

ASLM

AFRICAN SOCIETY FOR LABORATORY MEDICINE

2018

PREVENTING AND
CONTROLLING THE
NEXT PANDEMIC:

**The Role
of the
Laboratory**

4TH INTERNATIONAL
conference report

10 – 13 DECEMBER 2018

TRANSCORP HILTON
Abuja, Nigeria

ABBREVIATIONS

Africa CDC	Africa CDC Africa Centers for Disease Control and Prevention
AJLM	AJLM African Journal of Laboratory Medicine
AMR	AMR Antimicrobial Resistance
ART	ART Antiretroviral Treatment
ASCP	ASCP American Society for Clinical Pathology
ASLM	ASLM African Society for Laboratory Medicine
CDC	CDC Centers for Disease Control and Prevention
CHAI	CHAI Clinton Health Access Initiative
EGPAF	EGPAF Elizabeth Glaser Pediatric AIDS Foundation
EID	EID Early Infant Diagnosis
FELTP	FELTP Field Epidemiology and Laboratory Training Program
GHSA	GHSA Global Health Security Agenda
GHSS	GHSS Global Health Systems Solutions
LSHTM	LSHTM London School of Hygiene and Tropical Medicine
MSF	MSF Médecins Sans Frontières
NCD	NCD Non-Communicable Disease
NHLS	NHLS National Health Laboratory Service
NTD	NTD Neglected Tropical Disease
POC	POC Point-of-Care
SANAS	SANAS South Africa National Accreditation Systems
SDG	SDG Sustainable Development Goal
SLMTA	SLMTA Strengthening Laboratory Management Toward Accreditation
SLIPTA	SLIPTA Stepwise Laboratory Improvement Process Towards Accreditation
UNAIDS	UNAIDS Joint United Nations Programme on HIV/AIDS
VPD	VPD Vaccine-Preventable Disease
WHO	WHO World Health Organization
WHO-AFRO	WHO-AFRO World Health Organization, Regional Office for Africa

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EXECUTIVE SUMMARY

The African Society for Laboratory Medicine (ASLM) is an independent, pan-African professional body that mobilises and coordinates relevant stakeholders – local, national and international – with the aim of improving local access to quality diagnostic services for communities in Africa.

Themed “Preventing and Controlling the Next Pandemic: The Role of the Laboratory”, the conference served as a platform for the international laboratory medicine community to share best practices, network, build capacities and discuss innovative approaches for combatting global health threats. ASLM 2018 convened over 1000 laboratory scientists, clinicians, healthcare workers, health economists and health technology company representatives from nearly 60 countries in Nigeria from December 10-13, 2018. The 4-day conference focused on three key tracks: Pandemic Threats, Laboratory Response, and Synergizing Partnerships.

ASLM 2018 convened laboratory scientists, clinicians, healthcare workers, health economists and health technology company representatives from across Africa and the globe.

Key Highlights Text Box

- **Collaborations and partnerships are critical to epidemic preparedness.** Countries should work collectively and engage governments and political structures to allow cross-border surveillance and networks. Communities must be involved as they are the first line of intelligence.
- The **Africa Collaborative Initiative to Advance Diagnostics (AFCAD)** was launched by the Africa Centres for Disease Control and Prevention (Africa CDC), in partnership with the ASLM, Institut de Recherche, de Surveillance Epidémiologique et de Formation (IRESSEF), WHO-AFRO, Clinton Health Access Initiative (CHAI), African Field Epidemiology Network, UNITAID, and other partners to promote the diagnostic agenda in the African region through better coordinated and synergized efforts that align with the priorities of Ministries of Health.

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- **Communication and knowledge sharing** strengthen laboratory networks. ASLM supports two publications (**African Journal of Laboratory Medicine and Lab Culture Magazine**), the **ASLM LabCop** (an 11-country network devoted to scale-up of HIV viral load testing), and leadership of a consortium focused on antimicrobial resistance.
 - **Access to quality laboratories and quality diagnostics** are cornerstones of pandemic response. Laboratories must adhere to international standards and continue to pursue laboratory accreditation, an effort that has been a major accomplishment of ASLM through the **SLMTA** and **SLIPTA** programs. As of 2018, 85 labs in Africa outside of South Africa have achieved accreditation. ASLM launched the **Collaborative Registration Procedure (CRP)** initiative aimed to accelerate regulation to facilitate timely and wide access to essential quality diagnostics and streamline regulatory processes in Africa.
 - The alarming rise of **antimicrobial resistance** is another major threat, compromising the effectiveness of antibiotics and reducing the ability to treat certain diseases. A deficit in awareness of AMR and how to respond is contributing to the significant prevalence of resistant bacteria.
 - **Non-Communicable Diseases (NCDs)** represent a growing proportion of morbidity and mortality, although the problem receives less attention and resources. Management and prevention of NCDs will require an all-inclusive integrated patient approach and a refocus of health systems interventions to include NCDs.
 - **Laboratory network optimization and performance management** can improve effectiveness while allowing more efficient use of funds and better value for money. The experiences of HIV, malaria, and TB programs can be leveraged in pandemic preparedness to increase chances for success and use resources most efficiently.
 - The 2014 Ebola epidemic in West Africa highlighted that the presence of **National Public Health Institutes (NPHIs)** is fundamental for public health security. This must include capacity for innovative and traditional disease surveillance methods that increase the ability to detect and respond to outbreaks.
 - **Data and surveillance** have traditionally focused on centrally collected data but new technologies (e.g., WhatsApp, Twitter, Facebook, Yelp) represent untapped opportunities as well as new challenges.
 - Public health authorities must understand that Africa has the **workforce** but must empower and equip them to face the challenges ahead. The wealth of young African scientists, professionals, and laboratory experts represents great potential within the continent and we must ensure that we do not squander that resource.

