



International

CPHIA | 2021

Conference on Public Health in Africa

CONFERENCE REPORT

1ST INTERNATIONAL

CONFERENCE ON PUBLIC HEALTH IN AFRICA

CPHIA 2021 | 14–16 DECEMBER 2021



FOREWORD

The first international Conference on Public Health in Africa (CPHIA 2021) was hosted virtually by the African Union (AU) and Africa Centres for Disease Control and Prevention (Africa CDC) from 14-16 December 2021. This historic three-day conference focused on the need to address long-standing health challenges on the continent, including vaccine inequity and manufacturing capacity, the ongoing COVID-19 pandemic, and the need to build resilient health systems.

Support and political commitment to CPHIA 2021 and the AU New Public Order was evident in the opening and closing ceremonies, which included African Heads of State and leaders of Government, as well as key leaders of international health agencies.

Across seven scientific plenaries, nine parallel sessions, two special sessions, and eight abstract driven sessions, CPHIA 2021 had 232 African policymakers, scientists, public health experts, data experts, and civil society representatives who presented the latest learnings and research from the COVID-19 pandemic, as well as the actions needed to better guard against current and future health crises. In addition, 40 parallel side events were hosted by various health institutions and agencies.

Throughout the pandemic, many African countries have demonstrated tremendous leadership, acting quickly to limit the impact of the virus. However, Africa's dependence on international sources for vaccines, drugs, diagnostics, and health supplies has made it difficult for governments to mount a fully localized response.

There was an overwhelming consensus that it is time for change – Africa must stand up, Africa must unite, and Africa must put in place the necessary systems for it to safeguard the health of its people. Despite the immeasurable human cost and unintended economic implications, COVID-19 has created a historic opportunity for the African continent to build a new public health order – one that can secure Africa's future and guarantee its continued development.

We are grateful to the Africa CDC for all of their efforts to improve public health in Africa, including spearheading CPHIA; and to the members of the Organizing Committee for their constant support and contributions in planning this conference.

We are excited to announce Rwanda as the host for CPHIA 2022, from 13-15 December 2022. We hope to see you there in person!



Professor Agnes Binagwaho, MD, M(Ped), PhD
Co-Chair CPHIA 2021

Vice Chancellor and Professor of Pediatrics
University of Global Health Equity
Kigali, Rwanda



Professor Senait Fisseha, MD, JD
Co-Chair CPHIA 2021

Director of Global Programs
The Susan Thompson Buffett Foundation
Omaha, Nebraska



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ORGANIZING COMMITTEE MEMBERS

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- 3. Aggrey Ambali, PhD** – New Partnership for Africa's Development (NEPAD), South Africa
- 4. Agnes Kiragga, PhD** – Makerere University, Uganda
- 5. Ahmed Ogwel Ouma, MPH, BDS** – Africa CDC, Kenya
- 6. Alain Tehindrazanarivo** – University of Anatananarivo, Madagascar
- 7. Alimuddin Zumla, MBChB, PhD** – University College London, United Kingdom
- 8. Amadou Alpha Sall, PhD** – Institut Pasteur de Dakar, Senegal
- 9. Ames Dhai, PhD, MBChB** – University of the Witwatersrand, South Africa
- 10. Amit Thakker, MBChB, eMBA** – Africa Health Business, Kenya
- 11. Charles Shey Wiysonge, MD, PhD** – Cochrane South Africa, South African Medical Research Council, South Africa
- 12. Chikwe Ihekweazu, DTM&CM, MBBS** – Incoming Assistant Director-General, WHO Hub for Pandemic and Epidemic Intelligence, Germany
- 13. Chinwe Ochu, MBBS, MPH** – Nigeria Centre for Disease Control (NCDC), Nigeria
- 14. Christian Happi, PhD** – African Centre of Excellence for Genomics of Infectious Diseases (ACEGID), Redeemer's University, Nigeria
- 15. Daniel Bausch, MD** – Foundation for Innovative New Diagnostics (FIND), United Kingdom
- 16. David Heymann, BA MD, DTM&H** – Global Health Programme, Chatham House, United Kingdom
- 17. Deborah Watson-Jones, PhD, MBBS** – London School of Hygiene and Tropical Medicine (LSHTM), United Kingdom
- 18. Ebere Okereke, DTM&H, MBBS** – Tony Blair Institute for Global Change, United Kingdom
- 19. Echezona Edozie Ezeanolue, MD** – University of Nevada School of Medicine, United States
- 20. Edem Adzogenu, MD** – AfroChampions, Ghana
- 21. Ehimario Uche Igumbor, PhD** – Independent Public Health Consultant, Nigeria
- 22. Francine Ntoumi, PhD** – Fondation Congolaise pour la Recherche Médicale, Republic of Congo
- 23. Francois-Xavier Mbopi-Keou, PhD** – University of Yaoundé, Cameroon
- 24. Georges Alain Etoundi Mballa, MD** – Ministry of Public Health, Cameroon
- 25. Githinji Gitahi, MD** – Amref Health Africa, Kenya
- 26. Glenda Gray, MBBCh** – South African Medical Research Council (SAMRC), South Africa
- 27. Hassan Sefrioui, PhD** – Moroccan Foundation for Advanced Science, Innovation & Research (MAScIR), Morocco
- 28. Helen Rees, MRCGP** – Wits Reproductive Health and HIV Institute, South Africa
- 29. Ilesh Jani, MD, PhD** – National Institute of Health, Mozambique
- 30. Iruka Okeke, PhD** – University of Ibadan, Nigeria
- 31. James Eustace, BSc (Hons) Economics** – Dalberg Advisors, Switzerland
- 32. Jean-Jacques Muyembe, PhD, MD** – National Institute of Biomedical Research, Democratic Republic of Congo
- 33. John Amuasi, MD, PhD** – African Research Network for Neglected Tropical Diseases (ARNTD), Ghana
- 34. Justin Maeda, MD** – Africa CDC, Ethiopia
- 35. Kedest Tesfagiorgis** – Bill & Melinda Gates Foundation, United States

