

## LAB CULTURE

THE ASLM NEWSLETTER FOR LABORATORY PROFESSIONALS ACROSS AFRICA

November 2012, Issue 5

# HEALTHCARE-ASSOCIATED INFECTIONS

The Neglected Threat

## SPECIAL ISSUE: COUNTDOWN TO ASLM2012

An Interview with the Hon. Dr. Tedros Ghebreyesus, Minister of Health of Ethiopia

Plenary Speaker Prof. Barry Schoub and the Dream Age of Virology

Winners of the ASLM2012 Travel Award

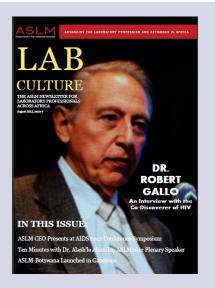


#### **Lab Culture | Call for Submissions**

ASLM is accepting submissions to *Lab Culture*, our quarterly newsletter. We invite you to submit articles (200-500 words) on the following topics:

- Standards & Accreditation
- Research
- Education & Training
- Clinical Medicine

If you are interested in advertising in *Lab Culture* or providing a photo or article contribution, please email us at <a href="mailto:newsletter@aslm.org">newsletter@aslm.org</a>.



## Are You Attending ASLM2012? Conference Satellite Symposia Topics Include: WHO Pregnalification of Laboratory Information

Laboratory-Clinical Interface

WHO Prequalification of Diagnostics

Laboratory Information
Systems

Biosafety & Biosecurity

Mobile Platforms & New Technologies for Diagnostics

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LETTER FROM THE CEO	
Countdown to ASLM2012	2
MEMBER NEWS	
ASLM Welcomes New Additions to Ambassador Programme	3
Expanding the Society's Reach Through Social Media	3
An Interview with the Minister of Health of Ethiopia, the Hon. Dr. Tedros Ghebreyesus	4
ASLM Highlights Laboratory Medicine at Forum for Infectious Disease Diagnostics	6
ASLM Attends Regional HIV/AIDS Public Health Laboratories Network Meeting	7
SPECIAL SECTION: ASLM2012	
Plenary Speaker Prof. Barry Schoub's <i>Dream Age of Virology</i>	8
ASLM Grants Conference Travel Awards to Students	10
Satellite Sessions Expand the Horizons of <i>ASLM2012</i>	11
STANDARDS AND ACCREDITATION	
WHO Addresses State of Diagnostic Certification Worldwide	14
ASLM Hosts Second SLIPTA Independent Advisory Committee Meeting	17
EDUCATION AND TRAINING	
ASLM Facilitates SLIPTA Auditor Training in Tanzania	18

#### **FEATURE ARTICLE**



Staphyloccocus aureus culture on blood agar.

#### Healthcare-Associated Infections: A Neglected Issue Threatening Healthcare Facilities in Africa

Editorial Team: Rachel Crane (GSSHealth) Tsehaynesh Messele, PhD (ASLM) Jessica Fried, MPH (GSSHealth) Aaron Krol (GSSHealth) Laurel Oldach (GSSHealth) Corey White, MPA (ASLM)

12

Lead Editor: Paula Fernandes, MBA, PhD (GSSHealth)
For submissions and inquiries please contact:
Newsletter@ASLM.org



November 2012 ASLM Newsletter 1

## LETTER FROM THE CEO

### **COUNTDOWN TO ASLM2012**



Early this year, when we began to plan the ASLM2012 international conference, I wasn't sure what level of involvement to expect from Society members and others in the medical laboratory community. After months of planning, I can say that I have been astonished at the enthusiasm and commitment of conference attendees and planners. Between June and September, we received over 600 conference abstract submissions. We have also received and confirmed 37 satellite session applications and 15 exhibition requests. Over 130 speakers and coconveners have confirmed conference attendance, and more than 120 people have signed up to volunteer at the venue. ASLM has also honoured 25 exemplary students with conference travel awards.

atory medicine on the African continent.

Apart from planning for our international conference, we have been busy attending meetings, facilitating training courses, and developing opportunities to expand the Society's reach. In September, ASLM participated in two meetings centred on the advancement of infectious disease diagnostics and the control of HIV/AIDS through improved laboratory capacity and quality. The ASLM SLIPTA (Stepwise Laboratory Quality Improvement Process Towards Accreditation) Independent Advisory Committee hosted its second meeting in late September, and in October the Society expanded its regional Ambassador Programme and facilitated a SLIPTA auditor training in Dar es Salaam, Tanzania. ASLM also co-hosted a SLIPTA auditor training in Abuja, Nigeria, from 29 October to 2 November, and plans to host another SLIPTA auditor training in Johannesburg, South Africa shortly following *ASLM2012*.

ASLM2012 will be an exciting event for many reasons. It is In addition to information on our recent activities and a our first international conference and we are expecting special insert on the ASLM2012 conference, this edition of over 1000 participants from the global scientific communi- Lab Culture features an article concerning healthcarety. ASLM2012 will unite laboratory scientists, health profes- associated infections (HCAI), which are acquired by pasionals, industry members and public health leaders com- tients while in treatment at healthcare facilities. A thormitted to improving laboratory diagnostics in Africa and ough approach to HCAI surveillance and intervention is around the world. Participants will be able to exchange ide- long overdue across the African continent. As we scale up as and knowledge, collaborate on projects, and learn about laboratory capacity, we must be cognizant of this important the latest in diagnostic technologies, cutting-edge research medical concern. "Healthcare-Associated Infections: A Neand quality assurance methods. Such interactions are cru- glected Issue Threatening Healthcare Facilities in Africa" is cial to addressing issues specific to public health and labor- available on page 12. I hope you enjoy Issue 5 of Lab Culture, and I look forward to seeing you at the conference.

Dr. Tsehaynesh Messele, CEO, ASLM

## **ASLM WELCOMES NEW ADDITIONS TO** AMBASSADOR PROGRAMME

In October, ASLM announced the appointment of three new Ambassadors as part of the Society's regional Ambassador Programme. Professor Daniel Sess, Dr. William Ampofo, Dr. Adil Ismail and Professor Dennis Agbonlahor join Professor El-hadj Belabbes, who became the first ASLM Ambassador in March. Ambassadors provide a crucial link between the Society and its members, communicating the needs of the scientific community so that ASLM may respond accordingly. Ambassadors will play an active role in identifying regional training needs and advocating among government health agencies and professional organisations for improvements in the quality of laboratory diagnoses.

#### **Prof. Daniel Sess**



Prof. Sess joins ASLM as the Ambassador to Côte d'Ivoire. He currently serves as President of the Monitoring Committee of the regional organisation CRESAC (Centre Régional d'Evaluation en Santé et d'Accréditation des

Etablissements Sanitaires en Afrique).

#### Dr. Adil Ismail



Dr. Ismail joins ASLM as the Ambassador to Sudan. Ismail has served at the Ministry of Health of Sudan for over 18 years. He is currently an Assistant Research Professor at the National Public Health Laboratory (NPHL) in

Khartoum and in early 2012 became the Acting Director of NPHL.

#### Dr. William Ampofo



Dr. Ampofo joins ASLM as the Ambassador to Ghana. He currently serves as Senior Research Fellow and Head of the National Influenza Centre, Virology Department at the Noguchi Memorial Institute for Medical Re-

search, University of Ghana.

#### **Prof. Dennis Agbonlahor**



Prof. Agbonlahor joins ASLM as the Ambassador to Nigeria. He is currently Head of the Medical Laboratory Science department at Niger Delta University, where he teaches medical, veterinary and environmental mi-

crobiology.

