

The East African Diploma in Tropical Medicine and Hygiene Clocks Seven years and Stronger



Philip Gothard, London School of Hygiene and Tropical Medicine

his is the seventh year the DTM&H has taken place in East Africa. We had a significant increase in applications from African doctors, many of who were recommended to join the course by word of mouth. Overall, there are 71 participants from 22 countries from as far away as Australia, Japan and Brazil with 21 doctors from Africa on full scholarship.

This year's course was host to the Royal Society of Tropical Medicine & Hygiene's first East African Research in Progress meeting. 45 posters and presentations were chosen from over 150 submitted abstracts and 120 delegates attended the 2-day meeting at KCMC. Alex Coutinho from Partners in Health in Rwanda gave a keynote speech on the rising rates of non-communicable diseases in Africa and Professor David Mabey shared his wisdom on how to build a successful career in clinical research. Both the chief executive and president of the Society declared the meeting a success and we are hoping to repeat the event next year.

At the time of writing the group was in Kampala having just completed a week learning about HIV and TB. Local and international tutors paired up to give daily teaching rounds at Kiruddu Hospital and the Infectious Diseases Institute. Meanwhile in the lecture theatre the class heard about the latest advances in TB

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UNIVERSITY OF CAMBRIDGE



Editorial



Dear sponsors, partners and colleagues,

elcome to the 4th edition of THRiVE News 2017 themed "THRiVE on the Move". THRiVE is an East African regional

network of research excellence including universities and research institutes. THRiVE-2 has completed its second calendar year filled with excitements. Our vision: By 2030 Africa will lead research that has a major impact on health in the region and make significant contributions to world health. We contribute to this vision by grooming, mentoring and supporting the most promising young scientists towards becoming excellent research leaders. We focus on three thematic areas namely infectious diseases/ neglected tropical diseases; maternal, neonatal and reproductive health; and non-communicable diseases.

We have recruited through rigorous competitive processes 10 fellows for two-year career development awards, and 17 and 8 fellows for 4-year PhD and 2-year postdoc training respectively. Masters students are also mentored to have quality research that will lead to publications in peer-reviewed journals. The supervisors and mentors are very competent world renowned faculty who are experts and leaders in their fields. As part of succession planning the lead supervisors work with cosupervisors and co-mentors whom they groom to replace them in future. Supervisors and cosupervisors receive training in how to supervise and we settle for no less than high research ethical standards. We leverage information & communication technology to break new grounds in education and research.

We aim to enhance the societal impact of our research by striving to embed public engagement in THRiVE research. Unlike many other research consortia THRiVE has a champion for community and public engagement. We nurture partnerships through networks, institutions and programs. Tracking and documenting progress of all activities taking place at our institutions needs more attention. To this end we developed an online monitoring and evaluation tool to capture in real time THRiVE events and achievements. Aluta continua!

Name	Institution
1. Professor Wilfred	University of Yaounde I,
Mbacham	Cameroon, MARCAD
2. Professor Alison Elliot	MUII-Plus
3. Professor Hannah Akuffo	SIDA
4. Professor Njeri Wamae	Mount Kenya University
5. Professor Mukadasi	Makerere University,
Buyinza	CARTA
6. Professor Gibson Kibiki	East African Community
7. Dr. Alphonsus Neba	AAS/AESA (Observor)
8. Professor Nelson Sewankambo	Director THRiVE

The East African Diploma Cont'd



diagnostics and HIV roll out from experts such as Professors Eli Katabira, Harriet Mayanja, Moses Joloba and Steve Reynolds. It is clear that Uganda is making impressive progress towards the goals of 90-90-90 and universal access to treatment for TB.

The following week the students left Kampala for field placements focusing on neglected tropical diseases. Students learn about the practical issues of managing visceral leishmaniasis, onchocerciasis and schistosomiasis in remote settings, whilst others saw how successful community outreach programmes work for marginalised populations such as the Batwa and Pokot peoples.

Applications opened for the 2018 East African DTM&H in November 2017. If you are interested in applying for a scholarship please take a look at the course webpage or contact the course director, Phil Gothard for more information. philip.gothard@gmail.com

https://www.lshtm.ac.uk/study/courses/short-courses/DTMH-eastafrica



Participants in the 2017 training for East Africa Diploma of Tropical Medicine and Hygiene

CREATING AWARENESS ON RESEARCH ETHICS

By Robert Kiduma, Onen Walter and Prof. Elizabeth A. Opiyo, Gulu University



A training session at Gulu University on research ethics

THRiVE-2 in partnership with the Institute of **Research and Graduate** Studies - Gulu University conducted a public engagement seminar on 'Ethical Conduct of Research' on 13th September 2017 held in the Gulu University Main Hall. The seminar aimed at creating awareness to the public on the relevance of ethical conduct of research and ethical clearance of research protocols. Members of Gulu University Research and Ethics Committee facilitated the seminar

which attracted 87 participants, among which were graduate students, undergraduate students, academic staff, researchers and administrative staff.