- 36. Kevin Marsh, MBChB, DTM & H** – University of Oxford, United Kingdom
- 37. Krishna Udayakumar, MD** – Duke Global Health Institute, United States
- 38. Lolem Ngong, MPH** – Amref Health Africa, Kenya
- 39. Lul Pout Riek, MD, MSPH** – Africa CDC, Ethiopia
- 40. Magda Robalo Correia Silva** – High Commissioner for COVID-19, Guinea-Bissau
- 41. Manhattan Charurat, PhD, MHS** – University of Maryland School of Medicine, United States
- 42. Martin Muita** – Africa CDC, Ethiopia
- 43. Merawi Aragaw, MD, MPH** – Africa CDC, Ethiopia
- 44. Michael Iroezindu, MPH** – Walter Reed Program, Nigeria
- 45. Millicent Olulo, MD, MSc** – PharmAccess Foundation, Kenya
- 46. Mohammed Abdulaziz, MBBS, MPH-FE, MHPM, FWACP** – Africa CDC, Ethiopia
- 47. Monique Wasunna, MBBS, MSc, PhD** – Drugs for Neglected Diseases Initiative Africa Regional Office, Kenya
- 48. Morenike Oluwatoyin Ukpong, MBA, MA** – Obafemi Awolowo University, Nigeria
- 49. Moses Bockarie, PhD** – European & Developing Countries Clinical Trial Partnership (EDCTP), South Africa
- 50. Nicaise Ndembi, PhD, MPhil, MSc** – Africa CDC, Ethiopia
- 51. Nissaf Bouafif, MD, MSc** – National Observatory of New and Emerging Diseases, Tunisia
- 52. Nyeki Adelerose, MD, ENT** – University of Yaoundé, Cameroon
- 53. Oyewale Tomori, DVM, PhD** – Redeemer's University, Nigeria
- 54. Pascale Ondoa, MD, MSc, PhD** – Amsterdam Institute for Global Health and Development (AIGHD), African Society of Laboratory Medicine, Netherlands
- 55. Patricia Ayanbadejo, BDS, MPH, FMCDS** – University of Lagos College of Medicine, Nigeria
- 56. Placide Mbala-Kingebeni, MD** – National Institute for Biomedical Research (INRB), Democratic Republic of Congo
- 57. Pontiano Kaleebu, MD, PhD** – Uganda Virus Research Institute, Uganda
- 58. Raji Tajudeen, MD, MPH** – Africa CDC, Ethiopia
- 59. Salim Abdool Karim, PhD, MS, MBBCH** – Centre for the AIDS Programme of Research in South Africa (CAPRISA), South Africa
- 60. Seun Esan, BSc (Hons), MSc, DPhil** – University of Liverpool
- Institute of Population Health, United Kingdom
- 61. Shingai Machingaidze** – Africa CDC, Ethiopia
- 62. Simon Antara, MBChB, MPH** – African Field Epidemiology Network (AFENET), Uganda
- 63. Souha Bougateg** – National Observatory of New and Emerging Diseases, Tunisia
- 64. Theresa Madubuko** – Africa CDC, Ethiopia
- 65. Thomas Kariuki, PhD** – Alliance for Accelerating Excellence in Science in Africa, Kenya
- 66. Tobias F. Rinke de Wit, PhD** – PharmAccess Group, University of Amsterdam, Netherlands
- 67. Trevor Crowell, MD, PhD** – The Henry M. Jackson Foundation for the Advancement of Military Medicine, United States
- 68. Victor Mukonka, MBChB (Unza), PhD** – Zambia National Public Health Institute, Zambia
- 69. William Ampofo, PhD** – Noguchi Memorial Institute for Medical Research (NMIMR), University of Ghana, Ghana
- 70. Yenew Kebede Tebeje, MD, MSc, MPH** – Africa CDC, Ethiopia
- 71. Yvonne Mburu, PhD** – Nexakli, Kenya

CPHIA 2021 OVERVIEW

The [first International Conference on Public Health in Africa](#) (CPHIA 2021), hosted by the African Union (AU) and Africa Centres for Disease Control and Prevention (Africa CDC), was originally set to take place in person in Addis Ababa in May 2021, but was [postponed](#) to December and moved to a virtual format due to the ongoing COVID-19 pandemic. The focus of the conference remained on lessons learned from COVID-19, creating a platform for African researchers, policymakers and stakeholders to share perspectives and research findings in public health.