## **EXPANDING THE SOCIETY'S REACH THROUGH SOCIAL MEDIA**

When ASLM launched in March 2011, the news was an- events to members, partners and interested parties via enounced in a series of printed press releases. However, as communications campaigns. Starting at just 330 e-mail rethe Society has grown in stature and reach, it has not relied cipients in September 2011, ASLM now has a community solely on traditional media for sharing information. Online following of over 5,000 contacts. ASLM has also established mass communication has enabled ASLM to expand its reach a presence on several social networking sites: through exponentially, connecting with both members and the gen- Twitter (username @ASLM\_News) and Facebook, ASLM eral public to communicate the critical mission of advanc- posts Society updates as well as public health and developing medical laboratory services throughout Africa. The ment news, with the ambition of reaching a broader audi-ASLM communications team takes full advantage of social ence within the global health community. Followers are networks and e-mail marketing programs to stay connected encouraged to interact, voice their interest and support and keep its members engaged.

Last year, ASLM began disseminating Society news and

ASLM campaigns. To date, ASLM has issued over 1,050 tweets to over 230 Twitter followers. On Facebook, ASLM

(Continued on page 6)

## **MEMBER NEWS**



An Interview with the Honourable

## DR. TFDROS ADHANOM **GHEBREYESUS**

Minister of Health of the Federal Democratic Republic of Ethiopia

As Minister of Health of the Federal Democratic Repub- pregnant women—was clear from my early research expelic of Ethiopia, how do you balance and prioritise the  $^{\rm rience.}$ health needs of an entire nation? Is this a constantly During Prime Minister Zenawi's time in office, child evolving landscape?

Equity is the basis for balancing and prioritising the health needs of our nation. The emphasis is on primary healthcare with universal coverage. The priority is mainly focused on that led to such great strides in healthcare improveour health sector development plan (HSDP), which has been crafted in four phases over the course of 20 years. We are now in the fourth phase, which is very much in line with the target set for the Millennium Development Goals (MDGs).

Yes, we could say it is a constantly evolving landscape. One thing is certain: our strategy is well thought out and consists of a long-term plan and impact. We take advantage of our practical experience through monitoring and evaluation and continue to improvise a dynamic approach to health system strengthening.

During your career you have served as Board Chair of the Roll Back Malaria initiative and Global Fund. Did your early career in malaria research impact your contribution to health policy in this arena?

Yes, to a great extent my early career in malaria research has helped me gain insights to influence some of the policies with which I have been involved. As some of my early research experiences were operational in nature, their policy implications were obvious. For instance, the need for prevention in terms of prompt treatment and diagnosis, and for universal coverage of insecticide-treated bed nets for the most vulnerable segment of society—children and

malnutrition in Ethiopia fell significantly; between 2005 and 2011, child mortality and malaria rates were cut in half. What would you say were the key interventions ment?

Our late Prime Minister Meles Zenawi was a wise and committed leader who made remarkable achievements in all aspects of his work, particularly in the health sector. The key to our success has been a strong government commitment and a clear national strategy set for a 20-year period in the form of a health sector development plan (HSDP). The other crucial factor is the innovative programme to deploy more than 37,000 health extension workers at the community level, fully engaged with 16 packages [containing basic services required] for primary health care. Increasing the numbers of trained health workers at the primary health level has made it possible for the community to promote healthy living and to manage many health issues closer to home. Importantly, the expansion and improvement of health care infrastructure through new construction has enabled many more patients to access high quality facilities.

ASLM benefits greatly from your support and from that of other African nations. What kinds of support would you like to see ASLM provide to African scientists in the next few years?

#### HON. DR. TEDROS ADHANOM GHEBREYESUS

(Continued from page 4)

in the domains of laboratory services and accreditation, implementing the Strengthening Laboratory Management capacity building, training, strengthening of research capac- Towards Accreditation (SLMTA) programme. We have inity and exchange of knowledge, inter-country collaboration, troduced over 59 laboratories to the first and second phasadvocacy and resource-mobilisation, and networking.

#### Are there any key health-related projects planned in Ethiopia that you would like to exclusively share with **ASLM?**

I would like to share two announcements with ASLM. Firstly, until now our Health Enhancement Programme has produced tremendous results. We are now coming up with a new health development initiative for the faster and more sustainable achievement of MDGs goals. This is a very innovative and comprehensive approach to mobilising the community at a grassroots level, as well as to owning every initiative in a more organised manner. We believe our strategies will achieve success more quickly and with sustainability.

I would like ASLM to provide support to African scientists Secondly, over the past two years Ethiopia has engaged in es of the programme. We are already seeing a lot of enthusiasm towards quality management and a keen interest in progressive improvement. As Ethiopia is a big country, we are keen on expanding to include as many laboratories as possible in SLMTA in a national roll-out approach.

#### Do you have anything else to add?

I wish you a successful conference! Let us all join hands in promoting the laboratory agenda to take root in Africa for quality services!

Editors: Paula Fernandes, MBA, PhD (Editorial Team) and Rachel Crane (Editorial Team); Contributors: Tsehaynesh Messele, PhD (Editorial Team) and Corey White, MPA (Editorial Team)

#### Call for Advertisements!

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#### See our ad rates:

Frequency	1x	2x	3x	4x
Full Page	US \$2,750	US \$2,585	US \$2,430	US \$2,284
Half Page	US \$1,500	US \$1,455	US \$1,411	US \$1,369
Quarter Page	US \$870	US \$844	US \$819	US \$794
Back Cover	US \$4,550	US \$4,277	US \$4,020	US \$3,779

## **ASLM HIGHLIGHTS LABORATORY MEDICINE AT** FORUM FOR INFECTIOUS DISEASE DIAGNOSTICS

ASLM leaders recently hosted a satellite meeting at a forum challenges overcome and achievements made. Mr. Teferi ber. The ASLM satellite meeting, entitled "ASLM - Advancing the Laboratory Profession and Networks in Africa", took place on 8 September and featured six presentation topics.

Dr. John Nkengasong, Chief of the International Laboratory Branch at the US Centers for Disease Control and Prevention (CDC) and former Chairman of the ASLM Board of Directors, presided over ASLM's satellite meeting. Delivering the opening speech for the session, Dr. Nkengasong discussed the Society's role in promoting laboratory standards across Africa.

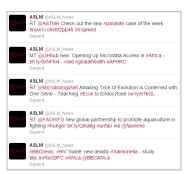
Dr. Tsehaynesh Messele, ASLM CEO, presented a summary of the first year of the Society in which she discussed the

themed, "Moving Forward in the Diagnosis of Infectious Mekonen, ASLM Accreditation Officer and SLIPTA Diseases in Resource Limited Countries," organised by Fon- (Stepwise Laboratory Quality Improvement Process Todation Mérieux in Veyrier du Lac, France from 7-9 Septem- wards Accreditation) Focal Point, talked about the impact of the SLIPTA programme and defined the roadmap for its expansion across the African continent. Dr. Trevor Peter, ASLM Board Chair and scientist at the Clinton Health Access Initiative (CHAI), covered the role of ASLM in supporting laboratory science, research and training and stressed the importance of a collaborative approach from partners. Dr. Fausta Mosha, Secretary of the ASLM Board of Directors and Laboratory Director of the National Health Laboratory Quality Assurance and Training Centre of the Tanzanian Ministry of Health and Social Welfare, focussed on collaborations and encouraged more institutions to step up in support of the ASLM network. Mr. Jonathan Lehe, Programme Manager of Point-of-Care (POC) Diagnostics at the Clinton

(Continued on page 9)

#### **ASLM EXPANDS SOCIAL MEDIA REACH**

(Continued from page 3)



videos and health-related video content.