CONFERENCE COMMITTEES

ASLM2018 CONFERENCE CHAIRS

Alash'le Abimiku

Institute of Human Virology, Nigeria
University of Maryland, United States

Souleymane Mboup

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African Society for Laboratory Medicine, Cameroon

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African Society for Laboratory Medicine, Nigeria

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Fondation Merieux, France

Igho Ofofokun

Emory University, United States

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Clinton Health Access Initiative (CHAI),
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Africa Centres for Disease Control
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Bradley Hersh (Ex-Officio)
Stroger Hospital of Cook County,
United States;
BH Global Consulting, United States

WELCOME

Professor Isaac Adewole

HONARABLE MINISTER OF HEALTH, NIGERIA

Dear Distinguished Guests and Colleagues,

On behalf of the Nigerian people and the National Ministry of Health, I proudly welcome you to Abuja, Nigeria where the fourth international conference of the African Society for Laboratory Medicine (ASLM2018) is holding from 10-13 December 2018. In light of recent outbreaks and pandemics that have plagued Africa particularly Western Africa, it seems appropriate that West Africa hosts this year's conference and that the theme is aptly - "Preventing and Controlling the Next Pandemic: the role of the laboratory".



Historically, Nigerians have attended the ASLM conferences in great numbers. We value the role that laboratory sciences and ASLM's have played in improving laboratory medicine; and subsequently the health and economy of Africa. The ASLM being a pan African society has improved the overall health status in Africa by promoting the value of medical laboratories and laboratory networks in Africa within all sectors including: Ministries of Health, Education, and Science Technology, National Public Health Institutes, Universities and other Tertiary Institutions, the Private Sector, and National Laboratory Professional Associations.

ASLM since its inception in 2011 has acted as the premiere professional body that represents laboratory practitioners and stakeholders in Africa. Through its various initiatives and partnerships, we have seen a continental push to ensure quality-assured diagnostics and clinical care that meet international standards. ASLM has successfully raised the importance and visibility of the laboratory as an essential component of all health systems and economy in Africa.

Here in Nigeria, the most populous country on the continent with a population of approximately 197+ million, we are concerned with preventing and controlling the next pandemic. We warmly welcome you all – healthcare workers, scientists, policymakers, dignitaries, philanthropists, private sector, industry, funders and so many others - who will convene in Abuja over the four days of ASLM2018 to discuss ways to optimize disease detection and response in Africa.

With best regards,

Professor Isaac Adewole

Minister of Health, Nigeria

OPENING CEREMONY AND KEYNOTE ADDRESS



ASLM2018 Conference Co-chairs Souleymane Mboup and Alash'le Abimiku gave a warm welcome to conference attendees and highlighted the conference theme: "Preventing and Controlling the Next Pandemic: The Role of the Laboratory." Delegates were reminded how recent epidemics, especially the 2014 Ebola epidemic in West Africa, have exposed the limitations of pandemic response and preparedness across the continent. Although these events have spurred a laudable increase in efforts to increase access to diagnostic services, much work remains to be done and ASLM2018 aimed to galvanize those efforts.

Opening ceremony speakers also noted the historical significance of the ASLM2018 theme, as 2018 marked the centennial of the 1918 influenza pandemic (the 'Spanish Flu') that killed 50 million to 100 million people around the globe and was arguably the single deadliest epidemic in recorded human history. Evidence suggests that another pandemic of similar severity is likely, and optimization of laboratory systems is essential to increasing collective preparedness, especially in this era of unprecedented mobility.

Key points made by opening ceremony speakers included the following:

- Collaboration, collegiality, and partnerships are critical to epidemic preparedness. To most efficiently address gaps, it is essential that countries work collectively to establish structures and processes. This includes sharing technology and resources and involving communities in preparing for outbreaks, as they are often the first line of intelligence. These efforts must also include engagement of governments and political structures to allow the collaborations required for cross-border surveillance and networks.
- Access to quality diagnostics are cornerstones of pandemic response, so laboratories must adhere to international standards and continue to pursue laboratory accreditation, an effort that has been a major accomplishment of ASLM. The SLMTA and SLIPTA programs have provided a framework to guide labs in establishing quality management systems, and development of functional tiered laboratory networks is having a significant positive impact on laboratory quality. As of 2018, 85 labs in Africa outside of South Africa have achieved accreditation, up from 28 labs in 2011.
- Africa is plagued with a high burden of communicable diseases and a rapidly increasing burden of non-communicable diseases (NCDs) such as cancer, hypertension, and cardiovascular disease. A major goal is access to basic primary healthcare for everyone in Africa. Achieving universal health coverage (UHC) will require uptake of innovation, strong partnerships, strong health care delivery systems and attention to the political and cultural contexts that impact health service access.
- Public health authorities must understand that Africa has the workforce but must empower and equip the workforce to be able to face the challenges to come. The wealth of young African scientists, professionals, and laboratory experts illustrates the great potential within the continent and we must ensure that we do not squander that resource.
- It is essential to conduct relevant basic science and operational research to ensure that we understand previous and current pandemics and apply lessons learned. Investing in health research is a catalyst for economic and social advancement, yet the majority of funding for research in Africa comes from outside the continent. It is essential to continue to advocate for country ownership and financial sustainability.
- The alarming rise of antimicrobial resistance is another major threat, which is compromising the effectiveness of antibiotics and reducing the ability to treat certain diseases.
- The economic, security and social burdens of pandemics are enormous, and economic growth depends on control of infectious diseases and attention to NCDs.
- Nqubile Ndlovu, the Acting CEO of ASLM, highlighted the importance of communication and knowledge sharing and highlighted the myriad ways that ASLM is addressing the issue, including ASLM publications ('African Journal of Laboratory Medicine' and 'Lab Culture Magazine'), ASLM LabCop (an 11-country network devoted to scale-up of HIV viral load testing), and leadership of a consortium focused on collection of antimicrobial resistance data, among others.

