for policy change to create a conducive environment for agribusiness in the East African Region. In 2009, Vera was involved in the policy and structural reforms towards harmonization of

regional policies in dairy trade. Between 2016 and 2017, Vera worked with the World Bank to analyze and later facilitated regulatory reforms to promote competitiveness in the livestock sector in Tanzania.



In 2000 Vera managed the 'Spin-off Thrust' of the Swiss Agency for Development and Cooperation (SDC) responsible for collecting lessons from 6 SDC-funded projects in agriculture, health, infrastructure, water and education sectors, and facilitated cross-fertilization. In 2011, she was among the Country Coordinators responsible for compiling lessons from a 5-year DFID-funded £50M Research Into Use (RIU) program implemented in 6 African countries and in Asia and Latin America. Dr. Mugittu, is also active on climate change dialogues especially on adaptation and technology transfer in the context of developing economies. She actively engages with African governments, CSOs, the private sector and development partners at national, regional and international levels to advocate and practically build climate resilience and adaptation capacity for Africa's livelihood gains and economic growth.

Dr Juliet Nabyonga-Orem

World Health Organisation, Medical Officer



Dr Nabyonga-Orem works for the World Health Organisation (WHO) as a Medical officer in charge of health policies, strategies and governance. She also heads the health systems and services cluster of the WHO Inter-country support team for East and Southern Africa. Her current work involves providing technical expertise to the 20 countries in East and Southern Africa to strengthen their health systems. Previously, she was the Regional advisor on health systems partnerships, monitoring and evaluation based at the WHO Regional office for Africa in Congo Brazzaville. Prior to moving to the Regional office, she worked at the WHO Uganda office as a Health Economics advisor and head of the health systems and services cluster. Before joining WHO, Juliet worked at various levels of the health care system in Uganda.

Juliet is a graduate of Makerere University, Kampala Uganda where she obtained MB ChB, obtained a MSc in Health Economics from University of York, UK and a PhD in Public Health from Catholic University of Louvain, Belgium. Her experience in health system development spans over 18 years within Africa focusing mainly on building countries' capacity in policy development; strategic planning; health financing; designing, implementing and evaluating health sector reforms; health system performance assessment and economic evaluation. She has extensive research experience on various aspects of health systems and health services such as; health financing, knowledge translation, evaluation of health sector reforms, identifying solutions to barriers in service delivery, health and poverty, economic evaluation costing and cost effectiveness analysis. She is a member a several scientific committees including the Africa Health Economics and Policy Association (AfHEA); Health systems Global; and a member of the Scientific advisory committee of the European and developing countries clinical trials partnership (EDCTP).



Dr Abdulsalami Nasidi

Reachcare foundation Nigeria, Executive Vice-Chairman



Abdulsalami Nasidi is a medical officer with over 42-years of experience in public health, virology and the biotechnology. He was born in the year 1952 in Garko, Kano State of Nigeria. He graduated in the year 1977 with an M.D. degree in medicine from Kalinin State Medical Institute, USSR; and acquired a Masters Degree (M.Sc) in Epidemiology in 1979 and a Ph.D (Virology), 1983.

Dr Nasidi was a Senior Research Fellow at the National Institute for Medical Research, Yaba, Lagos and became the head of the Federal Vaccine Production Laboratory, Yaba, he then became the nation's Chief Epidemiologist. In 1996 the Director, Public Health at same Ministry in the year 2007. He was the first Chairman of the Country Coordinating Mechanism (CCM) of the Global Fund to Fight AIDS, TB and Malaria, in which position he oversaw the development of proposals that generated more than \$680 million for Nigeria's HIV/AIDS, TB and Malaria programmes. He was also Chairman of the Presidential Task Force for Polio Eradication in 2008 was a co-developer of Hepatitis B vaccine and snake anti-venom against the carpet viper and two other Nigerian poisonous snakes. Dr Nasidi was appointed by the President to organize the national response to the 2014 Ebola Viral Disease outbreak in Nigeria. He has more than 50 publications in national and international journals and was recognized by Nigerian Government with the award of a national honour of the Officer of the Order of the Niger (OON) in the year 2002.

