

# LAB CULTURE

THE ASLM NEWSLETTER FOR  
LABORATORY PROFESSIONALS  
ACROSS AFRICA

May 2012, Issue 3

## HAZARDOUS WASTE

What We Don't Know Can Hurt Us

### IN THIS ISSUE:

Gearing Up for *ASLM2012*

An Interview with Dr. Kefas Mugittu, Veterinarian Turned Public Health Expert

Cancer Diagnostics and Treatment in Africa: A Clinician's Perspective



## ASLM Photography Challenge: Laboratories in Action for Quality Healthcare

ASLM invites you to capture your work!

ASLM announces the **First Annual ASLM Photo Contest: Laboratories in Action for Quality Healthcare**. Winning photos will be announced and displayed in December at the *ASLM2012* International Conference in Cape Town, South Africa and featured in *Lab Culture*.

### Rules and Categories

We are seeking a single great photo (although you can enter more than one) in the following categories:

- People
- Programmes
- Laboratory-Clinical Interface
- ASLM Activities

### Deadline

The deadline for submissions is **15 July 2012**.

### Submission Details

All ASLM members and supporters are eligible to submit their own photos. Photos should represent laboratory-related health in action. Each submission must include: a short description of the laboratory or issue depicted; your name, country, and email address; the category in which you wish your entry to be considered (see above); where and when you took the photo; and names of people in the photo, when available.

### How to Send Entries

Photos must be submitted electronically (one photo per e-mail, maximum of 5 per person) to [info@aslm.org](mailto:info@aslm.org). Please put "Photo Contest" in the subject line. Photos must be at least 640 x 480 pixels, high resolution, horizontal or vertical. By sending your photos to ASLM, you grant permission for ASLM to publish them at any time and for the photos to be included in ASLM Public Image Library.

### Judging

Photos will be judged by a panel based on the following criteria: aesthetic quality of the photograph; quality of the story told by the photo; originality of the subject.

## 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 [newsletter@aslm.org](mailto:newsletter@aslm.org).



## LETTER FROM THE CEO

Gearing Up for *ASLM2012*, the Society's  
First International Conference 2

## MEMBER NEWS

First ASLM Ambassador Assumes Post 3

ASLM to Launch Website for 2012  
International Conference 3

New ASLM Web Portal Creates  
Opportunities for Collaboration 4

Promoting Point-of-Care to Improve  
Patient Services 5

## RESEARCH

Open Access Journals Provide Expanded  
Research Opportunities without the Cost 8

Meet the Researcher: Dr. Kefas Mugittu,  
Veterinarian Turned Public Health Expert 9

## EDUCATION AND TRAINING

ASLM Hosts Second Grant and Proposal  
Writing Workshop 11

## CLINICAL MEDICINE

Cancer Diagnostics and Treatment in  
Africa: A Clinician's Perspective 12

## SEE BACK PAGES FOR ASLM2012 CONFERENCE INFORMATION



## FEATURE ARTICLE

Hazardous Laboratory Waste:  
What We Should Know 6



### Editorial Team:

Rachel Crane (GSSHealth)  
Etalem Engeda (ASLM)  
Jessica Fried, MPH (GSSHealth)  
Jhosetta Goudelock (CDC)  
Aaron Krol (GSSHealth)  
Laurel Oldach (GSSHealth)

Lead Editor: Paula Fernandes, MBA, PhD (GSSHealth)  
For submissions and inquiries contact: [Newsletter@ASLM.org](mailto:Newsletter@ASLM.org)  
Cover Photo: Copyright GSSHealth 2012

## ASLM2012: GEARING UP FOR THE SOCIETY'S FIRST INTERNATIONAL CONFERENCE

As summer fast approaches, we at ASLM are busy preparing for *ASLM2012*, our first international conference based around the theme, "Accurate Laboratory Diagnostics - A Pillar of Quality Healthcare", which will take place from 1-7 December 2012 in Cape Town, South Africa. Our planning committees are busy making arrangements for the conference, which will convene an expected 1500 participants and consist of keynote addresses, plenary sessions, exhibits, symposia and break-out sessions. The conference will appeal to professionals, activists and interested third parties alike, and cover a variety of topics, including: 21st century virology, laboratory strengthening, new vaccines and diagnostics, workforce development, challenges for the laboratory-clinical interface, and more.



Through this conference and other projects essential to promoting the Society's mission, we strive to bring improvements to laboratory medicine every day. Since the publication of the previous issue of *Lab Culture*, we have made great strides in the following areas:

### Education & Training

ASLM hosted its second Grant and Proposal Writing Workshop from 25 March to 1 April in Addis Ababa, Ethiopia. The workshop, co-hosted by the US Centers for Disease Control and Prevention, taught participants the essentials of developing grants and writing proposals. You can read more about the workshop on page 11.

Following the success of our first SLIPTA auditor training programme in September 2011, ASLM will host WHO/AFRO SLIPTA Auditor Trainings in Abidjan, Nigeria and Cameroon in June and July, to instruct and certify English and French-speaking scientists in the practice of clinical laboratory auditing.

### Regionalization & Collaboration

ASLM recently elected its first Ambassador, Prof. El-hadj Belabbès of Algeria, to promote ASLM activities in member countries. ASLM is also preparing to launch its Collaborating Centres programme in Senegal, Nigeria, South Africa, Tanzania, Ethiopia and Kenya. Through this programme, eligible participating laboratories will implement ASLM objectives by evaluating and quality testing new diagnostics, providing medical laboratory training opportunities, fostering interregional collaboration, and providing annual reports on the Centres' collaborating activities.

From 8-10 May, ASLM, in collaboration with the Ethiopian Health Nutrition Research Institute (EHNRI) and Fondation Mérieux, co-sponsored a meeting in Addis Ababa entitled "A Focus on Point-of-Care Diagnostics in Africa." The meeting identified specific diagnostic needs of African countries, discussed priorities for moving forward, and sought to increase health ministries' awareness of the importance of quality point-of-care diagnostics.

### Communication & Outreach

In April, ASLM launched its new website, [www.ASLM.org](http://www.ASLM.org), which features Society news and events, laboratory-related documents, and interactive tools. A separate website for our December 2012 international conference is in development and will be live soon. These websites will allow us to better disseminate information to you, our members, as well as to promote and maintain community networks.

Additionally, through our e-news communications, social media presence (find us on Facebook, Twitter, YouTube and Flickr) and this newsletter, we strive to keep you informed of the Society's activities, industry news, and other issues relevant to the field of laboratory medicine. You can read more about ASLM activities in the Member News, Industry Focus, and Education and Training sections of this newsletter. Hazardous waste disposal is an issue for many African laboratories, and needs to be addressed through the implementation of waste management and disposal guidelines. Our Feature article, "Hazardous Waste: What We Don't Know Can Hurt Us", is available on page 6.

I hope you enjoy Issue 3 of *Lab Culture*.

*Dr. Tsehaynesh Messele, CEO, ASLM*

## FIRST ASLM AMBASSADOR ASSUMES POST

ASLM has appointed its first Ambassador, Professor El-hadj Belabbes, as part of the Society's regional Ambassador Programme. Prof. Belabbes, a Medical Doctor, Professor of Medical Microbiology, and long-time advocate for lab medicine in Africa, accepted the position in March.

The role of an ASLM Ambassador is to disseminate the Society's name and objectives as well as to facilitate the establishment and implementation of ASLM programmes in member countries. An Ambassador must advocate for ASLM among health authorities and professional organizations. Furthermore, an Ambassador helps identify regional training needs.