Keynote Address: Is Africa Prepared (Ready) for the Next Pandemic?

Dr. John Nkengasong, Director of the Africa Centres for Disease Control and Prevention, emphasized in his keynote speech the importance of strong systems in prevention and control of disease outbreaks, and how it is essential to strengthen networks and workforce capacity, collate and share data and encourage partnerships. He noted that globally the number of infectious disease outbreaks continues to increase and that the next pandemic will likely be viral in origin, with influenza being the most probable candidate.

Dr. Nkengasong also referenced the historic 1918 influenza epidemic and its world-changing consequences and elaborated on some key lessons from that pandemic that apply to pandemics in the modern era.



These tenets include the following:

- Strong national public health institutes (NPHIs) are fundamental for public health security. This includes capacity for innovative and traditional disease surveillance methods that increase the ability to detect and respond to outbreaks. There are currently 14 NPHIs in Africa, with 20 countries in the process of establishing NPHIs.
- Laboratory medicine is critical in pandemic response, and we must work to prioritize approaches that accelerate wide access to timely diagnostics. In particular, the multiple molecular platform approach that can test for multiple pathogens concurrently will be vital.
- Conflicts can greatly impact the spread and control of outbreaks and must be factored into response planning.
- Investment in social sciences is critical. Clinicians should be cognizant of the relevance of social sciences in pandemic response, and social scientists and anthropologists must be trained to support pandemic response through community engagement and risk communication.
- Lack of vaccines and therapeutics hinder pandemic response, so a forward-thinking focus on innovation in vaccines and treatments to potential pathogens can serve as a global insurance policy. For those diseases for which a vaccine exists (e.g., yellow fever), adequate vaccine stocks and vaccine coverage are critical to prevent and control outbreaks.



There is a difference between prepared and ready. No one is ready, but we can all prepare. Preparedness during times of quiet will serve us well during outbreaks.

- Dr. John Nkengasong



The opening ceremony ended with a rousing musical performance by a group from the Abuja Metropolitan Music Society (AMEMUSO).

SCIENTIFIC SESSIONS

A vast array of scientific content from all over the globe was available for ASLM2018 delegates, including 28 sponsored seminars, 90 oral abstract presentations, 7 symposia, 15 poster sessions with over 450 posters, six round table discussions, and 2 special sessions. In addition, 28 sponsored seminars were held, including several hosted by ASLM and the African Journal of Laboratory Medicine, ASLM's official scientific journal. The conference seminars and symposia were convened by diverse stakeholders, including public health agencies, governmental organizations, and industry partners.



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The three tracks of the conference focused on emerging threats to public health in Africa, the role of laboratories in responding to those threats at the laboratory and public health system level, and how partnerships and collaborations can help achieve public health goals and prevent the next pandemic.



Track 1. Pandemic Threats

The sessions and symposia for the Pandemic Threats track covered assessing the burden of HIV, tuberculosis and malaria; assessing the burden of emerging communicable and non-communicable diseases; the role of the laboratory for understanding, treating and preventing disease; combating antimicrobial resistance; laboratory networks and systems for outbreak response; and universal health coverage and health systems strengthening.

The plenary speakers on current pandemic threats noted that health inequality and governmental corruption are major contributors to the 'cooking pot of pandemics' aggravated by poverty and disease pathogens. Good governance is a critical part of any solution to the problems of overburdened and overloaded health systems. Achieving universal health coverage requires fiscal commitment from the government as well as pooling and redistributive mechanisms. The session also highlighted the important of surveillance for early disease/outbreak detection and preparedness. Speakers emphasized accountability, inclusion of ministries of finance in key, and mentoring of junior staff by senior staff with more experience. They also emphasized the need for partnerships, local health protection, coalition of health activities and development of a national public health institute in every country on the continent.

A major highlight of the sessions was the pressing issue of antimicrobial resistance (AMR). Notably, presentations highlighted the significant prevalence of resistant bacteria among routine clinical cultures and the common finding of misaligned clinical prescription and drug susceptibility testing results, suggesting a deficit in clinician awareness of AMR and how to respond to it. Specific systems issues that were cited as contributing to AMR included weak regulation, fragmented procurement, chaotic distribution, unrestricted access to antibiotics, and consumer demand. Solutions presented included development of policies to regulate antibiotics supply chain and use, encouraging the use of lab-based evidence to inform prescriptions, and improved collaboration at the local and regional level.

Improvement of the disease surveillance landscape was also a focus. Several presenters noted that the current focus is on centrally collected data, but the recent advent of new technologies for data collection (WhatsApp, Twitter, Facebook, Yelp) represents untapped opportunity. These new modalities come with challenges, however, such as insufficient volume of data to draw trends and inform timely disease response; data readability issues due to the non-conventional format of the data sources; lack of people undertaking surveillance activities within these formats, and process design (i.e., how to incorporate the private sector within the surveillance process and digitalize data collection tools). Future efforts will also need to address data privacy risks, how to ensure quality of data shared on non-conventional platforms such as social media, and integration with existing activities.

Lastly, presenters noted that NCDs represent a growing proportion of morbidity and mortality worldwide, although the problem receives less attention and resources. Speakers iterated that an all-inclusive integrated approach is necessary to strengthen the management and prevention of NCDs and that we must refocus health systems interventions to include NCDs. Specific areas of mention included the high prevalence of unrecognized diabetes mellitus (particularly in urban areas),

the need to synchronize with and leverage existing HIV services to improve NCD care, and the need to integrate NCDs and communicable diseases. There was a call to action for all stakeholders to include NCDs in resourcing and program plans and use the lessons learned from successful work on infectious disease to plan effective programs to address NCDs.