These social networking and e-mail marketing sites provide the Society with the opportunity to establish new connections, boost the ASLM brand, promote events and increase traffic to its website. However, interest in the possibilities of online communication extends beyond public visibility and disseminating the Society's message. ASLM has always been devoted to the exchange of ideas and information between working scientists and members of the health community, understanding that these connections can spark innovation and help the most successful tools and strategies take hold in laboratory systems around the world. That is why the ASLM website (www.aslm.org) includes its own, growing social network tailored specifically to African la-

has over 295 "Likes" and a boratory scientists, public health workers and advocates. weekly reach of over 470 Member profiles, community forums, links to open access users. In addition to e-mail journals, an online library of essential information on the communications, Facebook state and practice of laboratory medicine in Africa, and upand Twitter accounts, ASLM coming online collaborative workspaces enable members to page share research and engage in dialogue from across the (ASLM\_news) where it posts world, accelerating the pace at which the best ideas rise to event photos, and a YouTube the top. ASLM understands that this free, virtual, collective channel (ASLMnews) for its workspace is the future of medical communication, and aims to provide access to the most up-to-date online resources to all of its members.

By: Aaron Krol (Editorial Team) and Rachel Crane (Editorial Team)

#### Get Involved with ASLM through Social Media

Facebook: facebook.com/pages/African-Society-For-Laboratory-Medicine/332528796775345

Twitter: twitter.com/aslm\_news

Flickr: flickr.com/photos/aslm\_news

YouTube: youtube.com/user/ASLMnews

ASLM Member Profiles: aslm.org/aslmprofiles/Home.php

## **ASLM ATTENDS REGIONAL HIV/AIDS PUBLIC** HEALTH LABORATORIES NETWORK MEETING



Group picture taken in Abidjan, Côte d'Ivoire.

ASLM participated in the sixth meeting of the Regional HIV/ AIDS Public Health Laboratories Network, hosted by the 2 World Health Organisation Regional Office for Africa (WHO/AFRO) from 11-13 September in Abidjan, Côte d'Ivoire. The meeting, themed, "Improving Quality and Access of Laboratory Services," convened leaders from the WHO and the US Centers for Disease Control and Prevention (CDC), as well as from the Ministries of Health of Cameroon, Côte d'Ivoire, Ghana, Tanzania, Senegal and Zimbabwe.

The purpose of the Regional HIV/AIDS Public Health Laboratories Network is to contribute to HIV/AIDS prevention and control by improving the quality and capacity of public health laboratories and laboratory networks in the African region. The Network strives to improve laboratory capacity and quality by promoting joint advocacy and resource deployment for laboratory services, common procedures and policy approaches, the exchange of information and technical expertise within networks, and the use of the existing laboratory structures within the AFRO region as regional reference centres.

The objectives of this meeting were to review the status of implementation of the 2008 recommendations of the HIV Laboratory Network; to review the current management and challenges of HIV laboratory services; to advance solutions for maintaining high-quality and reliable diagnostic support for HIV prevention, treatment and care; and to finalise a plan of action for the Laboratory Network for 2012 Editor: Laurel Oldach (Editorial Team) through 2014.

Dr. Celestin Hakiruwizera, Acting Director of Programmes of ASLM, provided an update on the Society, while Mr. Teferi Mekonen, ASLM Accreditation Officer and SLIPTA (Stepwise Laboratory Quality Improvement Process To-

wards Accreditation) Focal Point, presented the WHO/ AFRO SLIPTA process. ASLM staff also served as cofacilitators of the two plenary sessions of the meeting, with Dr. Hakiruwizera facilitating a Francophone group discussion while Mr. Mekonen facilitated an Anglophone group discussion.

By the end of the meeting, the discussion groups had produced the following specific recommendations for the Regional HIV/AIDS Public Health Laboratories Network:

- Further sensitize countries and governments to the need for accreditation, and support the elaboration of country action plans to achieve accreditation;
- Harmonise tools employed to help achieve accreditation;
- Expand training for laboratory professionals to include quality management system components such as record keeping, document control (SOPs), internal audit, etc.;
- Support WHO/AFRO member states to elaborate and implement a national laboratory strategic plan;
- Provide normative guidance on post-market surveillance (PMS) (WHO activity);
- Mobilise resources for the continued sustainable scaleup of external quality assessment (EQA) schemes using the dried tube specimen approach.

By participating in this meeting and helping produce specific recommendations for the Regional HIV/AIDS Public Health Laboratories Network, ASLM leaders help to advance the goals of the Network shared by the Society, including the goals of improving laboratory quality management and information systems. For more information on WHO/AFRO efforts in the fight against HIV/AIDS, please http://www.afro.who.int/en/clusters-aprogrammes/dpc/acquired-immune-deficiency-syndrome/ overview.html.

By: Rachel Crane (Editorial Team) and Teferi Mekonen, MSc, MPH (ASLM);



## **ASLM2012 PLENARY SPEAKER** PROF. BARRY SCHOUB **AND THE** "DREAM AGE" OF VIROLOGY

Professor Schoub, you are the Head of the Centre for Your plenary speech at ASLM2012 also concerns the Vaccines and Immunology at the NICD (National Insti- evolution of virology as a discipline in Africa over the tute for Communicable Diseases, South Africa) and past several decades. Why did you choose this topic? were the first Professor and Head of the Department of What aspect of your presentation do you think Virology at Wits (University of the Witwatersrand, attendees will find most interesting? South Africa). How has the field of virology changed over the years, in South Africa and the African continent as a whole?

Virology has really changed globally, and what we see in South Africa is a reflection of what has happened worldwide. In terms of scientific research, the country is now on par with Europe and the United States. The changes I have seen span about 40 years of work. We were in what we colloquially call the "Steam Age" of virology; now the technologies and interpretations are virtually unrecognisable from what they were. If you look at diagnostics from the mid-

"[ASLM2012] will have a great effect—it's a tremendous venture. It will make an impact by bringing together African scientists and facilitating collaborations"

cal technologies trol. were based on finicky tests. In reality, the lab to rapidly accurately port the physi-

in what can be called the "Dream Age" of virology. We detect [viruses] with molecular techniques such as PCR and tions. sequencing, so it's possible to discover a virus before it can be seen. In addition, sequencing has greatly helped our understanding of the epidemiology of viruses.

My plenary speech will indeed cover this topic, and to some extent the subject was given to me because I've had such a long career in virology. When you get to my age and [level of] experience, you want to look back. It's a story of a successful and very enjoyable career. I would do it again if I had the chance. I modified the speech somewhat away from the laboratory as I now work more on the clinical side, though I will bring in the lab side, too.

