



Academy for
Health Innovation
Uganda

Annual Report
2018-19





Ambasáid na hÉireann
Embassy of Ireland



Arts & Humanities
Research Council





 Academy for
Health Innovation
Uganda

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PROF. UMAR KAKUMBA SPEAKING AT THE 2ND HEALTH INNOVATIONS CONFERENCE

Message from Board Co-Chair



Prof. Elly Katabira

It is my pleasure to present to you, on behalf of the secretariat and staff of the Ugandan Academy, our Annual Report for 2018-2019. It has a new look and presents information in accordance with the promise we made last year to focus more clearly on priorities around collaborations for health with all stakeholders. The times are fast-changing and we must evolve with them. For this reason, one of our most important tasks this year, has been realigning the strategic plan to improve the beneficiary experience and enhance sustainability.

Over the last 3 years, each member of the team at the Ugandan Academy has demonstrated a personal commitment to organizing diverse projects and events geared towards the Sustainable Goal 3; Ensuring healthy lives and promoting well-being for all at all ages while including aspects of the other 16 goals. I have found it rejuvenating to watch the ease with which they oscillate between solving

programming equations for Interactive Voice Responses in the Call for Life project to organising artistic exhibitions on the History of HIV project at whirlwind speed.

I have been granted a lot of time to watch changes in the health sector over the great many years I have been in service and the capabilities of the famed Fourth Industrial Revolution are particularly exciting and daunting at the same time. The team at The Ugandan Academy, IDI at large and partners, especially the young innovators and their mentors have a monumental task ahead of them that must be taken seriously. We all have a task to ensure that the coming year is a remarkable year in ensuring that everyone is aware of the health issues and the urgency in collaboration to make sustainable healthcare accessible to all.

It is my hope that you will find this progress report both insightful and entertaining.



Director's Message

Rosalind Parkes-Rantanshi

Right after our Annual Health Innovations Conference in 2018, the buzz around the Fourth Industrial Revolution (4IR) grew louder in Uganda, with the possibilities of blockchain, and Artificial Intelligence. It got even more exciting when the National Institutes of Health in the US approached IDI with support to venture into Bioinformatics and big data through the set-up of the African Centre of Excellence in Bioinformatics and Data Science. As we march onwards through the 4IR, smart collaboration within the industry is vital if we are to create any lasting and sustainable impact in the Ugandan health sector.

Our 2019 annual conference was, consequently themed

“Harnessing the Fourth Industrial Revolution for Health”. It was amazing to witness so many young people invest their energies in the Hackathon that sought to address the last mile challenges arising from a rapidly evolving ecosystem. With such a young population in Uganda we are blessed with much talent which is vital to our development. The conference also provided opportunities for the youth and our sub-grantees to interact with potential partners and funders while showcasing the possibilities of their work in health. With representation from eager professionals and students Health Innovations Conference 2019 – our most prominent collaborative

venture – was our most successful conference yet. The reaction to the conference was uniformly positive and we will repeat the conference again in March 2020.

That is not all that we have been up to. In December 2018, the same spirit of innovations and collaborations we were able to pull off an exhibition to mark 30 years of World AIDS Day titled; Infected or Affected: A History of HIV in Uganda. This collaboration has led to further funding to create a mobile exhibition and an abridged version of it that will have a permanent home in the Uganda Museum.