Prof. Belabbes has been working to promote and strengthen African laboratory medicine since 2001, when he became a member of the World Health Organization, African Regional Office (WHO/AFRO) network of public health laboratories. He then served as WHO/AFRO Laboratory Officer from 2006-2012. Through his work with WHO/AFRO, Belabbes was able to participate in the majority of activities that led to the creation of ASLM, of which he is one of the founding members.

Over the past 30 years, Prof. Belabbes has worked in laboratory medicine in both public health and research capacities.



*Prof. El-hadj Belabbes,  
ASLM Ambassador*

For 16 years he occupied the position of Department Head, first at the Laboratory of Medical Biology at the University Hospital of East Algiers/Rouiba, then at the Department of Human Virology at the Institut Pasteur in Algeria. He also provided direction for Algeria's National Reference Laboratory of HIV/AIDS and the National Reference Laboratory of Influenza.

As an Ambassador, Prof. Belabbes looks forward to promoting ASLM through his interactions with national authorities and professional organizations. He will work to persuade relevant parties to embrace ASLM's standards and objectives.

"My previous experience with the WHO will help me greatly," Prof. Belabbes said of his new role. "I am optimistic about the fast development of ASLM on the African continent."

When asked what advice he would give to ASLM members interested in becoming more involved with the Society, Prof. Belabbes suggested that individuals strive to increase their colleagues' and Public Health authorities' awareness of the role ASLM will have in improving patient care through quality laboratory services. He also advises members to stay connected to ASLM and to participate in Society activities wherever possible.

*By: Rachel Crane (Editorial Team) and El-hadj Belabbes, MD*

## ASLM TO LAUNCH WEBSITE FOR 2012 INTERNATIONAL CONFERENCE

ASLM is preparing to launch a unique website dedicated to the Society's first international conference, *ASLM2012*. The conference, themed, "Accurate Laboratory Diagnostics – A Pillar of Quality Healthcare," will take place from 1-7 December 2012 in Cape Town, South Africa.

The website will feature conference and Society overviews, registration details, travel information, an events listing, and downloadable documents including the conference schedule and announcement flyer. Site visitors will be able to submit abstracts and register for the conference online.

*ASLM2012* will serve as a stage for dialogue on improving quality point-of-care laboratory diagnostics; developing resources for local capacity; strengthening laboratory-based surveillance, biosafety and biosecurity; sharing knowledge and best practices for improving laboratory services; priming laboratory research to address new and changing public health issues; and trading experience and knowledge on establishing effective, operational laboratory networks.

Abstract submissions should focus on laboratory medicine, and should be submitted in one of three tracks: Scientific Research, Diagnostics, and Drug Resistance; Policy and Networking; or Laboratory Management and Systems. Abstracts will be peer-reviewed for scientific content and interest to the clinical, public health, and scientific laboratory community. The deadline for abstract submissions will be 9 July 2012.

Registration for *ASLM2012* will be limited to 1500 participants. Online conference registration will close on 5 November 2012, or sooner if the registrant capacity is reached prior to that date. On-site registration will be available starting 1 December 2012, depending on space availability.

For more information on *ASLM2012*, please visit [www.ASLM.org](http://www.ASLM.org) or contact [ASLM2012@aslm.org](mailto:ASLM2012@aslm.org).

*By: Rachel Crane (Editorial Team);  
Contributor: Elizabeth Luman, PhD (CDC)*

<p>Conference Info</p> <ul style="list-style-type: none"> <li>• <a href="#">Login</a></li> <li>• <a href="#">Add me to the Mailing List</a></li> <li>• <a href="#">Shopping Cart</a></li> <li>• <a href="#">Media Info</a></li> <li>• <a href="#">Affiliated Events</a></li> <li>• <a href="#">Vendors/Sponsors</a></li> </ul>	<p>Registration will open May 25, 2012</p>
<p>Meeting Documents</p> <ul style="list-style-type: none"> <li>• <a href="#">Meeting Flyer</a></li> <li>• <a href="#">Meeting at a Glance</a></li> </ul>	<p><b>Registration</b></p> <p>Register early to reserve a slot!</p> <p>Due to space and logistical limitations, the ASLM 2012 Conference will be limited to 1500 participants. Online registration will close on November 5, 2012 or when the registration limit of 1500 is reached, whichever occurs first. Onsite registration will also be available starting December 4, 2012 on a space-available basis.</p> <p>Registration fees are as follows:</p> <p><b>Early-Bird Registration (May 25, 2012 to September 30, 2012)</b></p> <ul style="list-style-type: none"> <li>\$150 ASLM members</li> <li>\$180 Non-ASLM members</li> <li>\$50 Students (ASLM members only)</li> </ul> <p><b>General Registration (October-December 2012)</b></p> <ul style="list-style-type: none"> <li>\$200 ASLM members</li> <li>\$250 Non-ASLM members</li> <li>\$50 Students (ASLM members only)</li> </ul>

## NEW ASLM WEB PORTAL CREATES OPPORTUNITIES FOR COLLABORATION

ASLM has officially launched its new website, [www.ASLM.org](http://www.ASLM.org), now available to users. The new site is more informative and interactive, featuring up-to-date news and information about the Society's mission and history, in addition to an assortment of collaborative spaces.

The site keeps users informed through an Events Calendar and News & Events page, which includes news articles and events listings as well as links to the ASLM press pack, newsletter and e-news archive.

The site also provides an overview of the Society and opportunities for member involvement. The About Us section contains pages on ASLM's history, leadership, mission, eight pillars, partners and member countries. The Get Involved tab offers a consultant database and information about volunteer opportunities and support activities. Partners and Programmes is devoted to ASLM sponsors and partners, as well as to recent and upcoming workshops and other programmes.

ASLM.org also incorporates interactive features such as a Community Forum, Community Blog and Member Profiles section. The Member Profiles section contains a chat room, messaging options, personal calendars, community forums, personal blogs and articles, and photo and video albums. Member Profiles are available on a free trial basis to all who register with the site, but will be restricted to ASLM members beginning in August.

With an emphasis on accessible news and programme information and an expanded array of tools for member interaction, the new ASLM website encourages networking, collaboration and knowledge-sharing among the ASLM community and serves as a resource for medical laboratory-related services and products.

Development of the site is on-going, and more features will become available in the coming months. Collaborative workspaces, laboratory-related documents, technical assistance resources, and an online store are currently in development.

*By: Rachel Crane (Editorial Team);  
Editor: Aaron Krol (Editorial Team)*



**Join the  
ASLM Online Community!**

**Sign up to connect with colleagues,  
share photos, exchange ideas and  
create your own profile.**

**Register for free here:**

**[http://www.aslm.org/aslmprofiles/  
Signup.php](http://www.aslm.org/aslmprofiles/Signup.php)**

## PROMOTING POINT-OF-CARE TO IMPROVE PATIENT SERVICES



*POC meeting participants pose for a photo*

ASLM hosted a point-of-care (POC) meeting from 8-10 May at the Ethiopian Health Nutrition Research Institute (EHNRI) auditorium in Addis Ababa, Ethiopia. The meeting, entitled, “A Focus on Point-of-Care Diagnostics in Africa,” was organized in collaboration with EHNRI and Fondation Mérieux. The POC meeting was preceded by a one-day consultative meeting with Ministry of Health (MoH) leaders to discuss the harmonized regulation of diagnostics.