In my speech, I will look at the consequences of improvements of lab technologies, and how improved technologies and hitherto unknown technologies affect the diagnosis of 70s, back in the day when one would need to grow viruses illnesses. Technological improvements have helped imto make a diagnosis, it was very time-consuming and the mensely in the diagnosis and clinical management of HIV patient would either be healthy or dead by the time the and the infectious causes of hepatitis. I am planning to illusvirus was detect- trate just how rapidly evolving technologies have led to ed. Plus, serologi- different approaches and improvements to infection con-

#### What impact do you think a meeting like ASLM2012 will have on science in Africa?

was often unable I think it will have a great effect—it's a tremendous venture. It will make an impact by bringing together African scientists and facilitating collaborations. There are problems unique to the continent, and the conference will help cian. Now we are synthesise the capabilities of the scientists who attend. It will also encourage clinical and epidemiological collabora-

#### PROF. BARRY SCHOUB

(Continued from page 8)

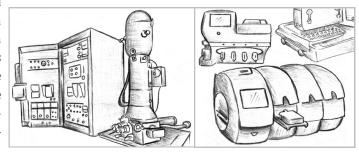
### public health challenges in Africa in the years to come? How does NICD plan to address these challenges?

HIV is ravaging sub-Saharan Africa, and efforts to control the disease will hopefully lead to a vaccine. Then, of course, there is also tuberculosis and malaria. These diseases will remain the biggest public health challenges for Africa, from an infectious diseases point of view. They have not yet been overcome, and scientists are challenged to develop vaccines for them. At NICD, our three biggest research units are the HIV/AIDS research unit, the TB reference centre, and the malaria research unit. About 75% of NICD's research resources are spent on efforts to prevent and cure these diseases.

#### What kinds of support would you like to see ASLM provide to African scientists and to public health initiatives in the next few years?

The [African Journal of Laboratory Medicine] is great, because it's a forum for communication. Within the journal I would like to see different opportunities advertised. We Editor: Paula Fernandes, MBA, PhD (Editorial Team); Illustrator: Rachel don't want scientists to be recruited away from Africa, and

Looking forward, what do you think will be the greatest it would be useful if the journal advertised opportunities for research, for grants, for training, etcetera. I would also like to see further development of the ASLM website as a place where people can find, share and contribute SOPs in an easy-to-use interface. ASLM could also facilitate electronic communication between labs.



The "Steam Age" of Virology. Rendering of 1970s electron microscope.

Today's "Dream Age" of Virology. Automated platforms for molecular biology.

For more information about ASLM2012 speeches and presentations, please see the main conference schedule at-a-glance: http://www.aslm2012.org/docs/AtaGlance.pdf.

Crane (Editorial Team)

## **ASLM HIGHLIGHTS LABORATORY MEDICINE AT** FORUM FOR INFECTIOUS DISEASE DIAGNOSTICS

(Continued from page 6)

Health Access Initiative (CHAI), covered the role of ASLM in grated diagnostic platforms play an important role in consupporting laboratory science, research and training and trolling infectious diseases in Africa and worldwide. ASLM's stressed the importance of a collaborative approach from participation in the fifth annual forum for infectious disease partners. Dr. Fausta Mosha, Secretary of the ASLM Board of diagnostics reflects the increasing recognition, among or-Directors and Laboratory Director of the National Health ganisations and governments, of the importance of labora-Laboratory Quality Assurance and Training Centre of the tory capacity in reducing the global infectious disease bur-Tanzanian Ministry of Health and Social Welfare, focused on collaborations and encouraged more institutions to step up in support of the ASLM network. Mr. Jonathan Lehe, Programme Manager of Point-of-Care (POC) Diagnostics at the Clinton Foundation, spoke about the outcomes of a recent POC meeting in Addis Ababa, Ethiopia, and ASLM's proposed role in promoting POC diagnostics.

The capacity to provide accurate disease diagnoses and monitor treatment response is critical to reducing the infectious disease burden in low- and middle-income countries. New technologies such as rapid molecular tests and inte-

This is the fifth forum in a series organised by Fondation Mérieux since 2008, centred on the theme, "Moving Forward in Diagnostics." The organisation has previously hosted meetings in collaboration with the Global Laboratory Initiative of the STOP TB Partnership, the World Health Organization, the Roll Back Malaria Partnership, UNAIDS, and American Academy of Microbiology.

By: Rachel Crane (Editorial Team); Editor: Laurel Oldach (Editorial Team); Contributor: Teferi Mekonen, MSc, MPH (ASLM)

## WINNERS OF THE ASLM2012 STUDENT TRAVEL AWARDS ANNOUNCED

ASLM is excited to announce that it has selected 25 recipi- lected the abstract submissions with the highest scientific ents for the ASLM2012 Student Travel Award. The award quality relevant to the field of laboratory medicine and the provides financial support in the form of US \$1,500 to stu-Society's mission. In accepting the award, recipients agreed dents and recent graduates interested in attending ASLM's to provide eight hours of volunteer service at the conferfirst international conference.

When asked how she felt upon discovering she had been This award highlights ASLM's commitment to supporting the Lagos University Teaching Hospital, Nigeria, says, "Exhilaration is the word. I was exhilarated...the next thing I did was to accept the award and then thank my colleague for encouraging me to apply for it."

dent Travel Award recipients will be able to network with enekwu (Nigeria), Ernest Lango-Yaya (Central African Re-

leaders and professionals of laboratory medicine, broaden their understanding of issues related to laboratory diagnostics, and exchange ideas for moving forward in promoting laboratory medicine in Africa.

Dr. Onyenekwu says she was first interested in attending the conference because "it will be an opportunity to meet and rub minds with people from all over Africa who are interested in the advancement of laboratory medicine."

ry of Clinical Biology, Central African Republic) says he became interested in attending the conference because it would allow him "to meet other lab professionals, learn about others' working processes and compare them to the processes in my lab, and to be a part of the network of laboratory professionals in Africa and the world."

Mr. Moussa Thiam of the Laboratory of Bacteriology and Virology, Le Dantec Hospital, Senegal, another recipient, says he will be "happy to be able to exchange expertise of different aspects of HIV research" at ASLM2012. He goes on to say that he expects the conference to "facilitate the sharing of experiences from different countries and from different areas of biomedical research in Africa."

To qualify for consideration, individuals submitted abstracts to the conference along with proof of their status as current or recent graduates (2012 graduation). ASLM seence.

accepted for the award, recipient Dr. Chinelo Onyenekwu of the next generation of laboratory scientists, who will determine the future of laboratory medicine in Africa.

Recipients of the ASLM2012 Student Travel Awards include: Abdi Samuel (Ethiopia), Abou Abdallah Malick Diouara (Senegal), Anthony Ahumibe (Nigeria), Awa Ba Diallo By attending the ASLM2012 international conference, Stu- (Senegal), Babatunde Odetoyin (Nigeria), Chinelo Ony-

> public), Franklyn Egbe (Cameroon), Grace Bartonjo (Kenya), Ifeyinwa Osegbe (Nigeria), Innocent Uwimana (Rwanda), Jacques Simpore (Burkina Faso), Jeremiah Ogoro (Kenya), Lee Schroeder (USA), Jennifer Giandhari (South Africa), Lilian Okeke (Nigeria), Loveness John Urio (Tanzania), Moussa Thiam (Senegal), Mura Ngoi (Tanzania), Nasir Umar-Tsafe (Field Epidemiology and Laboratory Training Programme, Nigeria), Chioma Nwuba (Nigeria), Oladimeji Abisola (Nigeria), Pierre Mukadi Kaningu (Democratic

Award recipient Mr. Ernest Lango-Yaya (National Laborato-Republic of Congo), Sarr Am (Senegal), Silvia Kadima (Kenya).