In the presentations, several issues that concern ethics in research were shared. Outstanding was; adherence to ethical norms when conducting research: promotion of knowledge, truth and avoidance of error, fabrication, falsification or misrepresentation of research data.

Participants were informed that ethical conduct in research makes researchers accountable to the public and build public confidence in research. Emphasis was placed on protection of research participants covering respect of persons (respect for autonomy, protection of persons with impaired autonomy), beneficence (maximization of benefits and minimizing harm to participants) and Justice - treat each person according to what is morally right.

The main facilitator, The Chairperson of the Gulu University Research Ethics committee (GUREC) Dr Gerald Obai, said "ethical lapses in research can be very dangerous and can significantly harm humans". He gave example of the Tuskegee study conducted in 1932-1972 to highlight extents of the danger and consequences of research that goes against ethical norms.

It was noted that research ethics involves making a judgement between doing what is 'right' and 'wrong' during the process of doing research, and that it is important to protect research participants, including ensuring that benefits that accrued to the participants during the study are reasonably and appropriately provided. It was also pointed out that research ethics is not only for the medical field or pure sciences, but cut across all disciplines of research involving humans, animals and the environment, therefore it is necessary to ensure

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A facilitator engages Gulu University faculty to the challenges of research ethics

THRIVE News Letter

CREATING AWARENESS ON RESEARCH ETHICS

that researchers obtain ethical approvals before commencing with their studies. Participants were informed that it is a requirement that all research protocols are reviewed by an accredited ethical committee prior to approval by Uganda National Council of Science and Technology (UNCST) which is the regulatory authority on research ethics.

> In open discussions, the public raised several issues concerning consent, monitoring of research activities, community empowerment, risky research and approval for research. For examples "when carrying out research, must one first have to get consent or first do the research and get the information and get consent after?" "What mechanism is in place to monitor what a researcher does in the field? "Does the Ethics committee when doing its evaluation, look at the priority areas of the country?" "The University needs to

be empowered and protected; does the Committee have a strategy to empower the University community?"

Critical Concerns

Participants were informed that it is mandatory that the consent of the research participants is sought before the commencement of the research. this requirement also applies in situations where the data collection is by documentary review. In such a case administrative clearance may be sought from the study site managers. Seminars of this nature empower the community to know their rights as research participants so that unscrupulous researchers do not exploit the community. while also informing the researchers of procedure they need to follow before embarking on research. Regular monitoring of research studies is vital to

ensure that there is no deviation from the study objective and no violation of the ethical quidelines. Because of the critical nature of the ethics in research, a community representative is a member of the Ethical Committee without whom no meeting takes place. Finally, apart from adherence to the research ethics, researchers were advised to ensure that the scientific quality of their research is sound. The research problem identified and the objectives of the study must be clear and the methods to be used should be appropriate.

The need for regular sensitization of administrators, students and staff was emphasized since new students and staff join the University from time to time. The participants were requested to act as ambassadors and convey the message to their respective departments and colleagues.



At the heart of strengthening research capacity in developing countries lies the availability of quality supervision by senior academics and a conducive research environment. In order to strengthen graduate education in Gulu University, a one day THRiVE sponsored workshop for graduate supervisors' was held on 8th August 2017. This workshop was organized in partnership with the Institute of Research and Graduate Studies (IRGS) as a series of workshops to share experiences on graduate supervision aimed at strengthening doctoral education. It is part of the greater effort by THRiVE to strengthen doctoral education across Consortia Institutions, by equipping doctoral supervisors and up-coming graduate supervisors with necessary skills to supervise research fellows. The workshop was attended by 40 participants, largely senior research supervisors from the faculties of: Medicine, Science, Agriculture, **Education and Business** and Development.

Professor Elizabeth A. Opiyo, who is the Director IRGS and the THRiVE Co-Principal Investigator, Gulu University observed that there are approximately 45 PhD holders at Gulu University and 80 staff members are currently enrolled for PhD training. The current situation however, requires that the local capacity to effectively supervise post-doctoral, doctoral and masters research programs at Gulu University need to be urgently addressed. Gulu University depends on support from externally



Attentive listeners



from Graduate Supervision Workshop

By Onen Walter Yagos, Tabo Geoffrey and Prof. Elizabeth A. Opiyo



appointed honorary professors for PhD supervision. Therefore, the THRiVE Sponsored Supervisors workshop was a timely intervention as the knowledge and supervisory skills obtained in the workshop would progressively improve on the scientific quality of research conducted by researchers at Gulu University. Relatedly, the revised Graduate Handbook of Gulu University has now streamlined the pathway to doctoral training.