The goal of POC testing is to provide the diagnostic test at or close to the patient (or point-of-care). Decreasing the proximity between patient and test result enables clinicians to make patient care decisions immediately, reduce loss to follow-up, and improve patient outcomes. There are a number of POC tests already in the market; these include rapid diagnostics tests (RDTs) such as those for HIV and malaria, glucose tests performed using handheld glucometers and small footprint analyzers to measure CD4 count.

Over 60 representatives from 15 countries attended the three-day POC meeting, including participants from international institutions, academic associations, African Ministries of Health, non-governmental organizations, industry, research institutes and donor organizations. The objectives of the meeting were to highlight the specific needs of African countries, to agree on priorities for moving forward, and to increase MoH awareness of the importance of quality control, evaluation, monitoring and implementation of POC.

The meeting kicked off with a plenary session featuring keynote presentations from Dr. John Nkengasong, chairman of the ASLM Board of Directors, and Dr. Kebede Worku, State Minister of Health of the Federal Democratic Republic of Ethiopia. Dr. Nkengasong spoke about “The Impact of POC HIV Technologies, Challenges and Needs,” while Dr. Worku’s address emphasized “POC Technologies and their Contribution within National Lab Policies to Health Systems Performance.” Other Day One plenary presentations focused on the theme, “POC, Where Do We Stand Today?” A breakout session followed the plenary session, giving participants the opportunity to divide into groups to discuss presentation topics. The first day ended with a welcome reception for participants.

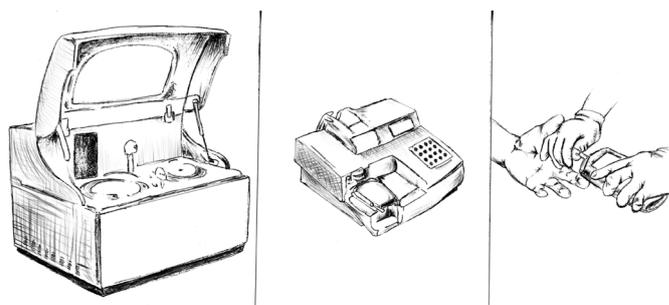
POC could have major implications for patients in low income and lower-middle income countries, many of whom must bear the cost of traveling long distances to access

healthcare facilities equipped to provide an adequate scope of diagnostic testing services.

Particularly for low income and lower-middle income countries, a POC platform must be cost-effective, easy to use and maintain, and comparable in quality to current alternatives. POC tests must be quality-controlled and their implementation well-planned, both in terms of appropriate clinical algorithms and user training and competency verification. Furthermore, results must be easy to interpret.

The second and third days of the meeting entailed plenary sessions with the themes, “From Bench to Adoption - Who Does What?” and “Looking Back and Ahead.” The former featured presentations on the role of academia in setting an international agenda on POC; the FDA’s regulatory perspective on POC products; lessons learned from TB serological tests in India; the feasibility of in-country quality control of rapid Diagnostic tests; the role of international health partners in supporting capacity for evaluation, quality control and monitoring of new diagnostic tools; and the role of private laboratories and informal sector in the roll-out of POC in support of MoH. “Looking Back and Ahead” addressed the pipeline of current and new POC technologies and timelines for their delivery. Following each plenary session were breakout sessions on the presentation topics.

*By: Paula Fernandes, MBA, PhD (Editorial Team) and Rachel Crane (Editorial Team); Contributor: Etalem Engeda (Editorial Team)*



*The goal of POC is to take the test to the point of patient care, circumventing the need for centralized sample collection and transportation. Illustration by Rachel Crane.*

# HAZARDOUS WASTE:

## WHAT WE DON'T KNOW CAN HURT US

Clinical laboratories are major contributors to the total medical waste stream produced by any health facility. Most of the waste from clinical laboratories is non-infectious or routine, but a smaller proportion, known as clinical biological waste, can endanger populations. Clinical waste includes human tissue, body fluids, chemicals, pathogenic organisms, and used injection products such as needles and syringes. Improper management of such waste is widespread, and poses a threat to public health.

Many countries in Africa have incorporated the issue of medical waste management and disposal into their agendas; the Ministries of Health in both Rwanda and Tanzania have recently developed detailed national waste management plans, with the goal of achieving proper management of waste disposal at all levels of healthcare service. Individual labs at some institutions use guidelines created internally or by outside non-governmental accrediting organizations like the South African National Accreditation System (SANAS). The international community has also weighed in, with a series of Hazardous Chemicals & Wastes Conventions that resulted in legally binding agreements about how to deal with dangerous chemicals. These conventions, ratified by a majority of African nations, include technical guidelines for dealing with healthcare waste, which can be viewed

at <http://www.basel.int/TheConvention/Publications/TechnicalGuidelines/tabid/2362/Default.aspx>.

Unfortunately, due to insufficient funding, staffing and awareness of the health hazards presented by laboratory waste, guidelines for disposal are not always followed. A variety of waste disposal practices are currently in use, ranging from the safest, where routine and biological waste are segregated and the hazardous portion is disinfected, to the most hazardous, where no segregation system is applied and all the waste is simply dumped near lab facilities. Careless disposal of infectious wastes may lead to serious, difficult-to-treat disease outbreaks. Hazardous chemicals can also do substantial harm to the public and the environment.

The best practice for biological waste, and equipment that has come into contact with such waste, is steam sterilization (autoclaving), followed by incineration. An alternative is chemical disinfection, often using bleach. Both procedures require quality control measures that assure adequate inactivation of infectious materials. For example, steam sterilizers require periodic testing using biological indicators and high quality chemical indicators of sterility (autoclave tape is insufficient) must be included at strategically-placed areas with every batch of material.



*An example of the common, hazardous practice of open-air burning. Photo reproduced with the permission of Dr. Francesco Marinucci.*



*An incinerator that has fallen into disuse.  
Photo copyright GSSHealth 2012.*



*A good incinerator with a padlock.  
Photo reproduced with the permission  
of Dr. Francesco Marinucci.*

A far more common method of waste disposal is incineration, practiced both in contained burns using an incinerator, and open-air burns. Incineration of bleached wastes and halogenated plastics such as PVC can produce toxins such as dioxin and furan; fumes may also contain other harmful gases and heavy metals. In general, open-air burning is more hazardous than use of an incinerator, because open-air fires offer no emissions control and tend to reach lower temperatures, preventing complete sterilization. When using an incinerator to disinfect wastes, it is important to ensure that the equipment is built according to appropriate specifications and well-maintained (incinerator ash must be removed frequently), and to operate it as directed, at a hot enough temperature and for long enough to destroy any pathogens.

Burial in pits, dry boreholes, or landfills is another common outcome for laboratory waste. When biological waste has been properly inactivated beforehand, this can be a safe “grave.” However, when toxic chemicals are included, there is a risk that they may leach into groundwater and contaminate wells; waterproof lining of waste pits minimizes this risk.

The most dangerous disposal method currently practiced is the open dump of untreated clinical wastes. Dumping leaves pathogens and chemicals accessible to the general population, and poses an even greater risk of contaminating the water supply than improper burial. Open dumping usually takes place near the lab facility, motivated by limited resources. However, some laboratories contract companies to dispose of untreated waste expecting that the waste will be disposed of correctly; this is not always the case. Once dumped, untreated waste is accessible to children and people who make a living by salvaging

materials, who are put at risk of infectious disease through injuries with contaminated sharps or contact with infected waste. There have also been cases when counterfeiters have salvaged improperly disposed containers to deceive buyers.