Most of our primary sub-grantees have reached the

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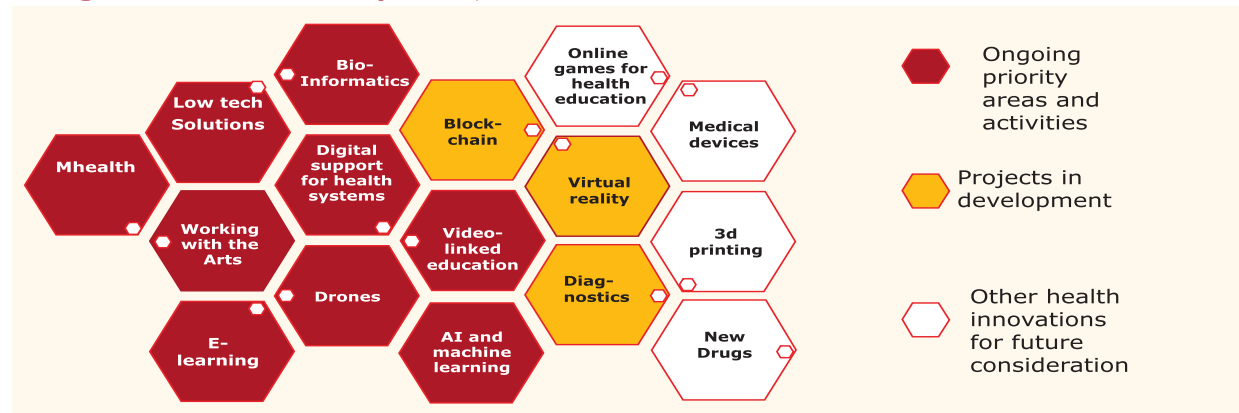
end of their tenure with us. It has been a learning experience, both for our team and the teams of these organisations, many of whom are serving hard to reach populations over the country. I am happy to report all supported organisation have further additional funding to ensure project sustainability, following diligent nurturing by the Academy team to increase their capacity.

In this age of change, this kind of growth is gratifying and a testament to the enduring spirit of the team at the Academy and the greater IDI. Our ongoing partnership with Janssen the pharmaceutical companies of Johnson and Johnson, as well as developing partnerships with the Universities of Cambridge and York, the National Institutes

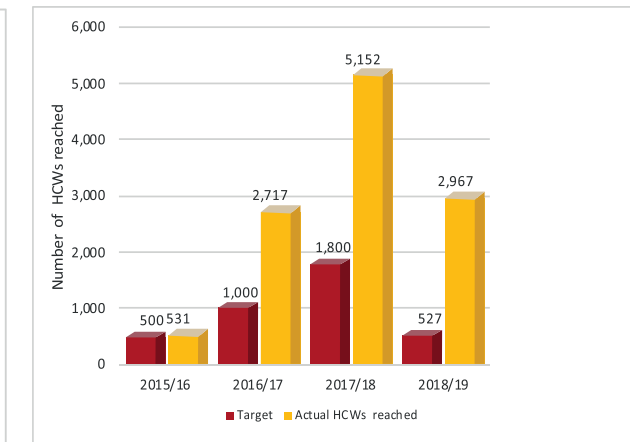
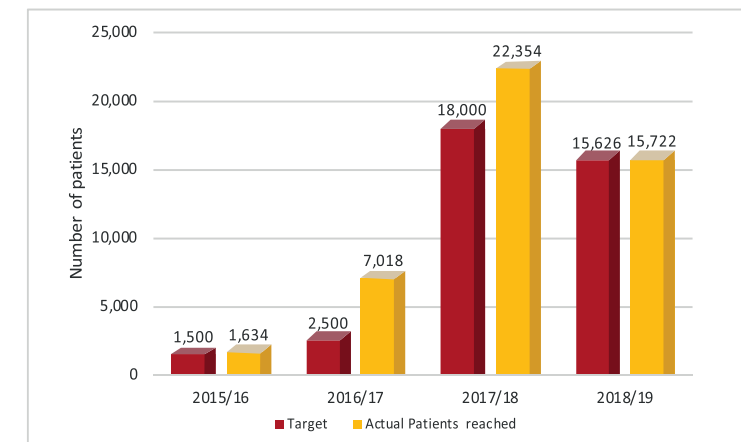
of Health, the World Economic Forum, the Global Shapers have helped us to grow. In country partners, such the Embassy of Ireland, Andela Uganda, Innovation Village, Kampala Pharmaceutical Industries, the Makerere College of Computing and Information Science and Clarke Group have also proved especially resourceful this year.

We continue to benefit from a strong and involved advisory board led by Prof. Elly Katabira and we are grateful for their guidance. We also thank the senior management team of IDI for their support. Finally, I would like to thank you for your continuing support of The Academy's mission to bring sustainable healthcare to all in Uganda.

Progress of Academy Projects



Graphs showing target number of beneficiaries vs reach vs over the years



Implement Innovative solutions-Findings from mid-term strategic plan.