Track 2. Laboratory Response

The sessions and symposia for the laboratory response track covered innovations to achieve universal health coverage (UHC) and international health regulations; improving diagnostics to achieve UHC; improving quality, safety and cost-effectiveness of laboratory systems; workforce development; strengthening the laboratory-clinic interface; quality management systems; biological specimen repositories for outbreak response; biosafety and biosecurity; the role of national public health institutes in pandemic response; and Africa regional laboratory networks.

Speakers in the 'Laboratory Response' track noted the critical importance of laboratory networks and health systems in pandemic response in the modern era. Robust and functional laboratory networks are essential for effective outbreak prevention, detection and response. It is therefore essential that accreditation of individual labs be accompanied by laboratory network optimization and performance management to improve effectiveness while also allowing more efficient use of funds and better value for money. Several sessions focused on the role of National Public Health Laboratory Networks (NPHLNs) in successful detection, characterization and tracing of disease transmission and the importance of integrating NPHLN and surveillance networks. Presenters examined ways in which multiple stakeholders are networking laboratories and/or sustaining laboratory networks to enable better disease response in Africa. Four key points were emphasized: 1) It is critical to understand all systems and consolidate them into a one network approach; 2) Lab operations should be created that can be used in both crisis and normal operations; 3) Policy must be coupled with strategic operation planning and implementation of guidelines, SOPs, and other practical components; and 4) There is a need for extended lab support and an increase in the number of accredited labs.



Track 2 also included a focus on promoting universal access to laboratory diagnostic services and the use of innovations to improve operational and resource efficiency, such as the use of an e-PT application for PT data management in Ghana that was highlighted. Many speakers noted that since the 2009 launch of SLIMTA/SLIPTA the number of accredited labs in sub-Saharan Africa has increased tremendously, and it is critical to continue those efforts to achieve international quality standards. GIS mapping of every lab in Africa is ongoing to allow users to visualize and optimize coverage and capacity in time of epidemics.

Many presenters in the laboratory response track noted that the Ebola epidemic in Liberia, Sierra Leone, and Guinea highlighted the need for National Public Health Institutes (NPHIs) in African countries. Fourteen NPHIs are already established, and 18 nations are in the process of NPHI development. However, there is the need for intensified advocacy for set-up of NPHIs in the remaining African countries who have no plans in place. Use of the system approach to quality was also highlighted as a key to overcoming challenges in external quality assurance implementation. Lastly, the need for partnerships and collaboration among biorepository networks and specimen transport systems was also highlighted.

The key role of health systems strengthening was also a focus, and speakers iterated that stakeholders should leverage the experiences of HIV, malaria, and TB programs in pandemic preparedness to increase chances for success and use resources most efficiently. Speakers highlighted innovations in these areas such as point-of-care early infant diagnosis testing, HIV self-test kits for use by the public, and the new triplex test kits for HIV, HBsAg and HCV. Scale-up of these types of innovations (e.g., POC tests) as well as more research on new technologies such as nanotechnology will not only accelerate improved health quality in the long-term but can be leveraged for pandemic response as needed. From the cancer perspective, it was noted that the HPV mRNA tests could be considered for routine cervical cancer screening in high HIV prevalent populations as it allows additional opportunities to prevent morbidity and mortality from advanced disease.

Track 3. Synergizing Partnerships

The sessions and symposia of the 'Synergizing Partnerships' track included the One Health approach; partnerships and collaborations for universal health coverage (UHC) and international health regulation; science and education to prevent the next pandemic; the 'Last Mile' to achieving the UNAIDS 90-90-90; implementation and harmonization of policies; and new approaches to partnering with the private sector.

One Health is a collaborative, multisectoral, and transdisciplinary approach that emphasizes coordination of human, animal, and environmental health communities to implement successful public health interventions. The recent re-emergence of Rift Valley Virus in Uganda and echinococcus granulosa (Nigeria), associated with cattle and dogs, underscores the need for collaboration between different types of public health expertise.



At the track 3 plenary sessions, the audience was reminded of the rapidity in which an epidemic can start and spread: “A disease threat anywhere is a threat everywhere. Today’s world is more connected than ever. In as little as 36 hours a pathogen from a remote village can spread to all major cities in 6 continents”. The need for innovative financing was also a major highlight in order to address resource constraints; this includes leveraging small amounts of resources to mobilize more and mobilizing upfront financing to help countries with a strong commitment to UHC.

Scientific session speakers also noted that discussions of financing must include effective cost-saving measures such as integrated testing; one study on point-of-care testing showed that integrated testing (tuberculosis, early infant diagnosis, and viral load) was cost-effective and did not compromise the quality of services. Similar discussions occurred on cost-saving management of hepatitis B virus and highlighted the need for collaborative discussions between clinical and laboratory medicine experts to optimize clinical management in a way that is resource-effective.

The role of public-private partnerships (PPPs) was also a key focus, as speakers emphasized the numerous benefits of PPPs. These include leveraging of private funds for the health sector, use of private sector solutions and expertise, and collaboration between public and private laboratories that can enhance access to and quality of laboratory diagnostics. The need for increased use of mobile health to establish and maintain connectedness was also emphasized, as well as the strengthening of cross-border laboratories in recognition that transmission of diseases does not recognize political and geographic boundaries. A key unresolved issue for the synergy of partnerships includes how to maintain the engagement of stakeholders to discuss and advance the goal of UHC.