The conference was spearheaded by Dr. John Nkengasong, Director of the Africa CDC, and CPHIA 2021 co-chairs Prof. Senait Fisseha, Director of Global Programmes at The Susan Thompson Buffett Foundation, and Prof. Agnes Binagwaho, Vice-Chancellor of the University of Global Health Equity. An [Organizing Committee](#) of more than 70 public health experts and leaders from around the world were responsible for planning the conference, including preparations of the scientific sessions and maintaining the highest level of scientific standards.

This committee, which met in full on a weekly basis, was organized into seven different tracks that focused on different aspects of the COVID-19 pandemic and the pillars of the AU's New Public Health Order. These tracks were presented as the below plenary sessions during the conference:

1. Epidemiology of SARS-COV-2, Virology, Prevention and Clinical Management
2. Vaccination in Africa: Research Capacity, Advocacy, Manufacturing and Distribution
3. COVID-19 and Equitable Health System Strengthening in Africa
4. The Case for a New Public Health Order for Africa
5. Assessing the Response to COVID-19 in Africa to Prepare for Future Health Threats
6. Digitisation, Modelling and Analytics to Support an Effective Public Health Response to the COVID-19 Pandemic
7. Agenda 2063: Whole-of-society – Private Sector, Community and Leadership, Approach in Combating COVID-19 and Other Emerging Diseases

In addition to the [seven plenaries](#), there were 11 parallel and special sessions featuring debates and panel discussions related to the conference tracks. There were also 40 oral abstract presentations as part of sessions 1, 5 and 6, and an additional 58 abstracts were selected for poster presentations online.

CPHIA 2021 drew in a large audience on the virtual platform EventsAir and through livestreaming onto Africa CDC social media channels. After the official conference dates were announced on August 12, a robust communications plan helped generate coverage in traditional media outlets and social channels, which drove awareness and registrations through the conference website, www.cphia2021.com.

**CUMULATIVE
PARTICIPANTS**
12,190

**TOTAL
REGISTRANTS**
17,008

MEDIA SUMMARY

Conference Announcement & Drumbeat

Extensive media outreach for CPHIA 2021 began in August 2021 when the new conference dates were announced through a press release distributed worldwide in English, French, Arabic, Portuguese and Swahili. The release was picked up by **1,338 websites** and generated **130** mentions on Twitter. Additional media outreach continued across all African regions and globally in the months leading up to CPHIA 2021.

To support ongoing coverage of CPHIA 2021, media partnerships were also secured with *The Conversation Africa*, *Internews* and *SciDev.net*. These outlets publicized the conference to their networks and committed to publishing op-eds by CPHIA 2021 Organizing Committee members on their websites.

Pre-conference Media Workshop

The week of CPHIA 2021 kicked off on 13 December with a two-hour virtual workshop on scientific reporting, led by experts in global health communications. The workshop, which was organized by the Africa CDC, The Conversation Africa, and Internews Health Journalism Network, drew in 50 journalists from across the continent. The discussion focused on how to translate and communicate science-related data and broadly create an enabling environment for consistent reporting on public health in Africa. Speakers included:

- **Esther Nakkazi**, science and technology journalist; media trainer and the founder, Health Journalists Network in Uganda (*moderator*)
- **Dr. Nicaise Ndembi**, Senior Science Advisor, Africa CDC
- **Dr. Candice Bailey**, Strategic Initiatives Editor, The Conversation Africa
- **Dr. Anthony Ajayi**, Associate Research Scientist, APHRC Kenya
- **Adele Baleta**, Science Writer, Internews
- **Beatrice M. Spadacini**, Health Manager, Internews

Scholarships were also offered to 15 journalists from across the continent, who were expected to publish at least two stories on the conference themes and outcomes. Scholarships were provided to compensate them for Internet charges and other costs associated with their reporting.