“It is important to ensure that companies that are contracted to dispose of waste are licensed and actually comply with the required standards,” says Juliana Hagembe, MSc, MPH, formerly of the Institute for Human Virology at the University of Maryland. “We are all accountable to make sure that we follow proper guidelines and protocols.”

Laboratory personnel can take responsibility to protect the public by separating hazardous from non-hazardous waste at the time it is generated. This is an inexpensive way to reduce the volume of

hazardous waste and the cost of managing it. Another important step is to ensure that the person appointed to manage and dispose of laboratory waste, oftentimes an untrained cleaner or lab assistant, understands the personal and public risks and the proper precautions to take when handling clinical waste.

There are many additional resources available for dealing with chemical and infectious wastes in developing countries. A good place to start is [www.healthcarewaste.org](http://www.healthcarewaste.org). The World Health Organization publishes a technical manual at [http://www.who.int/water\\_sanitation\\_health/en/](http://www.who.int/water_sanitation_health/en/). For information on groundwater safety, try <http://www.watersanitationhygiene.org>, and for more information on what wastes should be treated with which method way, please consult <http://www.nyayahealth.org/Library/alternativeswastemanagement.pdf>.

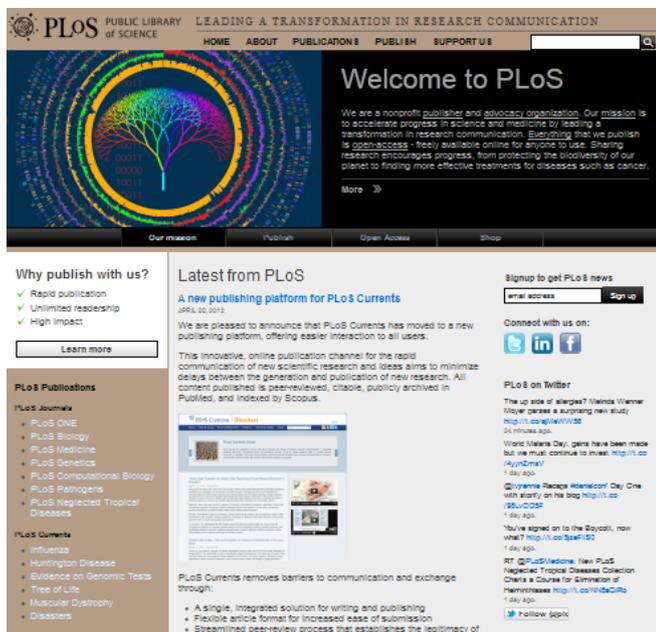


*A good burial pit. Photo reproduced courtesy of Dr. Francesco Marinucci.*

## OPEN ACCESS JOURNALS PROVIDE EXPANDED RESEARCH OPPORTUNITIES WITHOUT THE COST

Science is publicly funded, but the structure of the publishing industry often makes it very expensive to get access to the latest scientific results. It can be a challenge to find reliable, peer-reviewed information online, and lack of access to research can slow down a research project, or worse, prevent important health care information from reaching populations it could benefit. A growing number of researchers around the world are pushing to make peer-reviewed scientific research more widely accessible and economical. Fortunately for researchers without expensive journal subscriptions, there are already many peer-reviewed open access options available.

The mainstays of open access publication are free multi-disciplinary databases. These are organizations that make peer-reviewed research results in many scientific disciplines available to all users on the internet. The oldest and most famous is the Public Library of Science (PLOS), which publishes open access journals in both general biomedical fields (such as PLOS Medicine) and more specialized fields (such as PLOS Neglected Tropical Diseases), all of which may be searched from its main database at [www.plos.org](http://www.plos.org) or browsed individually.



Screenshot of [www.PLoS.org](http://www.PLoS.org)

Biomedcentral, another strong proponent of open access around the world, and with PLoS a sponsor of International Open Access Week, publishes 223 open access journals in various biological fields. Like the PLoS website, Biomedcentral offers both browsable journal homepages and a search function for all of its journals at [www.biomedcentral.com](http://www.biomedcentral.com).

Latest research published in journal:		
Vol 1, No 1 (2012)		
<b>Table of Contents</b>		
<b>Scientific Letters</b>		
	<b>Open Access</b> Systematic reviews of diagnostic test accuracy for evidence-based diagnostic practice in Africa <i>Eleanor A. Ochodo, Manika M.G. Leeflang</i>	PDF (230 KB) HTML EPUB XML 3 pages
<b>Original Research</b>		
	<b>Open Access</b> Review and comparison of quality standards, guidelines and regulations for laboratories <i>Tjeerd A.M. Datema, Linda Oskam, Paul R. Klatser</i>	PDF (374 KB) HTML EPUB XML 7 pages
	<b>Open Access</b> Immuno-haematological reference values for human immunodeficiency virus-negative healthy adults in Botswana <i>Madisa Mine, Sikhulile Moyo, Penny Stevens, Kurt Michael, Vladimir Novitsky, Kgomo Makhola, Aida Asmelash, Skhatele Molefahangwe, Elias Woldegabriel, Gaseboloke Mthoaheng, Talkmore Maruta, Charity Kamukamwe, Phibeon M. Mangwendza, Molly Holmes-Pretorius, Isaac Mtoni, Modisa Motswaledi, Rosemary Musonda, Ndavapi Ndwapi, Joseph Makheba, Richard Marink, Khumo Seipone, Tendani Gaolathe, Max Essex</i>	PDF (763 KB) HTML EPUB XML 7 pages
	<b>Open Access</b> Identifying HIV infection in South African women: How does a fourth generation HIV rapid test perform? <i>Kapila Bhown, Emma Kalk, Sonjha Khan, Gayle Sherman</i>	PDF (655 KB) HTML EPUB XML 5 pages
	<b>Open Access</b> Impact of mentorship on WHO AFRO Strengthening Laboratory Quality Improvement Process Towards Accreditation (SLIPTA) <i>Talkmore Maruta, David Motebang, Lebina Mathabo, Philip J. Rotz, Joseph Wanyoike, Trevor Peter</i>	PDF (442 KB) HTML EPUB XML 8 pages

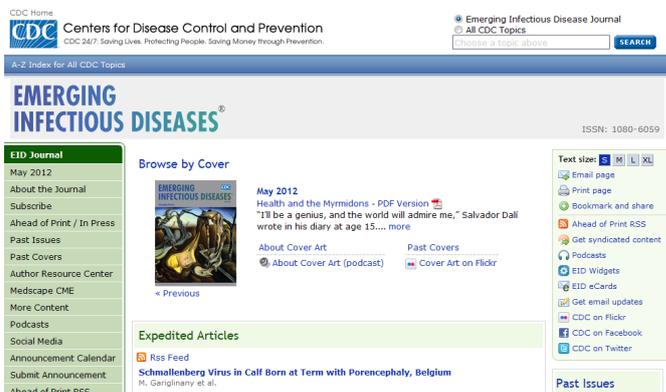
Screenshot of [www.ajlmonline.org](http://www.ajlmonline.org), site of the African Journal of Laboratory Medicine

African Journals Online (AJoL) aggregates articles published in Africa, comprising several hundred publications that range from national journals of medicine to more specific journals such as the African Journal of AIDS Research. AJoL also provides a comprehensive list of other low-cost research resources for African researchers.

The African Journal of Laboratory Medicine (AJLM), the official journal of ASLM, also provides peer-reviewed, open access articles focusing on the role of the lab and lab professionals in clinical care and public health in Africa. AJLM (available at [ajlmonline.org](http://ajlmonline.org)), launched in 2011, encourages scholarly exchange among biomedical scientists and clinicians, public health officials, the medical community, and policy makers across Africa.