As a Professor of Virology and Biotechnology, he served as the pioneer Director/Chief Executive Officer for the Nigeria Centre for Disease Control (NCDC) and was also recognized and appointed to establish the ECOWAS Centre for Disease Control (ECOWAS CDC) by the ECOWAS Council of Heads of State.

Currently, Dr Nasidi is serving as the Pioneer Provost of College of Health Sciences of University of Africa, Toru-orua, Bayelsa State.

Mr Livhuwani Charlie Nemugumoni

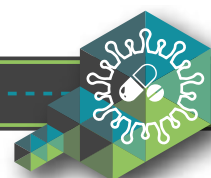
AVMI, Legal Support



Charlie Nemugumoni heads up the intellectual property cluster specialising in patents and technology transfer.

He has experience in the product development of pharmaceutical active ingredients (API) within the vaccine space. He joined the Biological and Vaccine Institute (BIOVAC) in Cape Town as a scientist in the R&D department. His product development activities involved the extraction and purification API for various vaccines.

Charlie holds an undergraduate degree in biological sciences and Honours degree in industrial biotechnology. He pursued a master's degree in Bioprocess engineering at the University of Cape Town and he recently submitted his final thesis for Bachelor of Laws (LLB) at University of South Africa specialising in Intellectual Property Law.



His expertise extends to the assessment of the patentability of inventions, preparation and facilitating of patent applications locally and abroad, performance of freedom-to-operate assessments, general IP commercialisation and IP due diligence assessments. He also supports the African Vaccine Manufacturing Initiative (AVMI) with legal compliance related matters.

Mr Everest Okeakpu

Biovaccines Nigeria, Project Manager



Mr. Everest Okeakpu, was appointed Project Manager, Biovaccines Nigeria Limited (BVNL) in August 2017. BVNL is the Joint Venture with the Federal Government of Nigeria to revive Local Vaccines Manufacturing (LVP) in Nigeria.

Mr. Okeakpu who started his career with May & Baker as an Intern Pharmacist in 2005, has held several other positions in the company including Business Development Manager, Specialist Business Manager North; with responsibility for promoting the company's promoted and ethical products in the 18 Northern states of Nigeria.

He has also served as Specialist Business Executive and Specialist Business Manager. Lagos.

Mr. Okeakpu holds a Bachelor of Pharmacy (Honours) degree from the Obafemi Awolowo University Ife, Ile-Ife and an MBA (in view) from the University of Ibadan School of Business.

He is a husband and father, and a Member of the Pharmaceutical Society of Nigeria (PSN) and Nigerian Institute of Management (NIM).

Dr Jean-Marie Okwo-Bele

Independent Consultant, Currently serving as Senior Advisor to the Health Minister of the DR Congo on strategic matters related to vaccines and immunization



During his 36 years of public health, Dr Okwo-Bele has worked at the national level in the Dem Rep of Congo, at the WHO regional office for Africa as well as at the UNICEF and WHO Headquarters, in support of child health, disease control and immunization programmes, contributing to policy formulation, management capacity support, advocacy and fundraising.

From 1993 to 2002, he directed the Polio Eradication Initiative in Africa, resulting in the reduction of polio endemic countries from 34 to 2 and promoted the inclusion of new vaccines in national immunization programmes.

At the WHO Headquarters, he facilitated the development of the Global Vaccine Action Plan 2011-2020, its endorsement as well as its yearly progress monitoring by the World Health Assembly. Under his leadership since 2005, the WHO's vaccine policy-making processes and recommendations became a much needed reference in guiding country level vaccine adoption as well as global level investments in the field of immunization.



Dr Okwo-Bele has been involved with the Gavi Alliance since its inception and was the WHO alternate member of the Gavi alliance board and member of the GAVI Alliance Policy and Programme Board Committee (PPC) for several years.

After his retirement from WHO, he served as Senior Advisor to the Health Minister of the D.R.Congo on strategic matters related to Ebola outbreak control (May 2018-April 2019) and continues to advise the Health Minister on vaccines and immunization matters.

Dr Okwo-Bele received his Medical Degree from the Medical School of the University of Kinshasa in the Democratic Republic of Congo and holds a Master of Public Health from the Johns Hopkins Bloomberg School of Public Health. He was awarded the Rotary Paul Harris Fellow recognition in 1998.