Conference Media Activities

Two press releases were distributed the week of CPHIA 2021 – one at the beginning on [14 December](#) and one at the end on [16 December](#). The opening and closing press releases were distributed in English and French to a network of approximately **1,500** journalists in Africa with pick-ups from North America, Europe and Asia. On the second day of the conference, over 70 journalists attended a media briefing on emerging discussions at CPHIA 2021, the impact of COVID-19 in the continent, and the urgent call for a New Public Health Order in Africa. Speakers included:

- **Dr John Nkengasong**, Director, Africa CDC
- **Professor Salim Abdool Karim**, Director, CAPRISA

- **Dr Ebere Okereke**, Senior Technical Adviser at the Tony Blair Institute for Global Change and honorary Senior Public Health Adviser to Africa CDC
- **Dr Githinji Gitahi**, Group CEO Amref Health Africa & Co-Chair of UHC2030 Steering Committee
- **Professor Helen Rees**, Executive Director, Wits Reproductive Health and HIV Institute, University of the Witwatersrand

Media Coverage

The conference generated **105 articles, blog posts, press releases, op-eds and broadcast videos** in over 50 outlets across the globe. Media coverage positioned CPHIA 2021 as an annual conference that provides the platform that capitalizes on the knowledge, experience and ambition of Africans to collectively pave the way for a healthier future for all. Key pieces include:



Xinhua [Africa CDC roots for resilient health systems to boost pandemic response](#) (18 August 2021)



CNBC Africa [The Cost of building Robust Health systems](#) (19 August 2021)



The New York Times [Fighting a Pandemic While Launching Africa's Health Revolution](#) (19 September 2021)



SciDev.Net Sub-Saharan Africa Edition, [Building a new public health order for Africa's gain](#) (9 December 2021) (also published in [Arabic](#) and [French](#))



All Africa [African Heads of State and Health Experts Convene Virtually for the First International Conference On Public Health in Africa](#) (14 December 2021)



Devex [Don't dismiss omicron as mild. WHO experts warn](#) (15 December 2021)



The East African [Invest in health systems. Rwanda's Paul Kagame tells African leaders](#) (15 December 2021)

Note: additional opinion pieces to be published in *The Conversation Africa* in 2022

SOCIAL MEDIA SUMMARY

A social media toolkit in [English](#) and [French](#) was shared with all conference registrants ahead of CPHIA 2021 to help generate additional awareness and amplify key themes and messaging across sessions. Below is a summary of social media activity from the week of CPHIA 2021:

#CPHIA 2021

3.1K

Total tweets using the hashtag

12M

Total reach of tweets using the hashtag

97M

Total Impressions of the hashtag

1.3K

Unique authors of posts using the hashtag

TOP COUNTRIES BY AUTHOR

South Africa



United States



Kenya



Ethiopia



Rwanda



Tanzania



Canada



Switzerland



United Kingdom



Nigeria



A word cloud showing the key words used during the CPHIA 2021 conference.

OPENING AND CLOSING CEREMONIES

CPHIA 2021 received strong political support with several Heads of State and Government and key leaders of regional and international agencies endorsing the inaugural conference, and fully supporting the call for a New Public Health Order for Africa.

Opening Ceremony

- **H.E Félix Antoine Tshisekedi Tshilombo**, President, Democratic Republic of Congo; Chairperson of the African Union
- **H.E. Paul Kagame**, President, Rwanda; AU Champion for Domestic Health Financing
- **H.E. Moussa Faki Mahamat**, Chairperson, Commission of the African Union
- **Dr. Matshidiso Moeti**, Director, WHO Regional Office for Africa
- **Prof. Agnes Binagwaho**, Co-Chair, CPHIA 2021; Vice Chancellor and Professor of Pediatrics, University of Global Health Equity

- **Prof. Senait Fisseha**, Co-Chair, CPHIA 2021; Director of Global Programs, The Susan Thompson Buffett Foundation
- **Dr. John Nkengasong**, Director, Africa Centers for Disease Control and Prevention (Africa CDC)

Master of Ceremonies: Zain Verjee, Zain Verjee Group



"The inaugural Conference on Public Health in Africa is an expression of our continent's commitment to forging a New Public Health Order for Africa." – H.E. Paul Kagame, President, Rwanda



"Together we will create a new benchmark for collective efforts and participation as we advance public health practice, education, training and research in Africa, for Africa." – H.E. Moussa Faki Mahamat, Chairperson, African Union Commission



“The inequities in access to key tools required for the pandemic response, which exposed our extreme dependence on manufacturers outside the continent, cannot prevail going into the future.” – Dr. Matshidiso Moeti, Director, WHO Africa Regional Office

Closing Ceremony

- **Shingai Machingaidze**, Senior Science Officer, Africa CDC
- **Dr. John Nkengasong**, Director, Africa CDC
- **Dr. Tedros Adhanom Ghebreyesus**, Director General, World Health Organization (WHO)
- **Dr. Olive Shisana**, Special Policy Advisor to the President of South Africa
- **Dr. Daniel Ngamije**, Minister of Health, Rwanda

Master of Ceremonies: Zain Verjee, Zain Verjee Group



“There’s a lot of good science happening on the continent but we needed a platform that would harness that and bring it all together. If I was to characterize [the conference] in two phrases it would be: commitment to quality science on the continent and defining the future.” – Dr. John Nkengasong, Director, Africa Centres for Disease Control and Prevention



"This conference is extremely timely. The COVID-19 pandemic has highlighted the importance of nurturing strong science and research on our continent and strong public health institutions." – Dr. Tedros Adhanom Ghebreyesus, Director-General, World Health Organization