In a bid to build capacity around grant, abstract and manuscript writing workshops were held within the Academy and a number of abstracts arising from these workshops have been submitted to various conferences and accepted. Members of the Global Shapers Kampala hub visited the Infectious Diseases Institute in Kampala accompanied by Wadia Hamza, the

head of the Global Shapers Community at the World Economic Forum (WEF) and Abdullahi Alim the community Manager of the Global Shapers at WEF. The conference winning team was assisted with submitting a paper to the AHIA training in Johannesburg. As 2018 marked the mid-point of our Janssen funding, we undertook a planned mid term evaluation our 5-year strategic plan. The aim

was document the achievements realized so far, identify gaps and challenges as well as determine the focus areas for the remaining period of the plan. Key findings; Funding for sub-granting will be coming to an end year 5. In the current funding environment, HIV and TB funding is not certain after the 5 years of the current strategic PEPFAR plan.

Key strengths include;

Ability to mobilize/source funds and fund local organizations, strong grants management structures, experience in working with sub grantees, ability to innovate and facilitate innovations

Key strategies moving forward

- 1) Broaden its resource mobilization and funding base for the remaining plan period and beyond.
- 2) Academy should also develop a mechanism for choosing new projects in order to emphasize priority innovation areas with traditional funders (research organizations, large multinational agencies, etc).

- 3) Develop a network of interested partners who benefit from Academy services, including the Health Innovations Conference.
- 4) Work with Janssen GPH to develop a value proposition to attract non-traditional funds (e.g corporate CSR) for continuing to support sub-granting activities



2ND HEALTH INNOVATIONS CONFERENCE 2019

This year's theme "Sustainable Health for all: Harnessing the fourth Industrial revolution" featured presentations and demonstrations aimed at harnessing health innovations to achieve the last mile and ensuring that scale up of start-up innovations. While presiding over the opening ceremony, the Deputy Vice Chancellor for Academic Affairs at Makerere University, Prof. Umar Kakumba appreciated the Ugandan Academy and the Infectious Diseases Institute (IDI) for working towards research and addressing healthcare service delivery needs in Uganda.

The conference was graced by reputable

speakers including Kwame Rugunda (the chief executive officer of Crypto Savannah and head of the Blockchain Association of Uganda), Ian Clarke, head of the Clarke Group, Mike Tatarkovsky of the National Institute of Allergy and Infectious Diseases, Prof. Elly Katabira (founder of the first HIV clinic and The Ugandan Academy Board co-chair) and Brian Gitta, founder of Matibabu a non-invasive malaria diagnostic test and the IDI Executive director Andrew Kambugu. Also present was Solomon King, the founder of Fundi Bots, who called upon developers to always remember the end user when innovating - "The danger of being a techie, is your infatuation with your product, but

you should always remember the end user has to be at the center of your thinking." Unique to this year's conference was a 17-hour Hackathon spearheaded by Andela Uganda and dubbed the #AndelaIDIHealthHack. Culminating out of the hackathon were three fan favourite groups which displayed applications to address, breast cancer and sexual reproductive health. Among the three, the overall champion of the health hack was team Phispha/Cephor who designed a Breast Cancer Glove, a breast cancer screening kit; this team also contained one of the only 2 women hackers who joined the competition. The conference also featured how the arts can help to work to improve innovations.

Innovations Sub Granting

Programmatic support supervision was undertaken for all Academy sub grantees throughout the quarter. Activities undertaken included review of previous action points, review of implementation progress, visiting of communities and collectively devising solutions for identified gaps. All sub-grantees attended an end of project meeting on the 16th November 2018. At this meeting, achievements and experiences were shared throughout.

Integrated Community Based Initiatives (ICOBIs)

During implementation of the case-based surveillance app, the team at Integrated Community Based Initiatives (ICOBIs) discovered a lot of discrepancies in documentation of patients at health facility level. Patient cards details were missing which made follow-up hard, if not impossible. While the first year involved a lot of clean up and capacity building on data collection

in the facilities, this last year has registered consistency and success in linking patients to care and improved clinical outcomes all via the electronic system. District level performance review meetings were held in Rubirizi and Sheema district to review progress and address any arising data challenges in order to ensure that good quality data is reported. Today, all the six facilities they work with, have been lauded at district health office level for improving outcomes of the HIV and TB patients in the communities.