> By: Rachel Crane (Editorial Team); Editor: Laurel Oldach (Editorial Team); Contributors: Elizabeth Luman, PhD (CDC-Atlanta), Chinelo Onyenekwu, MD (Lagos University Teaching Hospital, Nigeria), Moussa Thiam (Le Dantec Hospital, Senegal), Ernest Lango-Yaya (National Laboratory of Clinical Biology, Central African Republic)

opportunity to meet and rub minds with people from all over Africa who are interested in the advancement of laboratory medicine"

"[ASLM2012] will be an

- Chinelo Onyenekwu, ASLM2012 Travel Award Recipient

## SATELLITE SESSIONS EXPAND THE HORIZONS OF **ASLM2012**

ASLM's first international conference, to be held from 1-7 ment. POC and rapid diagnostic technologies are essential December in Cape Town, is rapidly approaching. Partici- for the control of diseases in Africa, where patients often pants of ASLM2012 have much to anticipate from the seven- bear the cost of traveling long distances and waiting to acday event. In addition to keynote addresses, plenary sessions, round table discussions, break-out periods and ex- nostic platforms must be cost-effective, rapid, easy to use hibits, the conference will feature 37 satellite sessions from and maintain, and of comparable quality to traditional diag-1-4 December, organised around the common theme of quality laboratory diagnostics. Satellite sessions provide opportunities for a wide array of organisations to share information and experiences on dozens of specialised subjects related to diagnostic practice. Non-profit associations, multilateral organisations, academic institutions, government organisations and industry members will host satellite sessions in the form of workshops and trainings, group meetings, equipment demonstrations and seminar presentations.

A large selection of satellite sessions allows the conference These systems facilitate to cover more ground, while offering participants the opportunity to explore those topics most relevant to their own ment of data, comprise practice in greater detail than conference-wide events can tactics for provide. Satellite sessions will engage ASLM2012 attendees high-quality in practical demonstrations and training in the correct use of the latest rapid, mobile and cost-effective diagnostic solutions in the fight against tuberculosis (TB), AIDS and malaria. Symposia hosts will also present on the implementation of laboratory information and quality management systems necessary to the application of new technologies.

In the interest of promoting new and emerging tools and techniques for the laboratory, satellite sessions will present new platforms for point-of-care (POC) diagnostics, low-cost and rapid diagnostics, technologies for detection of multidrug resistance, and early infant diagnostics, to name but a few. Leading manufacturers of diagnostic systems will discuss their newest products and guidelines.

"I encourage conference participants to attend satellite symposia to stay up-to-date on the latest disease diagnostic technologies and methods," says Glen Fine of the ASLM2012 Satellite Planning Committee. "Participants can take what they've learned and implement cost-effective solutions in their own work settings."

Exposing participants to the most ground-breaking diagnostic technology not only instructs them in how to best use this equipment; it provides the chance to consider the opportunities and challenges associated with its develop-

cess diagnostic services and treatment. POC and rapid diagnostics.

In addition to presenting new technologies and methods, satellite hosts will provide information on the implementation, maintenance and improvement of formal quality man-

agement and information systems. Inattention to these systems makes it more difficult for the new technologies to become established in the market. the exchange and managemaintaining diagnostics, and are essential to the

"Participants can take what they've learned and implement cost-effective solutions in their own work settings"

- Glen Fine, ASLM2012 Satellite Planning Committee Lead

adoption and long-term use of new disease control technologies.

Many satellite sessions require pre-registration, or are by invitation only. Eight of the symposia are open to all registrants without a pre-registration requirement. The number of attendees allowed in a symposium may be contingent on space available.

For more information on ASLM2012 satellite sessions, please visit: http://www.aslm2012.org/satellite-meetings.

By: Aaron Krol (Editorial Team) and Rachel Crane (Editorial Team); Contributor: Glen Fine, MS, MBA, CAE (CLSI).

## FEATURE ARTICLE

## HEALTHCARE-ASSOCIATED INFECTIONS

#### A Neglected Issue Threatening Healthcare Facilities in Africa



ccording to the World Health Organisation (WHO), healthcare-associated infections (HCAI) affect hundreds of millions of patients worldwide each year, contributing to an estimated 136,000 deaths in Europe and the US alone¹. The associated costs of HCAI are substantial, amounting to an estimated €7 billion and US \$6.5 billion annually in Europe and the US, respectively. The estimated prevalence of HCAI varies between 3.5% and 12% in highincome countries and between 5.7% and 19.1% in low- and middle-income countries².

Current estimates, particularly those for low-income settings, are based upon limited data obtained using non-standardised methods and are unlikely to provide an accurate picture of the burden of HCAI. Given the likelihood that projections of HCAI prevalence across low-income countries are grossly underestimated, more research is desperately needed in order to quantify the extent and impact of HCAI on patients, their families and on health care costs.

Healthcare-associated infections (HCAI), or nosocomial infections, are acquired by patients, staff or visitors while in a hospital, clinic, or other healthcare facility. These infections can wreak havoc in both high- and low-income countries; however, with reliable data difficult to collect, the global burden is not known and the control of HCAI remains a public health challenge.

HCAI can originate within the population of a healthcare

facility, can be associated with the use of medical devices or procedures, or can result from the introduction of infectious agents from the community served by the health care facility<sup>3</sup>. In some circumstances, a healthcare facility can act as an amplifier, leading to the spread of infections—sometimes caused by drug-resistant organisms—not only within the facility, but also to surrounding communities. These infections prolong hospital stays, create long-term disabilities, increase resistance to life-saving medications, and drive up costs for patients and their families. They are a major cause of morbidity and mortality worldwide, but have an underestimated impact on quality of life globally and particularly in Africa where low-income countries face challenges in keeping these infections at bay.

#### **Factors Contributing to HCAI**

WHO has identified a number of factors that increase the risk of HCAI, including: prolonged use of invasive devices; widespread and prolonged use of broad- and narrow-spectrum antibiotics; high-risk procedures; immune-suppression and other severe underlying patient conditions; and insufficient application of standard isolation procedures (adapted from <sup>1</sup>).

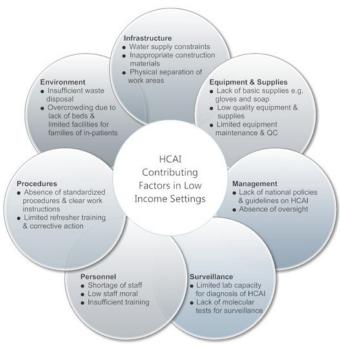


Fig 1: Factors contributing to HCAI in resource-limited settings.

<sup>1</sup>World Health Organisation. N. D. Healthcare-associated infections: fact sheet. Retrieved 13th November 2012 from http://www.who.int/gpsc/country\_work/gpsc\_ccisc\_fact\_sheet\_en.pdf.

<sup>2</sup>lbid

<sup>3</sup>Nejad SB, Allegranzi B, Shamsuzzoha BS, Ellis B & Pittet D. Health care associated infection in Africa: a systematic review.

Bulletin of the World Health Organisation 2011; 89:757-765. Doi: 10.2471/BLT.11.088179

## FEATURE ARTICLE

#### (Continued from page 12)

In many countries across Africa, the impact of HCAI is fur- Truly effective control of HCAI requires the introduction of gramme is required to confirm, track and support intervention efforts.

#### The Situation in Africa

Although some countries in Africa have sufficient resources to develop a strong health infrastructure and establish active and extensive programmes for control of HCAI, the majority have limited capacity for healthcare. More than 70% of African countries are ranked as "low" on the United Nations (UN) Humanitarian Development Index4, which cate- Hand hygiene is the single lowest-cost and most costgorises countries based on life expectancy, literacy, educathe funding needed to fulfil even the most basic healthcare needs; healthcare facilities are generally poorly developed, undersupplied, and overcrowded. Due to severe staffing shortages, healthcare providers are overworked and may lack sufficient training. The management of these facilities is often weak and policies and guidelines for infection control are inadequate or non-existent.