There are also more specialized open access journals. The American Society for Microbiology sponsors an online journal, mBio, focused solely on microbiology, at [mbio.asm.org](http://mbio.asm.org). There is also an open access journal of emerging infectious diseases, available at [wwwnc.cdc.gov/eid](http://wwwnc.cdc.gov/eid). To find

(continued on page 13)



Screenshot of [wwwnc.cdc.gov/eid](http://wwwnc.cdc.gov/eid), CDC's Emerging Infectious Diseases Journal



## MEET THE RESEARCHER

Dr. Kefas Mugittu, Head of the Bagamoyo Branch of the Ifakara Health Institute in Tanzania, sat down with us to talk about his current work and the trajectory of his career, from veterinary doctor to malaria and TB researcher.

### **Tell us the about the Ifakara Health Institute (IHI). What is the history of the Institute?**

In 1949, Dr. Rudolf Geigy visited Ifakara. He returned in 1956 to establish the Swiss Tropical Institute Field Laboratory, and forty years later, it was registered as an independent trust, changing its name to Ifakara Health Research and Development Centre. In 2008, the name was simplified to IHI and the centre added training to its list of core activities. In addition to its main office in Ifakara, IHI is comprised of six sites: Dar es Salaam, Bagamoyo, Rufiji, Kigoma, Mtwara and Dodoma. It currently has 1200 employees, and continues to expand. The Bagamoyo branch, which I oversee, has more than 180 staff.

### **Can you tell us a little about your background? What made you want to become a scientist?**

My background is quite complex and mixed up. I trained to be a veterinary doctor, graduated from the Sokoine University of Agriculture (SUA), Tanzania in 1995, and then practiced veterinary medicine for one year. I was living in Arusha in northern Tanzania when I stopped working as a veterinary surgeon. I had an itch to do much bigger things. I wanted to do something more challenging and in Africa there are many public health challenges. But as a vet, how was I to get involved? I wanted to venture into something new and fast-developing.

I first heard of molecular biology during my final years of training, but my interest in this subject didn't develop until I was practicing veterinary medicine. In 1996, I received a scholarship with the Norwegian Agency for Development Cooperation (Norad) to pursue a Master of Veterinary Medicine at SUA. Once my course work was complete, I went to the International Livestock Research Institute (ILRI) Laboratories in Nairobi, Kenya, where I was exposed to the use of molecular biology in research. Inspired, I returned to SUA in Tanzania to continue my work. I was mentored by Prof. Paul Gwakisa, the first person to introduce molecular biology research to Tanzania. This allowed my entry into the field, and in 1999, I joined IHI as a biomedical researcher. Eager to continue learning, I worked toward a PhD in molecular microbiology with a focus on drug-resistant malaria and, in 2006, I successfully completed the degree. I then pursued postdoctoral research in epidemiology of TB resistance at the Novartis Institute of Tropical Diseases in Singapore, from 2008-2010.

### **Describe your role as Head of the Bagamoyo branch of IHI.**

My main role is to oversee the strategic development of the branch, ensuring that our work is informed by the objectives and mission of IHI. As the branch has different disciplines and groups, my role is multifaceted: I strive to provide leadership across various programs; coordinate activities to avoid duplications; ensure that our activities are complementary to the activities of other IHI sites; and promote a work environment in which staff members can be creative and productive. I spend considerable time searching for research ideas, writing proposals, identifying financial resources, and maximizing the efficient use of these and other resources allocated to the branch by the head office. Finally, I work to forge and maintain harmonious relations with other organizations within the Bagamoyo District where we carry out our activities.

### **How have funding opportunities been over the past few years? Has it been easy to obtain funding? Have you noticed any trends or changes in funding?**

Our research project portfolio is funded by a number of donors. IHI also receives a small amount of government funding. Nonetheless, attracting research funds, in general, has not been so easy. Submission of grant proposals and securing funding is very competitive and will continue to become even more challenging as the number of funding opportunities is not at pace with the number of organizations seeking support. There is also currently a debate among donors on whether they should continue providing aid to Africa, making the future uncertain.

Securing funding ideally involves identifying research that interests both the donors and IHI, but because of a lack of resources, research in Africa is donor-driven. In IHI's strategic plan for the next five years, we are considering commercially viable research and believe this is the way forward. It is high time African institutions start considering this type of research as a sustainability strategy. I find this particularly exciting since I have an interest in biotech commercialization. Last year I took part in a UNESCO assignment that commissioned IHI to undertake a rapid assessment of the potential areas for the application of biotechnology on commercial bases in Tanzania. The engagement in and development of commercially viable research at various

institutions has not been coordinated well. These institutions need to be encouraged and supported to pursue this field of research more seriously.

## **How do you view accreditation? Is it important to funding?**

Accreditation demonstrates that our data is credible, consistent, and reliable and that we are able to reproduce results. All of these factors are crucial to attracting donors and grants. Because accreditation is a measure of quality, labs have to strive to earn it. As our branch is engaged with an international donor and we want to generate credible data, we are working hard to pursue accreditation.

## **Have you already earned accreditation?**

Unfortunately, our labs in Ifakara and Bagamoyo are not accredited, but we are intending to work with South African Development Community Accreditation Services to pursue ISO accreditation. Though it is a lot of work and quite expensive, we believe this is an important step to take. Of the IHI labs, the Bagamoyo site will probably be the first to earn accreditation because that is where the quality assurance is rigorously performed and labs are regularly audited.

## **What is the most exciting project with which you are currently involved?**

We have a number of great projects in Bagamoyo. It's a multi-disciplinary site where we perform research on both malaria

and TB. We have a very interesting, ongoing malaria vaccine trial project, and we recently established an early clinical trial facility where we conducted research on the bioavailability of coartem and the first *P. falciparum* sporozoite challenge in an African population. Our work on TB includes the development and evaluation of new diagnostics for childhood TB; the assessment of safety and efficacy of high dose rifampicin to short TB treatment; phase IIA trials to assess safety and immunogenicity of a new TB vaccine (H1/IC31); and the development of our laboratory as a centre of excellence in pathogen and host molecular genotyping.

## **What advice would you have for ASLM members interested in a career in research?**

I have loved biology since secondary school and knew it was something I wanted to focus on for my career. Once you enter university, you must identify your passion, the area that most interests you. Being a veterinary student, for me this was protozoology. As you go up the ladder, you have the chance to fine-tune your interests and aims. You must be focused and decide on your goals. I knew I was interested in molecular biology and was drawn to studying malaria and TB. You may decide, as I did, to earn a PhD and strive to become an established researcher. Lastly, it's important to continue educating yourself. Currently, I am studying biotech commercialization, a topic that I believe will be of increasing importance for researchers in Africa. Through reading, you can identify information gaps, which will allow you to determine interesting research topics and remain on the cutting edge of your field.

*Editor: Jessica Fried, MPH (Editorial Team) and Jhosetta Goudelock (Editorial Team);  
Contributors: Paula Fernandes, MBA, PhD (Editorial Team) and Rachel Crane (Editorial Team)*

## **Volunteers Needed!**

### **Publication Mentors:**

Seeking experienced laboratory 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 consideration for publication. Subject matter expertise not necessary. Volunteer time commitment depends on mentee needs.

### **Writing Workshop Mentors:**

Seeking laboratory 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:**

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

### **Peer Reviewers:**

Seeking objective reviewers with a 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 manuscripts. A 2-3 week turnaround is expected.