Mr Gareth Poxon

University of Edinburgh and TIBA Secretariat, IT Specialist



Gareth has 15 years' experience working as an IT professional in the Life Sciences Sector. In his current role at the University of Edinburgh, he manages a team providing technical support to the School of Biological Sciences, in areas such as Learning Technology, Bioinformatics and Data Science.

As part of the TIBA secretariat, he provides specialist IT support for field work, administrative support at workshops and events, and provides graphic design for the TIBA global brand.

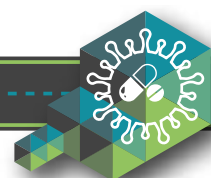
He holds an Honours degree in Computer Science and is training to become a specialist in Data Science.

Professor Simbarashe Rusakaniko

TIBA Zimbabwe & University of Zimbabwe, Professor of Biostatistics, Research & Epidemiology



Professor Rusakaniko holds a PhD in Biostatistics and Epidemiology. He is the former Chairman of the Department of Community Medicine at the University of Zimbabwe, College of Health Sciences. He is also currently the Director and coordinator of Clinical Epidemiology Recourse Training Centre Department (CERTC). He is a Senior Professor in Biostatistics and Epidemiology in Community Medicine at the University of Zimbabwe. He holds a DPhil in Adolescent Reproductive health awarded by the University of Zimbabwe in 2003, and he also holds an MSc in Epidemiology and Biostatistics. He has worked on over 20 collaborative research projects and has published over 150 peer-reviewed articles. He is currently actively involved in research projects: *Tackling Infectious Diseases for the Benefit of Africa (TIBA)* <http://tiba-partnership.org/> an NIHR funded collaborative project between the University of Edinburgh and 9 African research institutions in Botswana, Ghana, Uganda, South Africa, Kenya, Sudan, Zimbabwe, Rwanda and Tanzania. He is the country TIBA PI for Zimbabwe on this programme. He is also the Co-Lead on the TIBA project TOOLKIT 3.



Mrs Melissa Schouw

AVMI, Executive and Administrative Assistant



Melissa Schouw is currently the Executive and Administrative Assistant at AVMI. With 12 years of office administration and coordination experience, she is responsible for all office operations including bookkeeping, legislation compliance, financial management and membership liaising.

Since her employment in 2016, she has coordinated two annual general meetings (Cape Town and Sierre Leone), an Advocacy Workshop and is currently assisting with the planning of this workshop - Towards an Integrated African Vaccine Policy.

Professor Elopy Sibanda

University of Science and Technology in Zimbabwe - Professor in Immunology and Allergy



Professor Sibanda completed his medical studies in 1986, worked as a District Medical officer before proceeding to the University of Birmingham, UK for specialization. He holds dual specialist Certification in Clinical and Laboratory Immunology. He is currently a Professor in Immunology and Allergy at the National University of Science and Technology in Zimbabwe. Previously a Professor at the University of Zimbabwe (1997-2007) where he was instrumental in establishing the Department of immunology.

He founded The Asthma, Allergy and Immune Dysfunction Clinic in Harare. The focus of the clinic that attracts referrals from neighboring countries is to offer specialized laboratory diagnosis and clinical management of patients with allergic, autoimmune and immunodeficient patients.

Professor Sibanda has been Laboratory Advisor to the 15 Member States Southern African Development Community (SADC). He has travelled extensively in that region, where his responsibility was to strengthen laboratory capacity to respond to the three major communicable diseases (Hd AIDS, Tuberculosis and Malaria). He was instrumental in the establishment of Regional Supranational Reference Laboratories for communicable diseases. The next phase of the project is to strengthen national and regional capacity to control non-communicable diseases including Asthma. He has attended several WHO run courses in Arusha Tanzania, Maputo Mozambique and the Advanced Course of Vaccinology (ADVAC) at Les Pensières France. Elopy founded the Zimbabwe Allergy and Immunology Societies in order to create awareness and promote training in the disciplines. He was also co-founder of the Federation of African Immunological Societies (FAIS) of which he was President and Executive Member for 12 years. He represented FAIS in the Councils of the International Union of Immunological Societies. Professor Sibanda has organized International Conferences under the heading of African International Conference on Immunity (www.aici.org). He hosted the WAO ESP in 2013.