ASLM2018 SPECIAL ANNOUNCEMENTS

Africa Collaborative Initiative to Advance Diagnostics (AFCAD)

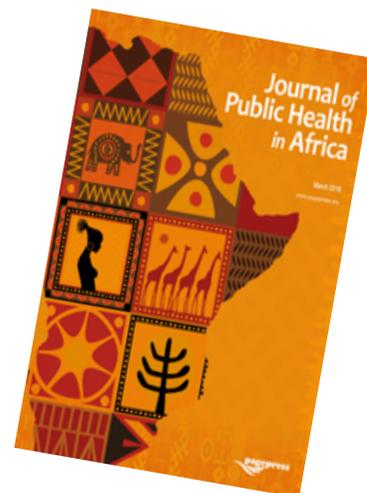
On Wednesday, 12 December 2018, ASLM and Africa Centres for Disease Control and Prevention launched a broad partnership called the Africa Collaborative Initiative to Advance Diagnostics (AFCAD) to address existing barriers towards advancing the diagnostic agenda in Africa. Additional partners include Institut de Recherche, de Surveillance Epidémiologique et de Formation (IRESSEF), World Health Organization Africa Regional Office (WHO-AFRO), Clinton Health Access Initiative (CHAI), African Field Epidemiology Network (AFENET), UNITAID, and others.



Prof Alash'le Abimiku, Chairperson of the ASLM Board of Directors, Dr Yenew Kebede, Head of Division of Laboratory Systems, Africa Centres for Disease Control and Prevention, and Mr Nqobile Ndlovu, acting CEO, ASLM made the announcement at the ASLM2018 conference in Abuja, Nigeria.

New Official Journal of Africa CDC

John Nkengasong, Director of the Africa Centres for Disease Control and Prevention (Africa CDC), announced that the 'Journal of Public Health in Africa' is now the official journal of the Africa CDC.



CLOSING SESSION

The conference co-chairs led the closing session and awards ceremony. After the lead rapporteurs provided key highlights from each track, the acting CEO of ASLM, Nqobile Ndlovu noted five key issues that emerged from ASLM2018:

- Firstly, for our programs to be sustainable we need to foster country ownership. Our programs need to move from pilots to scale if we are to achieve the desired health outcomes
- Secondly, we need to address the diagnostic gaps holistically. In this conference we witnessed the launch of the Africa Collaborative Initiative to Advance Diagnostics (AFCAD). Global partners and the Ministries of Health also met on the WHO prequalification program that has initiated the process of establishing a Collaborative Registration Procedure (CRP) for in-vitro diagnostics. These initiatives aim to accelerate the regulation to facilitate timely and wide access to essential diagnostics and streamline regulatory processes in Africa.
- Thirdly, we need to embed successful interventions and best practices into regulation.
- Fourthly, we need to address the human resources gaps. As such, ASLM will be launching an ASLM Academy to address the trainings needs of the laboratory professionals in Africa.
- Lastly, these efforts cannot happen without funding. In addition to the donor funding, we need to continue advocating for long-term internal funding.



Mr. Nqobile Ndlovu, acting CEO of the African Society of Laboratory Medicine



Dr. Osagie Ehanire (left), the Nigerian Minister of State for Health, and Ambassador W. Stuart Symington (right), the United States Ambassador to Nigeria, provided remarks at the ASLM2018 Closing Session.

AWARDS CEREMONY

ASLM Certificate of Recognition for Laboratory Accreditation

The awards ceremony began with presentation of certificates of recognition to accredited government laboratories that have passed through quality management and assurance checks. A record number 65 labs were recognized for their achievement of this standard of excellence. Award winners, arranged by country, are below:



Botswana

-
- Princess Marina Hospital Laboratory
- Sekgoma Memorial Hospital Laboratory
- Nyagabgwe Referral Hospital Laboratory



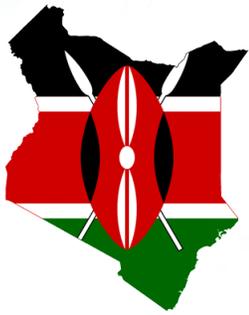
Cameroon

-
- Buea Regional Hospital Laboratory
- Bamenda Regional Hospital Laboratory



Ethiopia

-
- Oromia Public Health Research Capacity Building & Quality Assurance Laboratory
- National Clinical Bacteriology and Mycology Reference Laboratory - Ethiopian Public Health Institute
- National HIV Reference Laboratory - Ethiopian Public Health Institute
- National TB Reference Laboratory - Ethiopian Public Health Institute
- Bahir Dar Regional Health Research Laboratory Center - Amhara Public Health Institute
- St. Peter Hospital laboratory
- Arsho Medical Laboratory



Kenya

-
- Pcea Kikuyu Hospital Laboratory
- Ampathplus Care Laboratory
- KEMRI Alupe HIV Laboratory
- Bungoma District Hospital Laboratory
- Bomu Hospital Laboratory
- Eastern Deanary AIDS Relief Program (Cardinal Otunga Laboratory)
- Kisumu County Hospital Laboratory



Mozambique

-
- Laboratório de Parasitologia Molecular



Nigeria

-
- HIV Laboratory, Department of Virology, University College Hospital - IBADAN
- 661 Nigerian Air Force Hospital Laboratory (Formerly 445 Nigerian Air Force Hospital Laboratory)
- Center for Human Virology and Genomics, Nigerian Institute of Medical Research
- Plateau State Human Virology Research Center Laboratory
- APIN Supported Jos University Teaching Hospital Laboratory
- Defense Reference Laboratory