"In pursuit of a New Public Health order, our priority must be the attainment of universal health coverage as envisioned in the Sustainable Development Goals. For this to become a reality, we have to work to put the supporting scaffolding in place." – Prof. Olive Shisana, Advisor on Social Policy, Office of the President, Republic of South Africa



“As we focus ahead, we are tasked with ensuring history does not repeat itself and Africa is not left behind in accessing life-saving tools. We have the power to change this.” – Dr. Daniel Ngamije, Minister of Health, Rwanda

CPHIA 2021 SCIENTIFIC AWARDS

Scientific Excellence is developed over many years, through discipline, determination, dedication, and dynamic leadership. The response to COVID-19 on the continent was largely possible due to already existing capacity and expertise that has been built on the African continent for various infectious diseases. During the closing ceremony, Dr. John Nkengasong presented awards for scientific excellence to four individuals to recognize their extraordinary contributions to public health and health research on the African continent.

Lifetime Achievement in Public Health



Professor Jean-Jacques Muyembe-Tamfum

General Director, National Institute of Biomedical Research

Professor of Medical Virology, University of Kinshasa



Professor Salim S Abdool Karim

Director, Centre for the AIDS Programme of Research in South Africa (CAPRISA)

Professor of Global Health, Columbia University

Chair, WHO Strategic and Technical Advisory Committee on HIV and Hepatitis

Member of the Science Council of the World Health Organisation (WHO)

WHO TB-HIV Task Force, the Africa Task Force for Coronavirus, the African Union Commission on COVID-19, and Lancet Commission on COVID-19

Achievement in Global Health Leadership



Professor Senait Fisseha

CPHIA 2021 Co-Chair

Director of Global Programmes, The Susan Thompson Buffett Foundation

Chief Advisor to the Director of World Health Organisation

Professor of Obstetrics & Gynaecology, University of Michigan



Professor Agnes Binagwaho

CPHIA 2021 Co-Chair

Co-founder and Vice Chancellor of University of Global Health Equity (UGHE)

Advisor to the Director General of the World Health Organisation

Senior Lecturer at Harvard University

PLENARY AND PARALLEL SESSION SUMMARIES

As part of the seven scientific tracks for CPHIA 2021, we had the privilege of hearing from 232 African policymakers, scientists, public health experts, researchers, data experts, and civil society representatives.

Plenary Session 1: Epidemiology of SARS-COV-2, Virology, Prevention and Clinical Management

While the African continent was predicted to be particularly vulnerable to COVID-19, African populations appear to have thus far evaded widespread morbidity and mortality due to the virus. This track assessed how the pandemic has unfolded on the African continent, discussed possible biologic mechanisms that may have mitigated the impact of the disease, identified areas of particular need for future research in the African setting, and discussed the future of COVID-19 in Africa.

We heard from **Dr Nkengasong (Director, Africa CDC)** that by early-December 2021 approximately 9 million COVID-19 cases and over 213 000 had been reported in Africa since the start of the pandemic. The critical lessons learned in Africa's response encompass the 5 Ps: Pathogen, Population, Policy, Politics, and Partnerships. He highlighted that Africa Union and Africa CDC had a vision, for 'A new public health order'.

Professor Penny Moore (South African Research Chair of Virus-Host Dynamics and Reader / Associate Professor at the University of the Witwatersrand and the National Institute for Communicable Diseases (NICD)) walked us through the efforts in South Africa of genomic profiling of SARS-COV-2 which

began with beta variant and have since grown tremendously. Omicron first identified by South African scientists is the most divergent strain to date – accounting for 10% of new infections globally at the time.

Professor Salim Abdool Karim (Director, CAPRISA) assured us that there is no need to over-react to the omicron variant, as we have dealt with variants before, including variants with immune escape. He pointed out that there will likely be more re-infections and breakthrough infections, but that vaccinated individuals are much less likely to have severe COVID-19.

Professor Ibrahim Abubakar (Dean of Faculty of Population Health Sciences, Professor of Infectious Disease Epidemiology, University College London (UCL)) highlighted the four main forces acting on pathogen transmission: seasonality, immunity, viral evolution and mitigation. He pointed out that seroprevalence data are limited in Africa, and that these estimates suggest that official case numbers hugely underestimate population exposure.

Plenary Session 2: Vaccination in Africa: Research Capacity, Advocacy, Manufacturing and Distribution

As the world looks toward preparing for future health threats, African countries need to strengthen their vaccine manufacturing capacities by bolstering regulatory agencies, developing the necessary human resource potential and attracting financial and technical investment. This track explored the current state of COVID-19 vaccine distribution in Africa and the way forward, as well as the future of vaccine manufacturing on the continent.

Dr Mihigo (Program Area Manager, Immunization and Vaccine Development, WHO Regional Office for Africa) addressed the question – When will Africa be Vaccinated against COVID-19? We heard from him that Africa has made significant progress with COVID-19 vaccination, but many challenges remain. In addition to the vaccine equity issues that have been voiced out by many presenters at CPHIA, issues of vaccine supply chain require urgent attention including – quality and predictability of doses arriving in-country and their shelf life.