## What then is the best way to tackle the problem in Afri-

Solving the problem of inadequate infrastructure and equipment is often beyond the means of low-income nations; however, without great expenditure, it is possible to address other risk factors to dramatically reduce the incidence and prevalence of HCAI. With good basic training and comparatively little expense, programmes to improve surveillance, hygiene, and waste disposal systems can be implemented rapidly without the need for extensive improvements in infrastructure.

#### Surveillance

Surveillance provides data on the incidence and prevalence of different infectious agents, on who is affected, and where the infections are occurring, helping managers and policy makers identify priorities for controlling HCAI and allowing them to understand the nature and size of the problem so appropriate measures can be taken.

The role of laboratories

ther compounded by a range of issues related to lack of re-stringent infection control policies and practices aimed at sources for health (see figure 1). To be fully effective, pro-specific infectious agents, or groups of agents. This necessigrammes aiming to control HCAI must address all of these tates reliable laboratory-based identification of organisms risk factors. This requires hiring, extensive training, and and their antimicrobial resistance patterns, and consedeveloping more sophisticated infrastructure, all of which quently, increased capacity of diagnostic laboratories. Such place a great financial burden on healthcare facilities. laboratories should be equipped to identify causative or-Moreover, a HCAI clinical/laboratory surveillance pro- ganisms either by culture and biochemical testing or at least by the use of Rapid Diagnostic Tests. Molecular methods are becoming more suitable for use at a local level as costs reduce and techniques improve. Ideally, laboratories should also be able to undertake drug susceptibility testing. Furthermore, internal and external reference laboratories are needed both to confirm identifications and to help ensure quality control.

#### Hygiene

effective infection control measure that can be introduced tion, and standards of living<sup>5</sup>. These African countries lack into healthcare facilities. In 2005 and 2008, WHO launched two campaigns ("Clean Care is Safer Care" and "Save lives: clean your hands") to promote hygiene and highlight the



Fig 2: Unsafe disposal of medical waste at a hospital in West Africa.

importance of addressing HCAI for the safety of patients and staff. Hand hygiene formed the basis of both programmes, underscoring the fact that compliance by healthcare workers is a simple and low-cost intervention that has a significant impact on HCAI prevention. Currently, there are infection control initiatives involving hand hygiene programmes in Algeria, Mali, Senegal and Uganda, which have resulted in reduced incidence of HCAI. You can learn more about the WHO hand hygiene programme in a video presentation given by Professor Didier Pittet at http://www.youtube.com/watch?v=uihSIjTs5KE. You can also download related tools and reference material from WHO website http://www.who.int/gpsc/ the at information\_centre/en/.

(Continued on page 17)

<sup>4</sup>United Nations. (2011). Human Development Statistical Tables. In Human Development Report 2011. Retrieved from http://hdr.undp.org/en/reports/global/hdr2011/download/en/.

<sup>5</sup> indices & Data | Human Development Index | Human Development Reports (HDR) | United Nations Development Programme (UNDP). (n.d.). Human Development Reports (HDR) - United Nations Development Programme (UNDP). Retrieved November 15, 2012, from http://hdr.undp.org/en/statistics/hdi/.

## WHO ADDRESSES QUALITY OF DIAGNOSTICS FOR PRIORITY DISEASES WORLDWIDE

There are over one million people in Kenya living with HIV Superficially, the state of quality control in medical device today1. A decade ago reports of the country's epidemic manufacturing may appear quite healthy. Numerous interwere universally grim, with over 100,000 Kenyans dying of national agencies offer certification for companies that pro-AIDS every year<sup>2</sup>. Fortunately, the concerted effort by gov- duce diagnostics, reportedly based on quality management ernmental and non-governmental organisations (NGO) to system standards that must be implemented by the legal increase access to diagnosis and treatment reversed the manufacturer at the development, manufacturing, packagtrend, and today the national prevalence of the disease has ing and distribution sites. As a result, these companies are nearly halved from its peak<sup>3</sup>. Testing for HIV in Kenya is a commonly internationally certified, and the associated rigorous process that has reached over two-thirds of the products come with seals of approval tied to manufacturing country's population<sup>4</sup>. Participants receive up to three tests standards. However, the very proliferation of such agencies (each a different brand of kit) to determine their HIV status means that there are loopholes in the system. Not all agenas part of most national algorithms, and in 2011, one of cies are as rigorous in their on-site auditing of the requirethese was the Standard Bioline Diagnostic Kit, produced by ments of the international standards. By setting up factories South Korean company Standard Diagnostics, Inc5. This kit in countries with less stringent regulations, suppliers can is an inexpensive and simple blood test that can diagnose produce diagnostics, especially for export, the manufacture both HIV-1 and HIV-2, with the appearance of 2 or 3 red of which undergoes little or no inspection. Of the 193 WHO lines on the device indicating a positive result. The wide Member States, only about one-third have in place a regulaavailability of Bioline in Kenya made it a centerpiece of the tory system for diagnostics. country's successful HIV/AIDS prevention programme<sup>6</sup>.

3.0 test kits were quarantined when a World Health Organisation (WHO) prequalification assessment revealed that 50% of certain lots these tests produced invalid results7.

Standard Diagnostics Inc. and its parent company, Alere, voluntarily recalled the test kits upon the announcement, and in the meantime have instigated improvements in manufacturing and quality control processes. Thanks to a diagnostic algorithm requiring the use of up to three tests for HIV confirmation, few if any Kenyans received inaccurate information about their HIV status as a result of the severe defect. Kenya was not alone in its reliance on the test. Other countries faced the problem of making rapid changes in national testing algorithms, a challenging task in resourcelimited settings where supply chain and logistics management systems may be slow to respond. This episode hightest kit quality.

The WHO Prequalification of Diagnostics (PQ Dx) Pro-In November of last year, one million SD Bioline HIV-1/2 gramme confronts this loophole on both the supply and demand level. On the supply side, the Programme offers its own, independent assessment of the quality of the in-vitro diagnostics medical device in accordance with internationally standards. Such assessments are based on rigorous dossier review, site inspections and laboratory evaluations. Inspections are carried out by a WHO-lead team of highly qualified auditors. The prequalification process establishes a trusted outcome upon which all ministries of health and NGOs can rely. WHO also trains national regulatory authorities to review, evaluate, monitor, and regulate diagnostic products thus, contributing to country capacity to monitor the quality of diagnostics.

Meanwhile, on the demand side, the WHO PQ Dx Programme aims to promote and facilitate access to safe and appropriate diagnostics of good quality in an equitable lights the need for more rigorous monitoring of diagnostic manner, preventing substandard products from slipping through a less reliable agency8.

<sup>1</sup>UNAIDS Report on the Global AIDS Epidemic, 2010, p. 180. UNAIDS. Retrieved November 10, 2012 from: http://www.unaids.org/globalreport/Global\_report.htm

<sup>&</sup>lt;sup>2</sup>lbid., p. 185.

<sup>&</sup>lt;sup>3</sup>Avert: HIV and AIDS in Kenya. AVERT. Retrieved November 10, 2012 from: http://www.avert.org/hiv-aids-kenya.htm

<sup>4</sup>WHO Progress Report 2011: Global HIV/AIDS Response, p. 79. World Health Organisation. Retrieved November 10, 2012 from: http://www.who.int/hiv/pub/progress\_report2011/en/index.html

skenya recalls 'faulty' South Korean HIV kits. (2011, Dec. 29). BBC. Retrieved November 10, 2012 from: http://www.bbc.co.uk/news/world-africa-16355462.

