

### MAKERERE UNIVERSITY LUNG INSTITUTE

# Newsletter



#### Word from the Director

Dr. Bruce J Kirenga

Dear Readers,



First and foremost, I wish you a happy and prosperous 2020. Welcome to our newsletter for the first quarter.

In the previous year, MLI saw a lot of achievements in the various units: the Research and Innovation unit won 4 grants and published 22 manuscripts in scientific journals; the Training and Education unit held 13 Day of Lung Science sessions, five capacity building workshops and organised a successful two-day, international, scientific symposium on lung health involving academicians, clinicians, healthcare planers

and policy makers; the Stakeholder Engagement Unit engaged the public by featuring on TV health talk shows, published articles on lung health in newspapers and participated in a number of lung health awareness activities such as World TB Day, World Tobacco Day, National Day of Physical Activity and International Men's Day; and the Clinical Services unit expanded its array of services to include bronchoscopy.

We thank each one of you for your individual and collective contributions. We have also taken the lessons learnt from the areas in which we did not perform well in stride as we look forward to even bigger achievements this year.

I wish you an enjoyable read.

Science for healthy lungs as we build for the future

## WHO, MoH, MLI commemorate International Men's Day

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**TAKING THE LEAD:** The Minister of Health, Hon. Dr. Jane Ruth Aceng, gives a speech before the march to commemorate International Men's Day in which she launched three policy tools in which men's and boy's involvement is key as representatives from WHO, MoH and MLI listen on.

#### **INSIDE THIS ISSUE**

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- MLI's CAB joins WHO and MoH to commemorate International Men's Day
- Dr. Bruce J. Kirenga is conferred the award of PhD for his thesis titled Asthma prevalence and mortality in Sub Saharan Africa: the case of Uganda
- MLI marks 4 years

#### Word from the Editors

We welcome our readers to our first quarterly issue of the new decade. We look forward to providing important updates of MLI's work as MLI continues to place itself strategically at the forefront of research, clinical care services and stakeholder engagement to improve lung health in Sub-Sharan Africa.

In this issue, of note, are the activities of MLI's CAB which has been empowered to participate in key stakeholder engagement activities both nationally and internationally.

This quarterly newsletter is available on MLI's website: **mli.mak.ac.ug**. Subscribe for this newsletter by emailing **news@mak.ac.ug** with 'Subscribe' in the subject. For any comments or questions please reach out to the editorial team.

#### **Editorial team**



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# Lung health on the agenda as Ministry of Health commemorates International Men's Day In Uganda

he World Health Organisation's (WHO) International Men's Day is celebrated in various countries every year with the aim of addressing six key issues known as the "Six Pillars of International Men's Day." In summary, they focus on improving gender relations, promoting gender equality and producing responsible and positive role models in society.

In Uganda, championed by the Ministry of Health, the day was commemorated on 5th December, 2019 under the theme "Engaging Boys in a Healthy and Violent Free Nation." The activities of the day included a march, led by the Chief Guest of the event, Hon. Dr. Ruth Aceng from City Square through the city centre.

Before leading the march, the Minister launched three policy tools in which men and boys involvement is key. This included the National Strategy for Male Involvement/ Participation in Reproductive Health, Nutrition, Child, Adolescent health & Rights- including HIV/TB.

Among the participants was Makerere University Lung Institute's Staff and Community Advisory Board (CAB). The main goal of their involvement was to engage the community, especially men and boys in the fight against TB. This was done by screening people present for TB and sensitizing men and boys about the ongoing STREAM trial at MLI that's evaluating regimen for the management of multi-drug resistant TB. They also advocated for the mainstreaming of TB control programs targeting men and boys at national and community level. Furthermore, the team worked on obtaining the perspectives of the community about TB and/or the STREAM TRIAL with particular attention to men, boys and women who care for the men and boys.

At the end of the day, a total of 94 participants were screened 76.5% of whom were male. 40 samples were



READY TO MARCH: Dr. Stavia Turyahbwe (second left), the Assistant Commissioner at the NTLD joins MLI staff and CAB members to display placards advocating for better health practices among men ahead of the march



CITY MARCH: Hon. Dr. Jane Ruth Aceng, the Minister of Health, Uganda, led the procession of health advocates through the city centre to commemorate International Men's Day

collected from presumptive TB patients and the results from the analysis were shared with them.

The team also showcased various placards carrying TB messages approved appreciate the role of observing by the Ministry of Health to facilitate community sensitization and health education.

The CAB members also interacted with the Assistant Commissioner, National TB and Leprosy Division, with discussions

on how to improve men and boys' involvement in The End TB innovations.

From this event, the CAB was able to international days such as International Men's Day, International Women's Day, World AIDS day in the fight to end TB as they serve as important platforms to engage community.