Madam Byanyima (Director, UNAIDS) highlighted that many countries have agreed to temporarily suspend intellectual property rules to allow all countries to have access to the various technologies needed to make COVID-19 vaccines, a few richer countries that housed some of these manufacturers have not. She emphasized that it is important to ensure that the incentive to invest remains and should be protected, however, how this innovation is shared is just as critical.

Prof. Ernest Aryeetey (Secretary-General of the African Research Universities Alliance and African Economic Research Consortium (AERC), Board Chair at the University of Ghana) shared about the African Research Universities Alliance which has 3 vaccine research hubs (western, eastern, and southern Africa) which are focused on advancing vaccine development research on the continent. Their model of

cross-collaboration aims to retain skills on the continent by ensuring world class facilities and an enabling environment for career growth.

Prof. Petro Terblanche (Managing Director, Afrigen Biologics) highlighted the **mRNA hub** led by Afrigen Biologics that was established in 2021, which she said was key to establishing the technology needed for building vaccine manufacturing capacity in Africa. The hub is designed to start with a focus on COVID-19 vaccines but is planned to expand to other diseases of concern to African populations.

Plenary Session 3: COVID-19 and Equitable Health System Strengthening in Africa

African countries and continental public health institutions have had to develop innovative approaches to meet the challenges presented by the COVID-19 pandemic – from a rapid expansion of diagnostic capacity and genomics, to pooling resources between nations and across the public-private sector. This track explored case studies that can inform innovative approaches to building strong health systems in Africa.

Rt. Hon. Dr. Michel Sidibe (***Special Envoy for the African Medicines Agency, African Union***) boldly stated that “We do not need to be scared of the future of our continent, and do not need to be scared of the work it will take to get there – success will be ours if we define our future together”. He emphasized that it is time for a new paradigm that will allow us to achieve a truly equitable and effective health system for Africa. The ultimate goal or vision is to build a healthcare system that is comprised of African solutions to African problems that help all Africans.

We heard from **Honorable Minister Lt Col Dr. Tharcisse Mpunga** (***Minister of State in Charge of Primary Healthcare, Ministry of Health, Rwanda***) that Rwanda’s successful introduction of the COVID-19 vaccine was led by 4 key pillars: partnership and strong multisectoral coordination; leveraging existing resources; realistic planning; and strengthened cold chain infrastructure.

Prof. Tulio de Oliveira (***Director, Centre for Epidemic Response & Innovation, Professor, Stellenbosch University***) pointed out that COVID-19 pandemic response allowed for genomic data to be used in real time. The Network for Genomics Surveillance in South Africa (NGS-SA) was established in February 2020, and this has facilitated efficient identification, notification, communication and transparency with all variants detected in the country, including the Omicron variant detected in November 2021.

Plenary Session 4: The Case for a New Public Health Order for Africa

The proposed New Public Health Order is an urgent call for Africa to strengthen public health institutions, decentralize public health engagements for more efficient implementation, bolster capacity for local production of vaccines, therapeutics and diagnostics, while creating significant investments in the health workforce and leadership programs, and building respectful public-private partnerships. This track will

focus on two tenets of the New Public Health Order: building the capacity of the Africa CDC and National Public Health Institutes and investing in the public health workforce.

Dr. Chikwe Ihekweazu (Assistant Director-General, Health Emergency Intelligence, WHO) shared the journey to build Nigeria CDC to what we see today which took 16 years – he said we need to do this faster. There are now many NPHIs in countries around Africa however, it is not enough to just create these institutes if you do not give them the mandate to operate efficiently. He emphasized that we have to rethink the architecture of our national public health institutes – leverage on the resources already invested in our Ministries of Health to help us prevent and respond to future pandemics.

Dr. Natalie Mayet (Deputy Director, National Institute for Communicable Diseases, and Chairperson, IANPHI-Africa) highlighted critical points that the backbone of Africa’s health care systems is nurses – yet they remain under-compensated and vulnerable. The framework for Public Health Workforce Development developed by Africa CDC’s Task Force for Workforce Development outlines steps that will be taken to increase both quantity and quality of African public health professionals across the continent.

Dr. Amadou A. Sall (CEO, Institut Pasteur de Dakar) spoke on the importance and need for Africa to expand its capacity for the development of vaccine, drugs and diagnostics. He highlighted the challenge of Africa’s geopolitical situation which is difficult to solve. It is necessary to ensure a competitive environment, he cautioned that balance is needed to ensure that new player can enter the market as well.

Dr. Ebere Okereke (Senior Technical Adviser, Institute Global) reminded us that health is an investment which can have big returns (e.g., Moderna). The private sector is a critical partner to work with in preparing for future pandemics.