He currently serves in the 2016-19 Member of World Allergy Organization Committees for Communications, Emerging Societies and Allergy in Developing Countries.



Mr Patrick Tippoo

AVMI, Executive Director



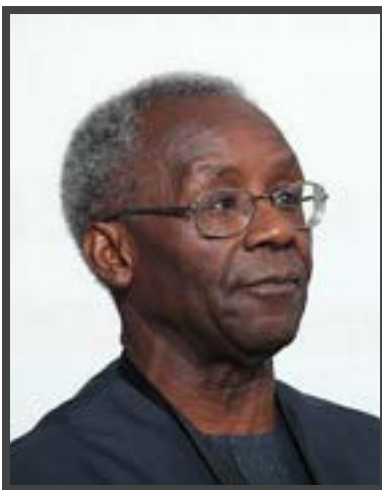
Patrick Tippoo has more than 30 years experience in the vaccine manufacturing industry and has been with Biovac, a private public partnership in South Africa, since its inception in 2003. His responsibilities at Biovac have included product development, strategic alliance partnering, international relations, projects and business development. Currently as Head of Science and Innovation he is focussed on growing Biovac's product development capability and scientific & technical capacity as a centre of excellence for vaccine development and manufacture in Africa.

He is a founding member of the African Vaccine Manufacturing Initiative (AVMI) and is passionate about breaking Africa's cycle of dependency and reliance on supply of much needed vaccines from outside Africa. He is a strong advocate for the establishment of vaccine development and manufacturing capacity in Africa.

Patrick has also served as a member of the Executive Committee and the Grant Advisory Committee of the Developing Country Vaccine Manufacturers' Network (DCVMN) since 2014.

Professor Oyewale Tomori

Biovaccines Nigeria, Chair



Professor Tomori is the immediate past President of the Nigerian Academy of Science with experience in virology, disease prevention and control. He was at the University of Ibadan from 1971 to 1994. He later served as the pioneer Vice Chancellor of the Redeemer's University in Nigeria from 2004 to 2011. From 1994 to 2004, he was the virologist for the World Health Organization (WHO)'s Africa Region, establishing the African Regional Polio Laboratory Network. In 1981, he was recognized by the U.S. Centers for Disease Control and Prevention (CDC) for contributions to Lassa fever research. In 2002, he received the Nigerian National Order of Merit, the country's highest award for academic and intellectual attainment and national development. He has authored/co-authored over 150 scientific publications. Dr. Tomori has served or continues to serve on numerous advisory committees, including: (nationally) - Chair, Lassa Fever Steering Committee, National Laboratory Technical Working Group, Expert Working

Group on Polio Eradication and Routine Immunization, etc, and (internationally)- WHO SAGE, WHO Africa Regional Polio Certification Committee, WHO Group of Experts on Yellow Fever Disease, Chairman WHO Yellow Fever Emergency Committee on International Health Regulations, GAVI Board, Vice Chair of U.S. National Academy of Medicine Global Health Risk Framework Commission, and World Bank Interagency Working Group on Financing Preparedness and Response. He is an international member of the U.S. National Academy of Medicine and currently Chair, Board Biovaccines Nigeria Ltd.



Mr Matthew Williams

AVMI, Administrative support



I currently serve as a downstream scientist in the S & I division at the Biovac Institute, where I am directly involved with the preparation and purification of target APIs. I also assist AVMI in an administrative support role.

My core interest lies in the development and distribution of robust and affordable vaccines to combat highly infectious diseases. In addition to this I am particularly interested in the relationship between healthcare and education NGOs and how this can be better utilised to aid communities afflicted by disease and poverty.

Other Attendees

Ms Monica Acquaaah-Arhin, Associate Professor, Noguchi Memorial Institute for Medical Research

Dr Batholemew Ibeh, Director, National Biotechnology Development Agency

Mr Abdul Kpakra-Massally, Acting West Africa Manager, Biomedicalabs, LLC

Mr Mwai Ngibuini, Merck

Dr Alexander Ochem, AVMI







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