Child and Family Foundation Uganda (CFU)

The national TB survey in estimated that Uganda has 87,000 TB cases annually, with an annual prevalence rate of 253/100,000. Being airborne, the cslum communities in which CFU operates are ideal for the spread of the disease due to congestion. CFU continued to conduct integrated

outreaches for HIV/AIDS, TB and malnutrition within the communities of Tuula in Kawempe Division with a priority of reaching children under 14 years as per one of the national areas of priority. They worked with various community households which they visited and provided with integrated services. Staff were also trained in HIV/TB care and management and nutrition in addition to screening for symptoms and signs

of tuberculosis. It was realised that there was an increased number of children suffering from non-project targeted diseases such as respiratory tract infections and fever. Ongoing refresher trainings of staff had remarkable improvement in the care and management of HIV, TB and malnutrition cases identified. Follow up of clients using phone calls has yielded more results as some clients do not wish to be reached at home due to stigma.



Community Client Led ART Delivery group meeting

Hoima Caritas Development Organization (HOCADAO)

The HOCADAO team this year focused on a multi-pronged approach to meeting their targets. In a bid to be equipped to handle as much as possible during community outreaches, VHTs were trained

to test for HIV which reduced the workload on the few staff. Additionally, index testing was used, a more focused approach where the team targets those who are most at risk, such as spouses of those already in care. This approach was found to be more productive as out of a targeted 312 out of a target of 245 partners were tested through the index client testing; through this 30 clients were found positive and

enrolled in care. Another approach was the contact tracing where family members of those with TB were tested and found to be positive and linked to care. Community Client Led ART Delivery (CCLAD) groups were formed to improve adherence to medication without hinderance of the distance from clinics as one person collects medication for the group, saving on transport fares.



Rural Initiative for Community Empowerment West Nile (RICE-WN) and Reach Out Mbuya Parish HIV/AIDS Initiative (ROM)

Together with RICE, ROM was tasked to develop and roll out a comprehensive electronic data capture tool in the form of a community drug distribution point application. To do this effectively, the teams held multiple meetings with the district health team and partnering health facilities to understand the scope of the problem and how to address it. The main purpose of the app is to expanding ART coverage to over 90 percent of ROM's and RICE-WN's CDDP selected communities. CDDPs were formed in six Arua health facilities within the Rhino camp and Imvepi refugee settlement and a key population service point was set up at Vurra customs largely targeting long distance truck drivers and commercial sex workers. At the close of the year, the application had been fully developed and despite a few technical delays, clients were enrolled on the CDDP app.

WORLD AIDS DAY 41
TAVELANDS REGION
December 1, 2008

Uganda to set up HIV/AIDS museum



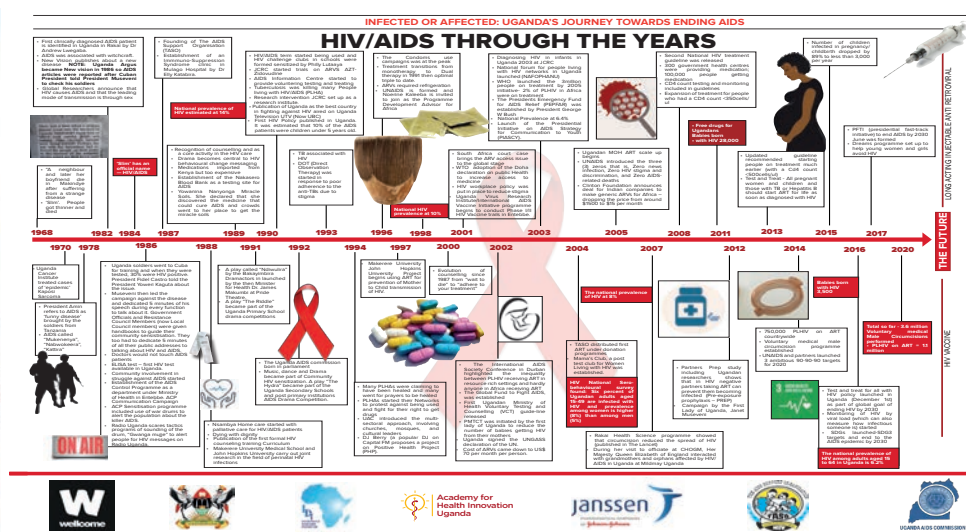
HIV has **NO FACE**
Stand in **TRUTH**
and **DON'T**
ASSUME