*For more information or to volunteer, please contact: [editor@ajlmonline.org](mailto:editor@ajlmonline.org)*

## CONTINUING ADVANCES IN GRANT AND PROPOSAL WRITING THROUGH ASLM WORKSHOP



*Workshop participants pose for a photo with ASLM staff and mentors following the opening press conference*

ASLM held its second Grant and Proposal Writing Workshop from 25 March to 1 April in Addis Ababa and Debre Zeit, Ethiopia. The workshop, hosted in collaboration with the US Centers for Disease Control and Prevention (CDC-US), aimed to enhance participants' understanding of the essentials of the grant- and proposal-writing process.

22 participants from four countries (Sudan, Kenya, Lesotho and Ethiopia) convened for the workshop's opening press conference at the Bole location of the Jupiter Hotel in Addis Ababa. Following the press conference, attendees relocated to the workshop site in nearby Debre Zeit.

Organizers designed the workshop to be both educational and interactive, featuring presentations, peer review and brainstorming sessions. Course trainers presented on the core components of a grant proposal and other critical aspects of the grant-writing process. Trainers also provided a hands-on tutorial on designing effective PowerPoint presentations.

Presiding over the eight-day workshop were Dr. Connie Sexton, Deputy Chief of Science of the International Laboratory Branch (ILB) of the CDC's Division of Global HIV and AIDS (DGHA), and Jack Smith, Director of the Jack Smith Group. Dr. Giorgio Roscigno, COO of ASLM, and Dr. Elizabeth Luman, Associate Chief of Science, ILB, also presented at the workshop. Additional mentorship was provided by Corey White (Acting Communications Advisor, ASM, seconded to ASLM), Rachel Crane (Project Coordinator, Global Scientific Solutions for Health, seconded to ASLM), CDC-Ethiopia's Laboratory Advisor, Dr. Peter Fonjungo, and ILB Health Scientist Natasha Nyanin.

Participants spent the majority of the workshop interacting one-on-one with mentors and engaging in small-group peer review. "The mentors were very consultative and understanding," said participant Jeremiah Okari Ogoro. "They had a friendly touch throughout the training and were able to address all issues."

Over the course of the training, mentees learned to define and develop the essential elements of grant proposals, including:

**"Through the workshop, I learned how to identify a topic for grant writing, how to justify the unmet need of a problem, and how to write a work plan, brief timeline, and budget"**

Project Abstract, Goals and Objectives, Project Output, Specific Aims, Project Strategy, Budget and Timeline, and Project Monitoring and Evaluation. The course helped participants identify potential funding sources, better understand the proposal review process, develop key components of a proposal, and improve their technical writing and presentation skills.

A mock-fundraiser social took place on the final evening of the course. Participants had the opportunity to "pitch" their proposal concepts to course trainers posing as potential funders, who scored participants according to the persuasiveness of their presentations and their ability to target the appropriate funding group for their projects.

Awards were presented for the top proposals. The workshop concluded with a closing ceremony attended by the CEO of ASLM, Dr. Tsehaynesh Messele, who presented participants with certificates acknowledging their assiduous effort during the week.

"Through the workshop, I learned how to identify a topic for grant writing, how to justify the unmet need of a problem, and how to write a work plan, brief timeline, and budget," commented participant Desalegn Ararso.

*(continued on page 13)*



*Course trainer and mentor Dr. Connie Sexton assists participants with their proposals*

## CANCER DIAGNOSTICS AND TREATMENT IN AFRICA: A CLINICIAN'S PERSPECTIVE

---

By the year 2020, the number of new cancer cases worldwide is expected to reach 16 million, a dramatic increase from the estimated 12 million new cases in 2011. Although cancer is often considered a disease plaguing high-income countries, 70% of this projected growth in new cases is expected to afflict populations living in the developing world. Currently, people living in low-income countries account for an estimated 56% of all new cancer cases and 64% of all deaths from cancer. This shift in the demographics of cancer can be attributed to increasing life expectancies resulting in more individuals reaching ages at which the risk of cancer is higher, as well as lifestyle changes such as tobacco use, unhealthy diets and physical inactivity.

These changes have had an impact not only on cancer rates, but also on the types of cancer found in Africa. Lung cancer, while relatively uncommon in Africa compared to Europe and North America, is on the rise. Kaposi Sarcoma (KS), an HIV- and human herpes virus 8 (HHV8)-associated cancer, is also a problem. While HHV8-related KS is endemic in equatorial Africa, along what is commonly referred to as the "KS Belt", with the AIDS epidemic, HIV-related KS has become more prevalent throughout sub-Saharan Africa. With the advent of antiretroviral therapy and its widespread use in the developing world since the 1990's, patients in Europe and North America now rarely suffer from KS; however, access to this effective treatment is extremely rare in much of sub-Saharan Africa, leading to a growth in the prevalence of diseases like KS and HIV-related lymphoma in local populations. In Eastern Africa, KS is one of the leading cancers diagnosed in men. While KS can also be present in females, the cancers of greatest concern for African women are of the cervix and breast. The latter recently became the most prevalent cancer diagnosed in this population, even as its incidence has decreased in high-income countries. Women account for 56% of all cancer cases on the continent, a sex disparity not found outside of Africa. These statistics serve as an alarm that must incite action to tackle this evolving public health dilemma.

Cancer in Africa has been a neglected problem when compared to communicable diseases, which have comparable mortality rates. Limited resources restrict patients' options; in many countries, there may be millions of people for every cancer centre, and tens of millions for every radiotherapy centre. With radiation therapy rare and most surgeons untrained in oncology, non-specialized hospitals and health care centres are generally ill-equipped to deal with cancer cases. For those cancer patients unable to afford a visit to

dedicated treatment centres, a cancer diagnosis is usually a death sentence.

Even with existing resources, steps can be taken to alleviate the cancer burden in Africa. Effective treatment begins in the lab and the clinic with early detection. Over 60% of cancer cases across the continent are detected at a late stage when the only effective treatment options may be impracticable and unaffordable. Early detection methods should be readily available in clinics, and clinicians should educate patients in self-care methods. A digital rectal exam and blood draw to look for levels of prostate-specific antigen (PSA) can indicate prostate infection, inflammation, or cancer; testing blood using a BRCA gene test can identify mutations, particularly inherited mutations, in breast and ovarian cancer susceptibility genes; cervical smears can show cancerous cells; and patient self-administered breast exams can lead to the discovery of a cancerous growth.

When early signs of cancer are suspected, doctors and lab technicians must be prepared to investigate and address them. For instance, fine-needle aspiration is a simple, inexpensive technique for investigating superficial masses, obviating the need for a biopsy; however, few doctors are prepared to perform the procedure, and laboratory personnel may be unavailable to analyze samples. Human leukocyte antigen (HLA) typing is critical for identifying matches for bone marrow transplants. Currently, only two African countries—South Africa and Nigeria—have national bone-marrow registries. Cervical cancer is a particularly common cancer in Africa; through low-cost methods like DNA testing for HPV or visual inspection with acetic acid, it can be detected even when Pap smears are unaffordable. Large-scale programs in Kenya and South Africa have already taken advantage of low-cost alternative diagnostic tools and seen improvements in early diagnosis of cervical cancer. Clinicians and technicians in Africa should continue educating themselves in diagnostic techniques that have proven effective in other countries. In addition, Ministries of Health should coordinate education programs to ensure that their doctors have the latest information on cancer diagnostics.