By Abdunoor Nyombi/ Kasozi Frank/ Pauline Ndagire ENDING THE EMERGENCY
SCIENCE, LEADERSHIP, ACTION

ENGAGING: Rachael Kabamooli, a CAB member and Dr. Ivan Kimuli the STREAM community liaison officer interact with Gay Bronson from Vital Strategies during the workshop

The Union World Conference on Lung Health is one of the major gatherings of public health specialists, clinicians, researchers and policy makers with an overarching aim of sharing experiences, challenges and finding solutions to major lung diseases. The 50<sup>th</sup> Union World Conference was held in Hyderabad, India from 30<sup>th</sup> October – 2<sup>nd</sup> November 2019 under the theme: Ending the Emergency: Science, Leadership, Action.

One of the key study findings shared during the conference were results from a trial for a new TB vaccine, M72/AS01E, which were received with excitement as this represented a major breakthrough in vaccine development in 100years. This new vaccine has the potential to prevent TB in half of the people who receive it. This timely research comes at a time when the world has set a target to reduce TB deaths by 95% and to cut new cases by 90% between 2015 and 2035.

Several pre-conference activities were held in the build up to the main event. This included a STREAM (Standard Treatment Regimen of Anti-Tuberculosis drugs for patients with MDR-TB) led two -day workshop on Community Engagement on the 28th and 29th October 2019. The STREAM trial is an international, multi-centre, parallel group, open label, randomised control trial on patients with multi-drug resistant tuberculosis (MDR-TB). Currently, the study is being conducted across thirteen sites in Ethiopia, Georgia, India, Moldova, Mongolia, South Africa and Uganda.

This workshop aimed at developing a collective vision for STREAM community engagement across all sites. Community engagement teams were also trained in a variety of operational and grant management topics.

MLI CAB members also shared their experiences with teams from other STREAM sites participating in the community engagement workshop. The sessions were solution driven as community engagement team identified problems that cut across sites and had brain-storming sessions to address them. From these sessions, MLI CAB members were empowered with skills such as problem-solving, target setting and developing logic models.

Additionally, the conference provided a much-needed interface for lung disease patients and TB survivors to engage public health specialists, clinicians, researchers and policy-makers to get patients' perspectives to drive bottom-up solutions to lung disease especially TB. One such priority area for TB survivors is the development of shorter and effective regimen for TB.

By Dr. Ivan Kimuli/Dr. Jasper Nidoi

# MLI director's work on air pollution, asthma prevalence and mortality in Sub Saharan Africa leads to PHD award

r. Bruce J. Kirenga, a senior lecturer and pulmonologist at Makerere University and the founding Director of MLI was awarded a PhD by the Rector Magnificus, Prof. C. Wijmenga, in accordance with decision of college of deans at the University of Groningen.

The journey to this achievement began in June 2015 when he enrolled for a PhD programme in Department of General Practice and Elderly Care Medicine at the University of Groningen. His PhD thesis focused on asthma epidemiology having observed that there was limited data on prevalence, risk factors and burden of Asthma in Africa. The studies presented in the thesis focused on elucidating the factors associated with asthma, asthma morbidity and its mortality in SSA with a focus on Uganda.

He conducted a national population survey and a hospital-based survey at Mulago Hospital to determine the prevalence of asthma at a national level and among hospital in-patients and outpatients respectively. Asthma patients were also enrolled into a two-year prospective cohort study to determine



**AWARD**: Dr. Bruce is joined by staff of the University of Groningen as he is conferred the award of PhD after the successful defence of his thesis

asthma-related morbidity, mortality and their predictors. The role of air pollution on lung function and health; and HIV on asthma prevalence were also elucidated.

His work revealed an 11% prevalence of Asthma in Uganda from the national population survey. Smoking, biomass smoke exposure, family history of asthma, urbanization, history of TB and HIV infection were cited as key risk factors. Key among his findings was that the mortality rate of asthma was over 20 times higher than the average rate

reported in high income countries with poor access to medication cited as a key factor. Regarding air pollution, the levels of particulate matter, PM<sub>2.5</sub>, was found to be more than five times the safety levels recommended by the World Health Organization.

Based on these findings, he was able to conclude that African countries have a high prevalence of asthma that's probably driven by a high prevalence of HIV, TB and air pollution. Poor access to medication was noted to be a key driver for the high asthma related mortality observed. This thesis was successfully

defended on 27th November 2019 leading to the ward of PhD.

All MLI staff join Makerere University work fraternity to congratulate Dr. Bruce Kirenga upon this superlative achievement. The title and link to his thesis is given below:

Asthma prevalence and mortality in Sub Saharan Africa: the case of Uganda

https://www.rug.nl/about-us/news-and-events/events/phd-ceremonies/promoties -2019?hfId=122124

By Samson Omongot/ Dr. Jasper Nidoi

#### **IN PICTURES**



**MLI CELEBRATES:** MLI celebrates 4 years of operations and MLI staff join to celebrate Dr. Bruce's PhD. The occasion was marked with cake cutting after which MLI staff were invited to a cocktail dinner where a light meal and drinks were served.