<sup>&</sup>lt;sup>6</sup>Avert: HIV and AIDS in Kenya. AVERT. Retrieved November 10, 2012 from: http://www.avert.org/hiv-aids-kenya.htm.

<sup>&</sup>lt;sup>7</sup>Update information on the SD Bioline HIV-1/2 v3.0. (2012, Jan. 6). World Health Organisation. Retrieved July 17, 2012 from: http://www.who.int/diagnostics\_laboratory/procurement/120106\_final\_update\_info\_sd\_bioline\_hiv\_rtd.pdf.

(Continued from page 14)

Prequalification by WHO is a prerequisite for placing diagreviewed fast track procedure for diagnostics. However, nostics on the procurement list used by UN agencies. Other WHO PQ Dx has observed that companies often produce public health partners may also wish to rely on WHO PQ Dx different regulatory versions of a particular diagnostic as part of their product inclusion criteria. WHO Member product. Consequently, some versions of a single product States increasingly look to WHO prequalification to guide that are manufactured under less stringent conditions are their procurement decisions. The Programme offers assurbeing sold to countries that lack robust regulatory frameances to public health providers, programs, and govern- works. ments that the products included on the WHO procurement list have passed rigorous assessments by WHO.

early 2010 in response to the requirement for increased stringency in regulation of the diagnostics market. The initial focus of WHO PQ Dx has been on tests related to HIV (RDTs, molecular diagnostics and CD4 enumeration), hepatitis and malaria. Flagging of the SD Bioline HIV-1/2 3.0 quality issue is the most high-profile contribution of the Programme to the security of diagnostics in the world health community to date. However, the Programme has also been met with criticism and pushback. The WHO's stringent prequalification process takes time (up to 12 months) to complete if the manufacturer meets quality requirements. In the case of products whose manufacture occurs at multiple sites and/or of those that do not as yet

fulfil international quality requirements, this process can take longer.

The slow pace of evaluating the compliance process necessarily conflicts with the urgent need for Application Letter of Dossier Site Laboratory Pre-qualification Agreement Process Review Inspection Evaluation

The WHO Prequalification Process<sup>10</sup>. NB. Some of the above activities may occur simultaneously.

release of new products. In addition, the process is expen- Korea and the US. ASLM advocates a "twinned" or joint resive, and enrolment currently comes with a price tag of US view process whereby national regulatory authorities in \$12,000, an expense that manufacturers may not see as purchasing countries are more closely engaged in the value-added, particularly if they have already passed as- assessment process; distributing the cost, increasing the sessments by other regulatory authorities8. For this reason, reach and accelerating the pace of prequalification11. The the Global Medical Technology Alliance, an association that long term goal of WHO PQ Dx is to devolve activities to narepresents medical manufacturers, has called on the WHO tional regulatory authorities reducing the complexity of to introduce a two-tiered regulatory approach, allowing auditing companies that manufacture in multiple sites often companies who have already met the requirements of more in countries where the product may not even be sold. Buildstringent regulatory authorities in countries like the US, ing the capacity of local auditors will ensuring universal Japan and the EU to bypass prequalification<sup>9</sup>.

In 2011, WHO PQ Dx introduced a stringently regulated and

PQ Dx recognizes that due to differences in public health priorities, the stringency of regulation for some diagnostic The WHO PQ Dx Programme became fully operational in products (e.g. malaria RDTs) in settings such as the USA, may not be appropriate for African countries. To respond to country-specific requirements, WHO has adopted a riskbased approach that considers the unique circumstances (such as product stability, end user training etc.) in which diagnostic products are used in resource-limited and environmentally-challenging regions.

> While a fast-track approach might speed up the release of new products from well-established companies, it does little to address the barriers to enrolment for smaller companies in particular, those manufacturing in low-income countries. It is not surprising, in these settings, that more than 70% of diagnostic products reviewed for prequalification

diagnostics in low-resource countries, and may delay the were submitted by only four countries: India, China, South coverage thus, preventing manufacturers from bypassing rigorous inspections.

The World Health Organisation's Prequalification of Diagnostics Impacts on Diagnostics and Medical Technology to Patients. Global Medical Technology Alliance. Retreived October 25, 2012 http://www.globalmedicaltechnologyalliance.org/position-paper-the-world-health-organization%E2%80%99s-prequalification-of-diagnostics-impacts-on-diagnostics-and-medical-technology-to-patients.html

<sup>&</sup>lt;sup>0</sup>For more information, please visit: http://www.who.int/mediacentre/factsheets/fs278/en/index.html.

#### WHO ADDRESSES STATE OF DIAGNOSTICS

(Continued from page 15)

for many years, the fast track process is relatively new and WHO PQ Dx staff members continue to track programme progress of remain committed to continuous quality improvement. One particular challenge is the availability of resources to re-inspect manufacturers on a periodic basis. Manufacturing processes may change over time, particularly in such fluid markets as medical device production, and periodic requalification will be necessary to ensure maintenance of quality standards. The requirement for requalification of diagnostic products must be flagged by the manufacturer. Hence, the criteria, and a mechanism for dealing with requalification is required to manage this process. The main responsibility of WHO is to the end users and recipients of regulated tests. To this end, WHO must work closely with regulatory authorities to defray programme costs. To its credit, the WHO has an on-going commitment to train regulators in countries where WHO PQ Dx operates, a project that over time will improve both the speed and the cost -effectiveness of the Programme and work towards global and regional regulatory convergence.

In addition to reducing costs and increasing efficiency, there is a need to encourage more companies to submit to pregualification, not only to protect people from faulty diagnostics, but to achieve greater economies of scale. Furthermore, as buyers (in particular, UN agencies and governmental and non-governmental organisations) incorporate

Although the WHO PQ Dx programme has been in operation the requirement for PQ Dx products into their procurement process, WHO will need to work with countries to assist consequently, there will be limitations and lessons to learn. national programmes to expand the scope of their regulatory frameworks to include greater coverage of laboratory commodities.

> With greater commitment from the global health community, WHO PQ Dx can establish itself as an essential step in releasing a new diagnostic product of good and sustainable quality, and not as an optional hurdle. This will encourage companies whose products meet the highest standards to view the WHO PQ Dx as their first and most important entry point to the global market. Through increased efforts to build country-level capacity, the WHO's Prequalification of Diagnostics Programme can have a significant impact on global health, making sure that only the highest quality products are released onto the market.

> By: Aaron Krol (Editorial Team) and Jessica Fried, MPH (Editorial Team); Editor: Paula Fernandes, MBA, PhD (Editorial Team); Contributors: Gaby Vercauteren, PhD and Anita Sands, MPH

<sup>11</sup>PDP Regulatory Discussion Paper, 2010

## ASLM HOSTS SECOND SLIPTA INDEPENDENT ADVISORY COMMITTEE MEETING

The ASLM SLIPTA (Stepwise Laboratory Quality Improve- During its second meeting, the IAC identified four key strament Process Towards Accreditation) Independent Advisotegic approaches for strengthening laboratory QMS: ry Committee (IAC) hosted its second meeting from 27-28 September at the Radisson Blu Hotel in Addis Ababa, Ethiopia. The IAC convenes annually to develop methods to strengthen laboratory quality management systems (QMS) 2. in Africa. The main objective of the IAC is to improve laboratory services and facilitate evidence-based decisionmaking.