**Make one more
ADULT
DECISION
in your life**

#KnowYourStatus
#GetTestedToday
#VGCSR

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About 13 million people are living with HIV in Uganda. At least 73% of adults, 68% of children with HIV are on antiretroviral treatment



Academy Innovations

Call for Life Lite Progress

- 3422 patients were registered at three Ministry of Health sites; 706 registered at Kisenyi Health centre IV, 1038 registered at Kasangati Health centre IV and 1674 registered at IDI-Mulago. Academy Director presented an abstract (Access and utilization of Digital Health Info-tips among people living with HIV using the Call for Life in Uganda) at the Global Digital Health conference in Washington DC. Call for Life Project Lead Dr Agnes Bwanika participated in the Health Innovations Conference 2019 as a speaker for a panel discussion, 'Celebrating achievements, learning from challenges'.

ART Access Project

ARTAccess allows PLHIV registered at MOH facilities in Kampala to pick up their medication at private pharmacies. Iterative development of the ART Access tool took place and the latest version is 10.0; a total of 22 stakeholder application development meetings were held with pharmacists, nurses and health facility staff. ART Access project coordinator made a presentation of the ART access app at the Global Digital Health Forum in Washington DC in December 2018. The ARTAccess tool has been piloted in three pharmacies (Shubh, Cedars, Hefra) and two health facilities (Kawaala and Kiswa) so far more than 1,200 clients previously served using the paper based method have been migrated to using the tool. ART Access Tool was presented at the MOH eHealth technical working group in February 2019: Two meetings with METS were held, to lay ground work and plans for integrating the tool to the OpenMRS.

Overcoming Geography with Technology -

Medical Drones Pilot Project

Though the world has made tremendous strides in combatting HIV and other healthcare challenges, lifesaving medications remain out of reach for millions of people who live beyond the reach of traditional healthcare systems. To address this, the Kalangala Medical Drones Project is developing a program to bring lifesaving medications directly to patients who need them.

The Project team is working in close consultation with the local community and government authorities, including the national Ministry of Health, to get this important program underway. We look forward to sharing more information as this program progresses.



Medical Drones testing in Kalanga

Sustainable Development Initiatives (SDI)

Located in Kalangala District on Bufumira Island, SDI has proved of great value to the neighboring island communities. Having set out primarily to improve access to HIV and TB care services in the fishing communities, SDI has embarked on much more. Equipped with a boat ambulance SDI learnt that having community-based peer teams to work as volunteer linkage facilitators or community intermediaries improve timely monitoring and supervision of ARV daily uptake, leading reduced suppression rates amongst the PLHAs. SDI has since won a grant to work with Rakai Health Services as the implementing partner in the region. Additionally, the team at SDI have been a key player in the research around using Unmanned Aerial Vehicles to transport ART to clients who are far flung on the islands of Kalangala.

Affected or Infected: An Exhibition of the History of HIV in Uganda

In December 2018, a static exhibition titled “Affected or Infected: A History of HIV in Uganda” opened to the public at the Uganda National Museum. This exhibition was created after a series of stakeholder meetings that brought together key persons involved in the AIDS response over the last 30 years. These provided in-depth knowledge of the early days and the progress of the response to guide in planning for this exhibition. Several organizations were visited during this process. These included; UNAIDS, JCRC, Mild May, MRC, Straight talk Uganda, UHMG, THETA and others. It had different themes to help create an interactive environment:

Unknown, knowing, believing, caring, remembering, surviving, testing, treating and advocacy. On World AIDS Day, the exhibition opened to the public and was visited by different groups of people ranging from secondary students, university students, out of school youth groups, mobile men with money (including boda boda riders) sex



The Ambassador of Ireland and the minister for Presidency launch the exhibition

workers. The meeting highlighted key aspects in regard to implementation of Visualising HIV: An exhibition of past, present and future in Uganda” project. The exhibition attracted 2,202 visitors, some of whom included Ambassadors and Ministers, and closed on the 9th of February 2019. The Uganda Museum has since offered a permanent space for an



abridged version of the exhibition to be installed. The exhibition was also showcased at the Health Innovations Conference in March 2019 and attracted 85 people. A follow on grant application was submitted to Wellcome Trust Public Engagement Fund and funding has been received to take the exhibition around Uganda.