Session 4 Parallel Sessions

Panel: Establishing a National Public Health Institute: A conversation with Dr. Chikwe Ihekweazu

- **Dr. Chikwe Ihekweazu**, Assistant Director-General, WHO Health Emergency Intelligence

Panel: Getting to the business of economic and social recovery: AU Commission on COVID-19

- **Dr. Ama Pokuaa Fenny**, Senior Research Fellow, Institute of Statistical, Social and Economics Research (ISSER), University of Ghana
- **Dr. Maha El Rabbat**, Professor of Public Health, Cairo University; Former Egyptian Minister of Health
- **Prof. Olive Shisana**, Advisor on Social Policy, Office of the President, Republic of South Africa

Panel: Futureproofing Africa’s health system

- **Prof. Glenda Gray**, President and CEO, South African Medical Research Council, South Africa
- **Olumide Okunola**, Senior Health Specialist, World Bank Nigeria

- **Mah-Sere Keita**, Director of Programs, African Society for Laboratory Medicine
- **Seth Akumani**, Head of Exploration, UNDP, Ghana

Plenary Session 5: Assessing the Response to COVID-19 in Africa to Prepare for Future Health Threats

While African countries have responded relatively well to the pandemic, the continent has faced a variety of challenges, including in some instances weak leadership; restrictions in the global supply chain with insufficient test kits, personal protective equipment and vaccines; and misinformation. This track examined the effectiveness of Africa's response to the COVID-19 pandemic and highlight key successes, challenges and lessons learned to prepare for future health threats. It will also explore ways to prevent the severe unintended economic and social consequences that often follow health crises such as COVID-19.

Prof. Tom Kariuki (Former Director of Programmes, African Academy of Science) shared how Africa needs to build state of the art science infrastructure and create conducive environments that can generate good science. Building science platforms will allow Africa to be better prepared for future pandemics, allow for medicinal products to be developed in Africa, as well as attract investment to the continent.

Prof. Helen Rees (Founder and Executive Director, Reproductive Health and HIV Institute, University of Witwatersrand, South Africa) highlighted that there are many challenges the continent continues to face in responding to the COVID-19 pandemic, but also many successes - good political leadership and collaboration across Africa, the COVAX and AVAT facilities, vaccine manufacturing capacity being established, and many research collaborations.

We heard of the success of EDCTP as a model for health research from **Dr. Michael Makanga (Executive Director, European & Developing Countries Clinical Trials Partnership)**. Key elements of this model include strong scientific leadership, creating incentive to produce high quality research, strong research and data management systems, strong collaboration, and direct engagement with policy makers.

The total cost of the COVID-19 pandemic is estimated at US\$1.1 trillion. **Prof. Benedict Oramah (President and Chairman of the Board of Directors, African Export-Import Bank)** highlighted the multiple initiatives and entities that have been created to aid Africa respond to this pandemic including the African Vaccine Acquisition Trust (AVAT), the AVAT No Fault Compensation Scheme Trust (ANFCT); and the Africa Medical supplies Platform (AMSP).

Plenary Session 6: Digitisation, Modeling and Analytics to Support an Effective Public Health Response to the COVID-19 Pandemic

The COVID-19 pandemic has accelerated the advent of digital tools and technologies for public health messaging, epidemiologic surveillance, screening and diagnosis for rapid case identification, interruption of community transmission and clinical care delivery. This track explored how digitisation, modelling and analytics can be fruitfully employed to sustain the public health goals of quality, accessibility, efficiency and equity in health care.

Dr. Yvonne Mburu (Founder and Executive Director, Nexakil) shared how the COVID-19 pandemic accelerated the move towards digitisation. She also pointed out that population and individual data are pivotal for decision making through analytics and modelling, and that the challenge remaining, is how to integrate these data to provide the best public health response.

Dr. Edem Adzogenu (Co-Chair of the Initiative's Executive Committee, AfroChampions) highlighted that fragmentation of the continent and inability to move freely within the continent remains a big issue, and that solution relies on innovations and capacities available in Africa. He pointed out that no African country could defend itself alone, we have to collectively harmonize efforts.

Honorable Minister Dr Lia Tadesse (Ministry of Health, Ethiopia) shared how Africa is experiencing a genomic revolution which has resulted in cutting edge technologies now being available in Africa. We need to focus on development/updating digital and ICT strategies, strengthening continental capabilities, enhancing surveillance and sharing information.

Ms. Abimbola Adebakin (CEO, Advantage Health Africa) commended health innovators, stating that they were leapfrogging with digitization. She highlighted that we need to think larger than where we are and this may lead to attracting the right resources.

Plenary Session 7: Agenda 2063: Whole-of-society – Private Sector, Community and Leadership, Approach in Combating COVID-19 and Other Emerging Diseases

Effective partnerships and collaborations across all sectors will be critical to winning the fight against COVID-19. This track focused on what can be done to create and harmonize more effective platforms for public-private dialogue to strengthen health systems; the innovations and investments that should be prioritized to better prepare for and respond to future pandemics and outbreaks; how leveraging private sector supply chain best practices can improve health supply chains in low- and middle-income countries; the role of local leadership in effective testing and diagnostics; and community engagement best practices.