Senegal

-
- Laboratoire IRESSEF-RARS



South Africa

-
- RK Khan Laboratory – NHLS
- Inkosi Albert Luthuli Cytology Laboratory – NHLS
- Edendale Laboratory – NHLS
- Worcester Laboratory – NHLS
- Stanger Laboratory – NHLS
- Prince Mshiyeni Laboratory – NHLS
- Pelonomi Laboratory – NHLS
- Kroonstad Laboratory – NHLS
- Kimberley Laboratory – NHLS
- Catherine Booth Laboratory – NHLS
- Matlala Laboratory – NHLS
- Tshepong Laboratory – NHLS
- Helen Joseph Laboratory – NHLS
- Ngwelezane Laboratory – NHLS
- Grey's Laboratory – NHLS
- King Dinuzulu Laboratory – NHLS
- Dr Malizo Mpehle Memorial Laboratory – NHLS
- Aliwal North Laboratory - NHLS
- Tambo Memorial Laboratory – NHLS
- Letaba Laboratory – NHLS
- Karl Bremmer Laboratory – NHLS
- Kokstad Laboratory – NHLS
- Madzikane Ka Zulu Laboratory – NHLS
- Mount Ayliff Laboratory – NHLS
- Cecelia Makiwane Laboratory – NHLS
- Queenstown Laboratory – NHLS
- Paarl Laboratory - NHLS



Tanzania

-
- Aga Khan Hospital Laboratory
- Kibong'oto Infectious Diseases Hospital
- St. Benedict's Ndanda Referral Hospital Laboratory



Uganda

-
- Kiryandongo General Hospital Laboratory
- Kayunga Hospital Medical Laboratory
- Mildmay Uganda Laboratory
- St. Francis Nsambya Hospital Laboratory
- Central Public Health Laboratories



Zambia

-
- Centre for Infectious Disease Research in Zambia Central Laboratory
- University Teaching Hospital Laboratory
- Livingstone Central Hospital Laboratory

Following laboratories' acceptance of the Certificate of Recognition for Laboratory Accreditation, the following awards were presented:

Best Laboratory Champion Clinician Award

Promotes and recognizes an exceptional clinician in the field of public health whose work has had a profound impact on and/or benefit to laboratory medicine in Africa.



Dr. Gilchrist Muya Lokoe, Kenya

Practice in Laboratory Medicine Award

Promotes and recognizes a sustained laboratory improvement/best practice leading to tangible and replicable outcomes for enhanced quality in laboratory systems and patient care



AMPATHPlus Care Laboratory, Kenya

ASLM2018 Outbreak Hero Award

Recognizes an exceptional individual whose outstanding contributions and leadership have contributed to prevent and control an infectious outbreak



Professor Jean-Jacques Muyembe, Democratic Republic of the Congo

The Lifetime Achievement Award



Professor Souleymane Mboup

A lifetime achievement award to recognize impact on public health through exceptional contribution to laboratory science was presented to Professor Souleymane Mboup, Board Chair, Global Research and Advocacy Group. In his acceptance speech he offered the following advice: “Nothing is magic. Work. Be passionate. Recognize failures and let them teach you. Take initiative. Lead, and seek collaborations over the long term.”



Professor Souleymane Mboup receiving the Lifetime Achievement Award from Dr. Osagie Ehanire, the Nigerian Minister of State for Health.

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Local Organising Committee

Special thanks to the Nigerian Local Organising Committee for their onsite support. Members of the committee include:

- **Dennis Edo Agbonlahor**, Lahor Research laboratories, Benin City, Nigeria
- **Donald Ibe Ofili**, Medical Laboratory Science Council of Nigeria
- **Oyewale Tomori**, African Society for Laboratory Medicine
- **Chikwe Ihekweazu**, Nigeria Centre for Disease Control
- **Erhabor Tosan**, Medical Laboratory Science Council of Nigeria
- **Godswill Okara**, Association of Medical Laboratory Scientists of Nigeria
- **Nkechi Nwoke**, Federal Ministry of Health
- **Okoye McPaul**, US Centers for Disease Control and Prevention, Nigeria
- **Olubunmi Ngedu-Momoh**, FHI 360
- **Anthony Emeribe**, University of Calabar
- **Sam Peters**, Institute of Human Virology, Nigeria
- **Kenneth Iregbu**, College of Nigerian Pathologists
- **Jafaru Alunua Momoh**, National Hospital Abuja
- **Nicaise Ndembi**, Institute of Human Virology, Nigeria
- **Oni Idigbe**, African Society for Laboratory Medicine
- **Sophia Osawe**, Institute of Human Virology, Nigeria
- **Bassey Enya Bassey**, Association of Medical Laboratory Scientists of Nigeria
- **Akeem Lawal**, College of Nigerian Pathologists
- **Casmir Ifeanyi**, Association of Medical Laboratory Scientists of Nigeria
- **Mike Ebie**, Defence Reference Laboratory, Abuja
- **Igwe James C**, Biotechnology Society of Nigeria
- **Boluwatife Aina**, Institute of Human Virology, Nigeria

ISN Products Nigeria Ltd.

ASLM would also like to recognise its local sponsor, ISN. ISN is supporting travel scholarships for young investigators, offering volunteers during the conference, and co-sponsoring tea breaks for conference delegates, in addition to other support.

APPENDIX: PROGRAMME-AT-A-GLANCE

The detailed descriptions for all seminars can be found at www.aslm2018.org under the Conference Programme tab.