Where limited resources prohibit targeted curative care, more radical preventive measures can also save lives. In Ghana, registered nurses with the Africa Oxford Cancer Foundation dispense tamoxifen to women showing early signs of cancer. Women who receive a primary diagnosis of breast cancer at a clinic, and are unable to afford a visit to a cancer care centre, are given a 2-to-3-month course of tamoxifen, free of charge. Although the possibility of false

negatives and overtreatment is high, the medication is safe, and it is hoped that the early palliative care will reduce cases that might otherwise remain untreated.

Preparedness is the most important component in developing effective policies for public health. As laboratories are essential in early cancer diagnoses, technicians should strive to stay informed, through medical journals and the internet, about the latest diagnostic methods for cancer. Additionally, regular meetings between clinicians and laboratory staff can improve awareness of one another's needs; a laboratory trained in histopathology, for example, is of little use if doctors are uncomfortable taking biopsies. On a national level, public education about risk factors for cancer, like smoking, obesity and transmission of HPV or HIV, is the single most cost-effective approach to reducing the incidence of the disease. Advertising campaigns aimed at prevention can have

as much impact as new methods for early detection.

As cancer becomes an increasing health burden in Africa, ministries of health must adapt to treat non-communicable diseases with the same urgency as communicable diseases. Emphasis must be put on training, quality control measures, and planned national initiatives that do not leave individual clinics and laboratories struggling to survive on their own. If there is political will to prioritize early diagnosis and treatment of cancer, many of the same measures that are effective in battling infectious diseases in Africa are applicable to cancer care.

By: Aaron Krol (Editorial Team), Jessica Fried, MPH (Editorial Team) and Laetitia Gahimbare, PhD (Kigali University Hospital, Rwanda)

## Call for Advertisements

Are you a laboratory equipment supplier looking to market your products? Are you hosting a conference and looking to increase participation? Advertise in Lab Culture! Please contact [newsletter@aslm.org](mailto:newsletter@aslm.org) for more details.

See our ad rates:

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

- McCormack, V.A. Schüz, J. (2011). Africa's growing cancer burden: environmental and occupational contributions. *Cancer Epidemiology*, 36(1):1-7. Doi: 10.1016/j.canep.2011.09.005
- Kerr, D. Midgley, R. (2010). Can We Treat Cancer for a Dollar a Day? Guidelines for Low-Income Countries. *The New England Journal of Medicine*, 363:9. Doi: 10.1056/NEJMp1002812.
- McCormack, V.A. Schüz, J. (2011). Africa's growing cancer burden: environmental and occupational contributions. *Cancer Epidemiology*, 36(1):1-7. Doi: 10.1016/j.canep.2011.09.005
- Dollard SC, Butler LM, Jones AM, Mermin JH, Chidzonga M, Chipato T, Shibuski CH, Brander C, Mosam A, Kiepiela P, Hladik
- W, Martin JN: Substantial regional differences in human herpes virus 8 seroprevalence in sub-saharan Africa: Insights on the origin of the "KS Belt". *Int J Cancer* 2010,127(10):2395-2401.
- Cancer in Africa. (2011). American Cancer Society, No. 861430.
- McCormack, V.A. Schüz, J. (2011). Africa's growing cancer burden: environmental and occupational contributions. *Cancer Epidemiology*, 36(1):1-7. Doi: 10.1016/j.canep.2011.09.005
- McNeil Jr, DG. (2012, May 11). Finding a Match, and a Mission: Helping Blacks Survive Cancer. *The New York Times*. Retrieved from [http://www.nytimes.com/2012/05/12/health/a-match-and-a-mission-helping-blacks-battle-cancer.html?pagewanted=1&\\_r=1&emc=eta1](http://www.nytimes.com/2012/05/12/health/a-match-and-a-mission-helping-blacks-battle-cancer.html?pagewanted=1&_r=1&emc=eta1) Cancer in Africa. (2011). American Cancer Society, No. 861430.
- Kerr, D. Midgley, R. (2010). Can We Treat Cancer for a Dollar a Day? Guidelines for Low-Income Countries. *The New England Journal of Medicine*, 363:9. Doi: 10.1056/NEJMp1002812
- Kerr, D. Midgley, R. (2010). Can We Treat Cancer for a Dollar a Day? Guidelines for Low-Income Countries. *The New England Journal of Medicine*, 363:9. Doi: 10.1056/NEJMp1002812
- Cancer in Africa. (2011). American Cancer Society, No. 861430.

## OPEN ACCESS JOURNALS

(continued from page 8)

more open access journals specific to your field, try the Directory of Open Access Journals, which lists about 250 journals in biology and over 500 in medicine and public health, at [www.doaj.org](http://www.doaj.org).

Some journals with expensive subscription rates are made available to residents of low- or middle-income countries for free or at a reduced cost. The UN and the WHO sponsor a project called research4life (available at [research4life.org](http://research4life.org)), a set of databases dedicated to research in the life sciences, which are accessible to public institutions such as universities, teaching hospitals, government offices and research institutions. To get access, the institution librarian must fill out a registration form; after an institution is registered, anyone affiliated with it may access any of a staggering 8000 journals on the database. These include high-impact publications such as *Nature* and specialized journals ranging from microbiology to agriculture.

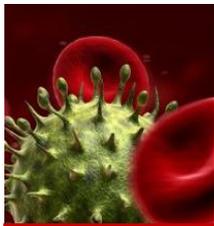
By: Laurel Oldach (Editorial Team)

## CONTINUING ADVANCES

(continued from page 11)

This workshop is part of a larger initiative by ASLM to provide direct support to medical laboratory scientists and advance their research and technical writing skills through a series of training programs conducted in different regions of Africa. The next Grant and Proposal Writing Workshop will be held in the autumn of 2012. Please watch the ASLM website [www.ASLM.org](http://www.ASLM.org) for more information on how to apply. Society members will also receive email updates of all ASLM events.

By: Natasha Nyanin (CDC) and Rachel Crane (Editorial Team);  
Editor: Aaron Krol (Editorial Team)



# ASLM

AFRICAN SOCIETY FOR LABORATORY MEDICINE

2012

*Accurate Laboratory Diagnostics – A Pillar of Quality Healthcare*

Cape Town International Convention Centre • Cape Town, South Africa • December 1-7, 2012

## First ASLM International Conference Dec 1-7<sup>th</sup>, Cape Town South Africa

### CALL FOR ABSTRACTS

The First International Conference of the African Society for Laboratory Medicine (ASLM) will convene in Cape Town, South Africa from December 1 through 7, 2012 ([www.aslm.org](http://www.aslm.org)\*). Laboratory professionals, clinicians, program managers, epidemiologists, researchers, students, and policy makers will assemble to address strengthening national laboratory health systems and networks, diagnostics, and healthcare delivery and disease surveillance.

The *ASLM2012* Scientific Program Committee is inviting abstracts with a focus on Laboratory Medicine for *ASLM2012*. Abstracts will be peer-reviewed for scientific content and current interest of the topic to the clinical, public health, and scientific laboratory community.

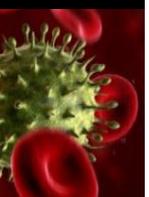
*ASLM 2012* is pleased to announce the [Abstract Mentor Program](#), which is an opportunity for young and/or less experienced abstract submitters to receive feedback from experienced writers. For more information, please contact [aslm2012amp@aslm.org](mailto:aslm2012amp@aslm.org)

Abstract submission opens May 31 and the deadline is July 30, 2012. Before submission, please consult the [Guidelines for Abstract Submission](#)\* in full. Abstract decisions will be emailed to the primary contact listed on the abstract by August 20, 2012.