Mrs. Grace Ssali Kiwanuka (Executive Director, Uganda Healthcare Federation) commended the notable contributions made by the private sector, as well as contributions they continue to make in the

response to COVID-19. She however pointed out that the major challenge is the lack of clear points of engagement between government, health development partners and private sector.

Dr. Ernest Darkoh (Founding Partner, BroadReach Group) shared how readily availability of the right insights and data are critical for addressing health challenges and mitigating health problems. Africa needs to focus its investments to address current and future threats with a focus on technologies, UHC, service delivery, infrastructure and innovative partnerships. He also pointed out that we need to shift the paradigm – moving from emergency response to comprehensive health systems strengthening.

Dr. Joel Mubiligi (Executive Director, Partners in Health) highlighted that Africa's response to public health crises depends on the readiness of our health systems which included healthcare workforce, finance, infrastructure and supplies. Africa should leverage existing global financing mechanisms during the COVID-19 pandemic to strengthen overall health systems capacity on the continent.

Session 7 Parallel Sessions

Panel: Boosting the manufacturing of vaccines in Africa

- **Stavros Nicolaou**, Senior Executive responsible for Strategic Trade Development, Aspen Pharmacare Group
- **Mwai Ngibuini**, Group Head of Business Development and Communication, Dawa Life Sciences
- **Ayman Lahlou Cheikh**, CEO, Cooper Pharma
- **Dr. Morena Makhoana**, CEO, Biovac

Panel: Strategic community engagements to strengthen health systems in Africa

- **Tian Johnson**, Founder, The African Alliance for HIV Prevention
- **Philana Mugenyi**, Government Affairs Manager for Sub-Saharan Africa, Terumo BCT
- **Bright Simons**, Founder and President, mPedigree

Debate: Harmonizing regulations to drive investments in vaccine in Africa

- **Dr. David Mukanga**, Senior Program Officer Regulatory Affairs, Africa Systems, Bill & Melinda Gates Foundation
- **Dr. Thomas Nyirenda**, Strategic Partnerships & Capacity Development Manager, EDCTP
- **Mrs. Delese Mimi-Darko**, CEO, Ghana Food and Drugs Authority

Special CPHIA Session: Developing, Producing and Delivering Oral Therapeutics for COVID-19

This session discussed the recent, exciting advances in the development of oral drugs for COVID-19. It was pointed out that we can leverage existing infrastructure and country resources to deliver new oral therapies, building on lessons from other health challenges – like HIV; and that it is essential that we drive attention, political will, and resources to ensure rapid, global access to these and other oral drugs for COVID-19

The panel included the following esteemed speakers:

Dr. John Nkengasong, Director, Africa CDC

Dr. Trevor Mundel, President of Global Health, Bill & Melinda Gates Foundation

Dr. Julie Gerberding, Executive Vice-President and Chief Patient Officer, Merck

Dr. Salim S. Abdool Karim, Director, CAPRISA

Special CPHIA Session: COVID GAP – Joint Convening to accelerate Global COVID-19 Vaccinations

COVID Global Accountability Platform (COVID GAP) is led by Duke University and COVID Collaborative, together with the World Health Organization, UNICEF, Africa CDC, The Rockefeller Foundation, and the Bill & Melinda Gates Foundation

The goal of these convenings is to urgently accelerate global COVID-19 vaccinations in low- and middle-income countries by addressing the following key areas:

- Current Status of vaccinations globally and in Africa
- Political Context and Financing
- Vaccine Demand, health workforce
- Supply chains and logistics, data systems

ABSTRACTS

CPHIA 2021 supported a closed call for abstracts on a specific set of pressing topics impacting health on the continent.

Abstracts were accepted for three of the conference tracks:

- Track 1: Epidemiology of SARS-COV-2, Virology, Prevention and Clinical Management
- Track 4: Assessing the Response to COVID-19 in Africa to Prepare for Future Health Threats
- Track 6: Digitisation, Modelling and Analytics to Support an Effective Public Health Response to the COVID-19 Pandemic

Across all three tracks, 152 abstracts were submitted and underwent a blind review process by at least three members of the CPHIA Organizing Committee. Of those, 40 were selected for oral presentations, while a further 58 were selected for CPHIA's virtual poster hall. Eight parallel sessions were organized for oral abstract presentations – Track 1 hosted four sessions, while Tracks 4 and 6 each hosted two. All presenters were allocated 10-minutes to share their findings.

The CPHIA 2021 Abstracts book will be published in the Journal of Public Health in Africa (JPHIA), the official journal of Africa CDC.

SIDE EVENTS

Between 13 and 17 December, CPHIA 2021 also featured [39 official side events](#) organized by organizations from around the world. These events took place outside of conference hours so as not to conflict with the sessions. They were all held virtually and organized fully by the host organizations, focusing on topics related to the conference themes, such as the role of the private sector, digital solutions for pandemic preparedness, and health system innovation. Organizations that hosted side events include:



African
Union



AFRICA CDC

Centres for Disease Control and Prevention

Safeguarding Africa's Health