- Highlighting QMS as an essential aspect of national laboratory strategic plans;
- Developing an effective communication strategy among TB laboratory stakeholders;

(Continued from page 16)

- 3. Serving as an outlet for the facilitation and strengthening of QMS implementation;
- 4. Monitoring the progress of laboratories toward accred-



Strategic Approaches for Strengthening Laboratory QMS.

The ASLM blueprint for laboratory accreditation addresses these approaches by identifying specific activities which

will aid the achievement of its strategic goals, including the publication of the SLIPTA checklist, the harmonisation of QMS implementation tools, the planning of auditor training courses, the implementation of SLIPTA, and the standardisation of SLIPTA-related documents. Collaborators in these activities include in-country ASLM representatives, ASLM partners, African Ministries of Health and the World Health Organisation (WHO).

In reviewing its achievements and gaps, the IAC strives to ensure that ASLM procedures, processes, products and services are consistent and of the highest quality. The IAC also helps African laboratories adopt and improve their own quality management systems and achieve accreditation. The expansion of SLIPTA in Africa will help improve disease diagnosis and control, patient care and preventive medicine throughout the continent.

By: Rachel Crane (Editorial Team) and Teferi Mekonen, MSc, MPH (ASLM); Editor: Paula Fernandes, MBA, PhD (Editorial Team)

#### HEALTHCARE-ASSOCIATED INFECTIONS

(Continued from page 13)

Waste disposal

Unsafe handling and disposal of contaminated waste from healthcare facilities can spread infections within facilities, and into the community and the environment. WHO reports that infectious waste makes up 15-25% of the total waste produced by healthcare facilities<sup>6</sup>. Safe waste disposal is often overlooked in resource-poor healthcare settings where complex disposal programmes are not possible and centralised disposal facilities may not exist. A balance has to be struck between the risks posed by the waste itself and those posed by the disposal methods (e.g. air pollution). It policies that address the control of HCAI in order to truly is accepted that at present, some countries may have to use have an impact on this public health challenge. In Africa, incineration; however, applying the international recommendations for best practice in the operation and maintenance of incinerators is not practical in most resourceconstrained settings. The problem of waste management still requires a suitable solution.

Some key initiatives for control of HCAI in Africa: African Partnerships for Patient Safety (APPS); Global Infection Prevention and Control Network (GIPC); Infection Control

Africa Network (ICAN); Réseau international pour la planification et l'amélioration de la qualité et de la sécurité dans les systèmes de santé en Afrique (International Network for the Planning and Improvement of Quality and Safety in Health Systems in Africa) (RIPAQS); and Clean-HandsNet.

While there are effective and low-cost measures that can be taken by healthcare facilities to reduce the incidence of HCAI, health authorities must establish reasonable infection control guidelines and make funding available to execute more research is needed into the size and extent of the problem and advocacy is essential to ensure that governments make resources available to tackle HCAI.

By: Tim Healing, PhD (GSSHealth); Editors: Jessica Fried, MPH (Editorial Team) and Paula Fernandes, MBA, PhD (Editorial Team)

<sup>6</sup>Waste management publications [Internet]. Geneva: World Health Organisation; 2011. http://www.who.int/  $immunization\_safety/publications/waste\_management/ISPP publications WM/en/index.html.$ 

## **EDUCATION AND TRAINING**

## **ASLM FACILITATES SLIPTA AUDITOR TRAINING** IN TANZANIA



Participants of the October SLIPTA Auditor Training Course hosted by EAPHLNP and ECSA-HC.

(EAPHLNP) and the East, Central and Southern African dress the gaps identified in preparation for accreditation. boratory Quality Improvement Process towards Accredita- ment of diagnostic services. tion (SLIPTA) auditor training course from 1-5 October at the National Institute for Medical Research and Training in Dar es Salaam, Tanzania. ASLM facilitated, certified, and provided financial support for the course, which sought to advance the implementation of SLIPTA in the region.

The five-day training course consisted of the following modules: Introduction to Accreditation, ISO 15189 Standards, Assessment Methods, SLIPTA Checklist, the 12 Quality System Essentials, and Professional Ethics. During the course, participants visited three laboratories for mock audit practice. ASLM, the Association of Public Health Laboratories (APHL) and Risk Accredit Management Systems— Africa (RAMS Africa) provided trainers, who presented course material and administered pre-tests, post-tests and final examinations. Representing ASLM at the training was Mr. Teferi Mekonen, Accreditation Officer and SLIPTA Focal Point.

A total of 17 participants (five from Uganda, two from Kenya, two from Burundi, two from Rwanda and six from Tanzania) attended. Through the Auditor training, participants were able to improve their capacity to audit laboratory gaps using the SLIPTA Checklist and to support laboratory

The East Africa Public Health Laboratory Network Project personnel in developing quality improvement plans to ad-Health Community (ECSA-HC) co-organised a Stepwise La- As Auditors, they will greatly contribute to the improve-

> EAPHLNP and ECSA-HC strive to improve vulnerable populations' access to diagnostic services in cross-border areas as well as to enhance laboratories' contribution to disease surveillance through mobile communications. EAPHLNP, a World Bank-funded programme, is being implemented in Burundi, Kenya, Rwanda, Tanzania and Uganda.

> By: Teferi Mekonen, MSc, MPH (ASLM) and Rachel Crane (Editorial Team); Editor: Laurel Oldach (Editorial Team)

> > In addition to facilitating the EAPHLNP/ ECSA-HC auditor training course, ASLM cohosted a SLIPTA auditor training from 29 October to 2 November in Abuja, Nigeria, in collaboration with the Medical Laboratory Science Council of Nigeria. 23 participants from 6 countries attended; 21 of them successfully completed the training. The Society plans to host another SLIPTA auditor training from 10-14 December in Johannesburg, South Africa.

#### **Volunteers Needed!**

#### **Publication Mentors:**

Experienced researchers, epidemiologists and statisticians to help with research methods/analysis, scientific communication skills, manuscript preparation/submission and peer review. Mentors will offer guidance for papers recommended for advisement. Subject matter expertise not necessary. Volunteer time commitment depends on mentee needs.

#### Writing Workshop Mentors:

Researchers, statisticians and epidemiologists with extensive publication experience. Help with daily lectures and discussions and work with a small group of participants on manuscript development. Mentors will provide guidance on research methods, analysis, laboratory or epidemiology subject matter within their expertise, manuscript preparation, scientific interpretation, and communication skills. The time commitment is a two-week workshop.

#### **Manuscript Submission:**

Laboratory Medicine-related manuscripts. Of particular interest: the role of labs in clinical care and public health; the translation of laboratory knowledge; the juncture of laboratory and medical science; lab-based epidemiology; laboratory investigations. Submissions accepted in French or English.

#### Peer Reviewers:

Objective reviewers with high level of expertise to evaluate the quality of manuscripts. Reviewers will offer detailed comments and suggestions, and make recommendations to accept, accept with revisions, reconsider with major revisions, or reject submissions. Reviewers will be contacted before being forwarded manuscript. A 2-3 week turnaround is expected.

For more information or to volunteer, please contact: ecl7@cdc.gov.

ASLM
Joseph Tito Street, Nega City Mall, 8th Floor
P.O. Box 5487
Kirkos Subcity, Kebele 08
Addis Ababa, Ethiopia
www.ASLM.org
Newsletter@ASLM.org