Capacity building



'Harnessing mobile technology for health worker capacity building to improve quality of care in resource-constrained settings'

IDI E-learning and ATIC

The Advanced Treatment and Information Centre (ATIC) continues to provide health workers access to free educational resources with assessments. There are more individual users accessing the website or ATIC and pdf cases have been developed. E-learning resources were reviewed by experts and ATIC continues provide technical assistance

to health care workers who call in. The learning innovations team worked with colleagues in the IDI training department to leverage the ongoing facility-based roll out of the recently released TB management guidelines as a platform for demonstration of ATIC. The team was able to make demonstrations with staff from 33

facilities. Carolyn Amuge represented IDI at the 9th South African AIDS Conference in Durban, South Africa, where she gave an oral presentation on 'Harnessing mobile technology for health worker capacity building to improve quality of care in resource-constrained settings'.

Academy Scholars

Dr Namisi continues to be housed at the Academy. During this year, he attended mock defense presentation of results at IDI, Makerere University Business School and the Faculty of Gender. He carried out in-depth interviews for exploring PLHIV experience in HIV-related stigma management as per his PhD subject. He also developed 2 draft manuscripts; Gender and Age-related Changes in resisting internalising HIV-related stigma, Uganda and Evidence for Psychological Empowerment

in HIV-related Stigma management. Dr Namisi also contributed two chapters to; HANDBOOK and POCKET GUIDE on counselling and psychosocial care for children and adolescents living with and affected by HIV in Africa. October 2018 By The African Network for the care of children by HIV/AIDS-ANECCA. USAID, PEPFAR and AIDSFree. These two books are resources for those providing psychosocial care to children and adolescent with HIV in Africa.



Dr. Charles Namisi



Richard Muhindo has done data collection and carried out in-depth interviews. He received and addressed comments from reviewers for his manuscript 'Psychosocial correlates of regular syphilis and HIV screening practices among FSWs in Uganda: A Cross sectional survey'. He also presented his abstract as a poster to the AfreHealth Conference.



Dr. Agnes Bwanika's research study focuses on mHealth and ART adherence among youths. Dr. Bwanika also received provisional admission from the Directorate of Research and Graduate Training at Makerere University and a full research proposal has been developed. A sensitization meeting regarding the research was held in May with the district officials in Kiryandongo district in western Uganda and administrative clearance for research given.



The AIDS Support Organization (TASO)

The mentee programme at TASO is designed to skill graduates in the rapidly changing and complex nature of HIV and TB clinical management. The mentees are placed at the 11 TASO Centres of excellence (CoEs) for experiential learning all over the country. These mentorship sessions conducted at Health Training Institutions focus on enhancing skills

in diagnosis, treatment and follow up. The mentees hail from a range of sub-disciplines in health, including clinical officers and laboratory technicians. The mentees have been particularly keen on the ATIC website which provides 24 hours online updates about HIV and TB management. End of project dissemination meeting was held in December 2018. Project Alumni are more

proactive in Assisted Partner Notification (APN) now as they have seen the relationship between non-suppressed viral load and disclosure of HIV status. Through IDI ATIC it has been possible for more mentees to do the online viral load course and there after acquire certification. Many mentees have been able to get employment as a result of the knowledge and experience gained during the project.

Research

Call for Life Randomized Controlled Trial

In December 2018, the Ugandan Academy successfully undertook close out and dissemination of results from the study which has been running since August of 2016. The study title "Improving outcomes in people living with HIV using mobile phone-based interactive software support", whose primary objective was to determine the effect of a mobile phone based- adherence support on the quality of life for patients receiving care at IDI-Mulago and Kasangati Health Centre IV. The study enrolled 600 PLWHIV with 300 at each site. The purpose of the dissemination was to inform study participants the study closure and to share the study results and to inform them of the transition of the adherence support to continue at a low frequency but outside of research. The project, recruited various

categories of participants and these included the positive partner in a discordant relationship, patients initiating 1st or 2nd line ART, Most-at-risk populations (MARPs), pregnant or breast feeding mothers on PMTCT and young adults. The main objective was quality of life for mental and physical outcomes and the study showed that the people on mobile phone-based support had improvement in quality of life. Various abstracts were submitted to and presented at different conferences including IAS, CROI and HTAi and the final data analysis is underway.