SATURDAY, 8 DECEMBER 2018	
Full Day Seminar 08:00 – 17:00	
CONGRESS HALL	
SLIPTA/SLMTA Symposium 2018	
Morning Seminar 08:00 – 12:00	
NIGER/ENUGU	
Establishing and Optimizing NPHIs in Africa	

SUNDAY, 9 DECEMBER 2018	
14:00 – 20:00	Registration REGISTRATION FOYER
Full Day Seminars 08:00 – 17:00	
CONGRESS HALL	NIGER/ENUGU
SLIPTA/SLMTA Symposium 2018	The ASLM Laboratory Community of Practice (LabCoP) Symposium
Morning Seminar 08:00 – 12:00	
BENUE/PLATEAU	
AJLM / PHE Manuscript Writing Workshop	
Evening Seminar 17:30 – 19:00	
BENUE/PLATEAU	
Laboratory Network Approach	

MONDAY, 10 DECEMBER 2018			
07:00 – 20:00	Registration REGISTRATION FOYER		
Morning Seminars 08:00 – 12:00			
NIGER/ENUGU	BENUE/PLATEAU	KANO	OSUN
Role of Laboratory Systems: Lessons Learnt and Perspectives	Development of Sustainable Laboratory Equipment Management Programs	09:00 – 12:00 WHO Workshop on Prequalification of In Vitro Diagnostics (IVDs) for National Regulatory Authorities (NRAs)	09:00 – 10:30 Improving the Clinic-Laboratory Interface– A Symposium Looking at How to Improve the Clinic-Lab-Interface (CLI) in both Stable Epidemics and Explosive Outbreaks
Opening of ASLM 2018			

Sponsored by



14:00 – 16:00	Opening Ceremony CONGRESS HALL
16:00 – 17:30	Opening Reception CONGRESS HALL
18:30 – 21:00	ASLM/Unitaid/WHO High Level Dinner (<i>Invitation Only</i>) KOGI

TUESDAY, 11 DECEMBER 2018

07:00 – 20:00	RegistrationREGISTRATION FOYER			
Morning Seminars 07:00 – 09:00				
NIGER/ENUGU		BENU/PLATEAU		
07:00 – 08:30		07:30 – 09:00		
Waste Management Strategies for HIV Viral Load and Early Infant Diagnosis		WHO Essential Diagnostics List		
PLENARY 1 – Pandemic Threats 09:00 – 10:30				
CONGRESS HALL				
Health System Inequalities and Pandemics Ibrahima-Socé Fall, WHO/AFRO		The Next Pandemic: What, When, Where? Chikwe Ihekweazu, Nigeria CDC		Costing the Response: Health Systems and Laboratories Olumide Okunola, IFC, World Bank
10:30 – 17:00	Exhibit Halls Open			
Oral Sessions 11:00 – 12:30				
CONGRESS HALL	NIGER/ENUGU	BENU/PLATEAU	KOGI	KANO
ORAL SESSION 1.1 Assessing the Burden of HIV, Tuberculosis and Malaria	ORAL SESSION 1.2 Assessing the Burden of Emerging Communicable and Non-Communicable Diseases	ORAL SESSION 1.3 The Role of Laboratory for Understanding, Treating and Preventing Diseases	ORAL SESSION 1.4 Combating Antimicrobial Resistance	ORAL SESSION 1.5 Laboratory Networks and Systems for Outbreak Response
Poster Sessions 12:30 – 13:30				
POSTER MARQUEE				
Pandemic Threats				
Oral Poster Sessions 12:30 – 13:30				
POSTER MARQUEE				
ORAL POSTERS 1.1: Assessing the Burden of HIV, Tuberculosis and Malaria	ORAL POSTERS 1.2: Assessing the Burden of Emerging Communicable and Non-Communicable Diseases	ORAL POSTERS 1.3: Laboratory for Understanding, Treating and Preventing Disease	ORAL POSTERS 1.4: Combating Antimicrobial Resistance	ORAL POSTERS 1.5: Laboratory Networks and Systems for Outbreak Response
12:30 – 13:30	Lunch on own			
Lunch Seminars 12:30 – 14:00				
NIGER/ENUGU	BENU/PLATEAU	KOGI	KANO	FCT
Laboratory Systems REIMAGINED to Deliver Scale Up	Strengthening Cross-Border Diseases Surveillance through Cross-Border Zoning	Multiplex Molecular Syndromic Testing: Transforming Early Detection of Outbreaks in Africa	Redefine the Reach of Reliable Testing... with cobas® Plasma Separation Card	The Role of the Laboratory in Preventing and Controlling Viral Epidemics and Viral Pandemics
Special Session 13:30 – 15:00				
CONGRESS HALL				
SPECIAL SESSION 1 – UHC and Health Systems Strengthening Moderated by Khama Rogo, World Bank Group, and Sten Westgard, Westgard QC				
Symposia 14:30 – 16:00				
NIGER/ENUGU		BENU/PLATEAU		
SYMPOSIUM 1 – Combatting Antimicrobial Resistance in Africa		SYMPOSIUM 2 – Outbreaks in Africa and Response		
Afternoon Seminar 14:30 – 16:00				
KANO				
Use of Resources, Efficiencies and Mutual Benefit of Integrated Multi Disease Testing in Optimised Laboratory Testing Networks				
Round Tables 17:00 – 18:30				
CONGRESS HALL	BENU/PLATEAU		KANO	
ROUNDTABLE 1 - Leveraging and Sustaining Networks for Disease Response in Africa	ROUNDTABLE 2 Disease Intelligence: Informing the Response		ROUNDTABLE 3 Invisible Threat: NCD Perspective	
Evening Seminars 17:00 – 21:00				
FCT	NIGER/ENUGU	BENU/PLATEAU	KOGI	
17:00 – 20:00 Geospatial Digital Tools: Best Practices and Opportunities to Improve Quality and Coverage of Key Laboratory Services	19:30 – 21:00 Post-Market Surveillance for HIV Self-Testing	19:30 – 21:00 Update on WHO Prequalification	19:30 – 21:00 New Decentralized Molecular Hep C Molecular Diagnosis & the Role of CD4 in the Management of HIV/AIDS Patients in the Current Dispensation	