If you have any questions, please contact [2012abstracts@aslm.org](mailto:2012abstracts@aslm.org).

\*ASLM2012 Conference website is currently under construction but coming soon. For questions, please contact [2012abstracts@aslm.org](mailto:2012abstracts@aslm.org).

**1<sup>ST</sup> International Conference**  
Cape Town, South Africa  
December 1<sup>st</sup> -7<sup>th</sup> 2012



**ASLM**  
AFRICAN SOCIETY FOR LABORATORY MEDICINE

**2012**

**1<sup>ST</sup> International Conference**  
Preliminary  
**PROGRAM AT A GLANCE**

*Accurate Laboratory Diagnostics - A Pillar of Quality Health Care*

PRE-CONFERENCE WORKSHOPS AND SYMPOSIUMS			MAIN CONFERENCE				
	Sat, December 1, 2012	Sun, December 2, 2012	Mon, December 3, 2012	Tue, December 4, 2012	Wed, December 5, 2012	Thurs, December 6, 2012	Fri, December 7, 2012
8:00 am					<p><b>PLENARY</b> Infectious and Non-Communicable Diseases in the 21<sup>st</sup> Century: Predicting the Future Kevin De Cock</p>	<p><b>PLENARY</b> Antimicrobial Resistance in Developing Countries Bruce Levin</p>	<p><b>PLENARY</b> Preparing Africa for High Level Research and Clinical Trials Charles Mgone</p>
8:30 am					<p><b>PLENARY</b> From Steam-Age to Dream Age Laboratory Technology: A Look Back on nearly Four Decades of Virology in Africa Barry Schoub</p>	<p><b>PLENARY</b> New Diagnostics- Point-of-care Diagnostics, Regulatory Hurdles and Innovation Gene Walther</p>	<p><b>PLENARY</b> Challenges and Opportunities at the Laboratory-Clinic Interface Illesh Jani</p>
9:00 am	MORNING	MORNING	MORNING		<p><b>PLENARY</b> Turning The Corner on Laboratory Systems and Quality of Laboratory Testing in Africa Alash'le Abimiku</p>	<p><b>PLENARY</b> Laboratory Capacity for Clinical Treatment and Vaccine Development in Africa Deborah Birx</p>	<p><b>PLENARY</b> Increased and more Harmonized Investments in an Integrated Health System Strengthening Approach Hon. Minister of Health Dr. Tewdros Adhanom</p>
9:30 am	MORNING	MORNING	MORNING		<p><b>KEYNOTE ADDRESS</b> The critical role of strengthened laboratory health systems for disease surveillance and control in meeting the Millennium Development goals Prof. C. O. Chukwu Hon. Minister of Health Federal Republic of Nigeria</p>	<p><b>KEYNOTE ADDRESS</b> Need for Laboratory Policies and Laws in Africa Hon. Dr. Haja Zahab Bangura, Minister of Health and Sanitation, Sierra Leone</p>	
10:00 am				REGISTRATION	BREAK	BREAK	BREAK
10:30 am	PRE - CONFERENCE WORKSHOPS SYMPOSIUMS	PRE - CONFERENCE WORKSHOPS SYMPOSIUMS	PRE - CONFERENCE WORKSHOPS SYMPOSIUMS	Poster Sessions & Exhibits	<p><b>ORAL ABSTRACTS</b> Strengthening, Partnerships, National Public Health Institutes and Laboratory Networks Point of Care Diagnostics Improving the Efficiency, Cost-Effectiveness and Impact of Diagnostics and Laboratory-Related Services</p>	<p><b>ORAL ABSTRACTS</b> Policy and Law, Biosafety, Security, International Health Regulation, Regulatory Issues, and New Technologies TB Diagnostics and Resistance Testing Design and Implementation of Laboratory Quality Improvement Programs</p>	<p><b>ORAL ABSTRACTS</b> Improving Surveillance and Outbreak Detection; Diagnosis of STDs, Zoonotic Infections, and Emerging and Neglected Diseases Malaria Diagnostics and Control Pre- and Post-Service Training and Workforce Development</p>
12:00 pm					LUNCH POSTER SESSIONS & EXHIBITS	LUNCH POSTER SESSIONS & EXHIBITS	LUNCH POSTER SESSIONS & EXHIBITS

**1<sup>ST</sup> International Conference**  
Cape Town, South Africa  
**December 1<sup>st</sup> - 7<sup>th</sup> 2012**

**1<sup>ST</sup> International Conference**  
Preliminary  
**PROGRAM AT A GLANCE**

***Accurate Laboratory Diagnostics - A Pillar of Quality Health Care***

PRE-CONFERENCE WORKSHOPS AND SYMPOSIUMS		MAIN CONFERENCE					
	Sat, December 1, 2012	Sun, December 2, 2012	Mon, December 3, 2012	Tue, December 4, 2012	Wed, December 5, 2012	Thurs, December 6, 2012	Fri, December 7, 2012
2:00 pm	MORNING PRE-CONFERENCE WORKSHOPS SYMPOSIUMS	MORNING PRE-CONFERENCE WORKSHOPS SYMPOSIUMS	MORNING PRE-CONFERENCE WORKSHOPS SYMPOSIUMS	<b>KEYNOTE OPENING SESSION</b> Conference Overview Dr. John Nkengasong Dr. Tsehaynesg Messele 1 <sup>st</sup> ASLM Honors Lecture Dr. Robert Gallo University of Maryland Donor Perspective: PEPFAR commitment to strengthening laboratory health systems and country ownership <b>Ambassador Dr. Eric Goosby</b> Laboratory Regulations and Standards <b>Honorable Prof. Peter Anyang' Nyong'o</b> Minister of Medical Services, Kenya Honorable Dr. Aaron Motsaedi, Minister of Health, S. Africa	<b>SYMPOSIUM</b> Eradicating Polio – Role of Laboratory Networks Evaluation and Implementation of Point of Care Diagnostics	<b>SYMPOSIUM</b> Lab Networks in Africa HIV Drug Resistance	<b>SYMPOSIUM</b> Laboratory-Clinic Interface Malaria Diagnostics and Resistance Testing
3:00 pm	MORNING PRE-CONFERENCE WORKSHOPS SYMPOSIUMS	MORNING PRE-CONFERENCE WORKSHOPS SYMPOSIUMS	MORNING PRE-CONFERENCE WORKSHOPS SYMPOSIUMS				
4:00 pm							
5:00 pm					<b>BREAK</b>	<b>BREAK</b>	<b>CLOSING SESSION</b>
5:30 pm				<b>OPENING RECEPTION</b>	<b>ROUND TABLE DISCUSSION</b> 1. Ministerial Panel 2. Role of Laboratory Accreditation in Patient Management: Clinical Pathology 3. Institute Pasteur Laboratory Networks	<b>ROUND TABLE DISCUSSION</b> 1. Development and Implementation of Diagnostics-Supplier Perspectives 2. Laboratory Needs for International Health Regulations Biosafety and Biosecurity 3. Flu LabNetwork 4. Point of Care Diagnostics for Maternal-Child Health	
7:00 pm					<b>SPECIAL GUEST RECEPTION</b>	<b>ASLM NIGHT/RECEPTION</b>	

ASLM  
Behind the Friendship Building  
P.O. Box 5487  
Bole Road, Bole Sub-City  
Addis Ababa, Ethiopia  
**[www.ASLM.org](http://www.ASLM.org)**  
**[Newsletter@ASLM.org](mailto:Newsletter@ASLM.org)**