Drug resistance in a long-term HIV cohort

The primary objective of this study is to investigate the course of HIV infections and the long term outcomes for HIV patients with more than ten years on ART. To date 950 participants are active in the cohort. Thirty five deaths have been reported; causes arising from motor

accidents, hypertension, cardiac disease, suspected hepatitis, suspected cancers and HIV related conditions. Frank Mubiru, study statistician presented an oral abstract on Cardiovascular side effects in the long term ART at the ICASA conference in Cote D'Ivoire.

Infectious Disease Research Collaboration (IDRC)

Infectious Diseases Research Collaboration (IDRC) is conducting an ongoing cross sectional study to evaluate a new stool processing method for the TB detection among the HIV infected-TB presumptive consenting adults. Performance of stool and sputum on direct fluorescent microscopy, GeneXpert/MTBRIF and culture is being compared using sputum culture as the reference. Forty-six patients have been enrolled onto the study.

Pictures of Ageing Project



Pictures of Ageing is a study that has been evaluating the social, demographic, clinical, frailty and co-morbidities including of people 60 and older living in a community in Wakiso district; Busukuma Division. The primary objective was to determine the feasibility of combining demographic and phenotypic and

artistic methods in understanding the picture of community dwelling older persons in Uganda. Funded by the UK Arts and Humanities Research council as well as the Medical Research Council, the study has brought together artists from Health Nest

Uganda, 32 Degrees and the Margaret Trowell School of Fine Arts at Makerere University. This multidisciplinary study involves neuroscientists, demographers, social scientists and artists (visual and performing). Caregivers were interviewed on their perceptions of older persons through



quantitative interviews. During the focus group discussions, participants were examined on their cognitive abilities using the 10/66 Dementia tool. They also took part in cognitive flexibility games and were assessed to determine their ability

to adjust to different settings. Data collected will be used to inform the ministries of Gender and Health about the challenges faced by older people in the community.

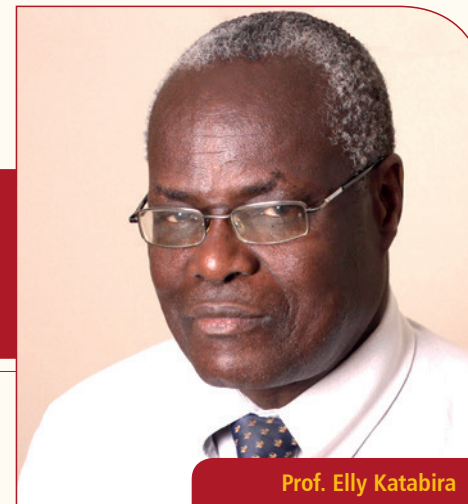




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Academy Board

IDI and Academy Secretariat are very grateful to the Advisory Board for their commitment and support.



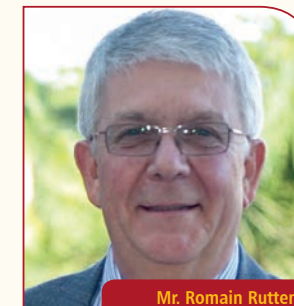
Prof. Elly Katabira

Board Co-chair - Professor of medicine,
Makerere University



Dr. Cissy Kityo

Executive Director,
Joint Clinical Research Centre



Mr. Romain Rutten

Head, Disease Management
Programmes at J&J GPH



Dr. Christine J. D. Ondo

Former Director General Health Services,
Uganda AIDS Commission



Ms. Regina Kamoga

Executive Director, CHAIN



Dr. Michael Bernard Etukoit

Executive Director, TASO



Prof. Ernest Okello-Ogwang

Board Member



Prof. Umar Kakumba

Deputy Vice-Chancellor
Makerere University



If you share our passion for health innovation, we would love to hear from you. **Academy for Health Innovation Uganda**



College of Health Sciences, Makerere University **Tel.** +256 312 211422 **P.O. Box** 22418, Kampala - Uganda



theacademy@idi.co.ug



www.theacademy.co.ug



[@TheUgAcademy](https://twitter.com/TheUgAcademy)