WEDNESDAY, 12 DECEMBER 2018				
07:00 – 20:00		RegistrationREGISTRATION FOYER		
Morning Seminar 07:00 – 08:30				
NIGER/ENUGU				
Biosafety in Africa: What is the International Laboratory Branch (ILB) Working On?				
PLENARY 2 – Laboratory Response 09:00 – 10:30				
CONGRESS HALL				
Laboratory Networks: The Response to the Next Pandemic Trevor Peter, CHAI		Development and Testing of an Autonomous, Integrated Mobile Laboratory for Epidemic Rapid Response and Surveillance Rudi Pauwels, Praesens Foundation		Health Systems for Pandemic Response in the 21st Century Wafaa El-Sadr, ICAP at Columbia University
10:30 – 17:00		Exhibit Halls Open		
Oral Sessions 11:00 – 12:30				
CONGRESS HALL	NIGER/ENUGU	BENUE/PLATEAU	KOGI	KANO
ORAL SESSION 2.1 Innovations to achieve Universal Health Coverage and International Health Regulations	ORAL SESSION 2.2 Improving Diagnostics to Achieve Universal Health Coverage and International Health Regulations	ORAL SESSION 2.3: Improving Quality, Safety and Cost Effectiveness of Laboratory Systems	ORAL SESSION 2.4: Workforce Development	ORAL SESSION 2.5 Strengthening the Laboratory-Clinic Interface
Poster Sessions 12:30 – 13:30				
POSTER MARQUEE				
Laboratory Response				
Oral Poster Sessions 12:30 – 13:30				
POSTER MARQUEE				
ORAL POSTERS 2.1: Innovations to Achieve Universal Health Coverage and International Health Regulations	ORAL POSTERS 2.2: Improving Diagnostics to Achieve Universal Health Coverage and International Health Regulations	ORAL POSTERS 2.3: Improving Quality, Safety and Cost Effectiveness of Laboratory Systems	ORAL POSTERS 2.4: Workforce Development	ORAL POSTERS 2.5: Strengthening the Laboratory-Clinic Interface
12:30 – 13:30		Lunch on own		
Lunch Seminars 12:30 – 14:00				
NIGER/ENUGU	BENUE/PLATEAU	KOGI	KANO	FCT
12:30 – 13:30 Molecular for Everyone – Increasing Access to Actionable EID and Viral Load Results While the Patient is Still There	THE PANTHER SYSTEM: Real Solutions for the Scale Up of HIV Viral Load Monitoring in Resource- Limited Settings	Global Point Prevalence Surveys (GPPS): Accelerate the Implementation of Antimicrobial Stewardship in Africa	Innovative Models of HealthCare Delivery Panel Discussion	Strengthening Sustainable Biorisk Management in Africa
Special Session 13:30 – 15:00				
CONGRESS HALL				
SPECIAL SESSION 2 – Innovations: -iLEADS, -FIND Moderated by Souleymane Mboup, IRESSEF, and Wendy Stevens, NHLS				
Symposia 14:30 – 16:00				
NIGER/ENUGU			NUE/PLATEAU	
SYMPOSIUM 3 – Quality Management System: Owning the Response			SYMPOSIUM 4 – Bio-safety/Bio-security: Reducing the Threats	
Round Tables 17:00 – 18:30				
CONGRESS HALL	BENUE/PLATEAU		KANO	
ROUNDTABLE 4 Biological Specimen Repository for Outbreak Response: Biobanking Networks	ROUNDTABLE 5 Role of National Public Health Institutes in Pandemic Response		ROUNDTABLE 6 Africa Regional Laboratory Networks: Perspective on Emerging Disease Threats	
Evening Seminars 19:30 – 21:00				
NIGER/ENUGU			FCT	
Saving Lives from Opportunistic Infections: Diagnostics for the Advanced HIV Package of Care			Laboratory Network Approach	



THURSDAY, 13 DECEMBER 2018				
07:00 – 12:00	RegistrationREGISTRATION FOYER			
PLENARY 3 – Synergizing Partnerships 09:00 – 10:30				
CONGRESS HALL				
Leveraging Public and Private Funds to Achieve UHC John Simon, Global Fund		Coumba Toure Kane, IRESSEF	Partnerships and Smart Investments for Global Health Security and International Health Regulations Rebecca Martin, US CDC	
10:30 – 15:00	Exhibit Halls Open			
Oral Sessions 11:00 – 12:30				
CONGRESS HALL	NIGER/ENUGU	BENUE/PLATEAU	KOGI	KANO
ORAL SESSION 3.1 The One-Health Approach	ORAL SESSION 3.2 Partnerships and Collaborations for Universal Health Coverage and International Health Regulations	ORAL SESSION 3.3: Science and Education to Prevent the Next Pandemic	ORAL SESSION 3.4: The Last Mile to Achieving the UN 90-90-90 Targets	ORAL SESSION 3.5 Implementation and Harmonization of Policies
Poster Sessions 12:30 – 13:30				
POSTER MARQUEE				
Synergizing Partnerships				
Oral Poster Sessions 12:30 – 13:30				
POSTER MARQUEE				
ORAL POSTERS 3.1: The One Health Approach	ORAL POSTERS 3.2: Partnerships and Collaborations for Universal Health Coverage and International Health Regulations	ORAL POSTERS 3.4: The Last Mile to Achieving the UNAIDS 90-90-90 Targets	ORAL POSTERS 3.5: Implementing and Harmonizing Policies	
12:30 – 13:30	Lunch on own			
Symposia 13:30 – 15:00				
NIGER/ENUGU	BENUE/PLATEAU		KOGI	
SYMPOSIUM 5 Laboratory Systems and Networks for One Health	SYMPOSIUM 6 International Partnerships for UHC and Preparedness		SYMPOSIUM 7 Partnering with the Private Sector: New Frontiers	
Closing Sessions 15:30 – 18:30				
15:30 – 16:30	Closing Session CONGRESS HALL			
16:30 – 18:30	ASLM Awards Ceremony CONGRESS HALL			