The Deputy Vice Chancellor Professor George L. Openjuru encouraged the participants to contribute to strengthening doctoral education through vigorous solicitation for grants that support doctoral programs. This he emphasized, can be achieved by improving on grants writing skills, and also creating support networks among institutions and PhD fellows within the THRiVE family institutions, and other Institutions.

The workshop consisted of presentations and discussions covering ethical conduct of research, supervision experience of supervisors and supervisees, PhD journey and publications and authorship among others. Participants expressed eagerness to obtain knowledge and techniques on effective supervision of graduate students, and how to handle and mitigate disagreements in supervision. Concerns emerged on knowing processes and procedures followed in supervision, and clarity on ethical concerns in research and authorship in publications involving students and their supervisors.

It arose that, successful studentship is enhanced through good time management of processes and events, in-depth literature search and extensive reading,

use of ICT services such as Zotero, Refworks, and Mendeley reference management, flexibility in programming events, and networking. Effective supervision has to ensure that time management is uncompromised, plagiarism is mitigated and support is provided to researchers to perfect their scholarly writing skills, and that institutional bottle necks do not jeopardize the research process. The importance of being familiar with procedures of dealing with unresponsive and uncooperative research fellows was also emphasized.

In the workshop, through sharing personal experiences on the PhD journey, being supervised or supervising others revealed that supervisors need to perceive students as *"academic daughters and sons"*, while at the same time be aware that "some students are focused and move very fast while others are slow learners and then there are also those who think they know everything".

Conducive environment to enhance effective learning and doctoral supervision It was recognized that a well-furnished library facility equipped with stable internet connectivity and constant supply of electricity and a comprehensive policy guide for research would go a long way in providing the environment necessary for effective learning and doctoral supervision. Deliberate efforts to include research ethics in the doctoral courses and ensuring that charges for ethical clearance fees and related costs are integrated in the fee structure is necessary. Regular discussions between supervisors and students was encouraged and the need for a memorandum signed between the supervisee and supervisor to spell out the working relationship between the two parties



Lessons from Graduate Supervision Workshop

was recommended. Supervisors were encouraged to attend and participate in more graduate supervision workshops to improve their technical competencies in research supervision.

It was proposed that Gulu University establishes a 'competitive research grant scheme' that would be the basis to expand the research portfolios. and this will act as a *'nursery'* for grooming researchers and supervisors. With more institutional support and individual efforts, there is optimism that the quality of supervision in GU will improve, and since research is a cross cutting discipline,

future similar workshops would also consider the participation of administrative staff with interest in research who might want to take up a career in research. To this end, a workshop was organized by Building Stronger Universities (BSU II), a Danida-funded project on 30th August 2017, that discussed research concept formulation and proposal development, graduate supervision principles and practice and graduate supervision and assessment.

THRiVE was applauded for sponsoring such an important workshop which enabled academics and research fraternity of Gulu University to share information and skills necessary for enhancing the quality of graduate supervision.



Supervisors' training workshop in progress at Gulu University

THE AESA/DELTAS ANNUAL GRANTEES MEETING. 3-5 JULY 2017. ACCRA GHANA

By Harriet Nambooze

The Alliance for Accelerating Excellence in Science in Africa (AESA) hosted the Developing Excellence in Leadership, Training and Science (DELTAS) Africa Annual Grantees Meeting from 3-5 July Accra, Ghana at the Fiesta Royale Hotel. The meeting was organized in collaboration with the West African Centre for **Cell Biology of Infectious** Pathogens (WACCBIP) one of the 11 DELTAS Africa programmes and the University of Ghana. The DELTAS fellows also had the opportunity to attend pre-meeting workshops on science publishing and translating research into policy. The meetings brought together individuals from 54 African institutions in 21 countries. This was

an opportunity for grantees funded through DELTAS Africa to showcase best science being conducted on the continent, network as well as share best practices and challenges. It was graced by renown researchers and scientists from Africa and elsewhere.

Though only two years into the implementation of the program, the deliberations provided an indication that DELTAS Africa an innovative Africaled program, is making big strides in increasing the number of excellent health researchers on the continent and providing them with the infrastructure to support them to do quality research and also ensure that they are retained on the continent. The collaborations that have arisen will support



Angela Kakooza (R) and Arthur Kwizera (L)

African researchers optimize the limited resources to solve common problems.

We congratulate Dr. Angelina Kakooza-Mwesige, Postdoctoral fellow and Dr. Authur Kwizera, PhD fellow for winning awards for first runner up for best abstract and 2nd runner up rapid

fire pitch presentations respectively.

Grantees also benefitted from other side meetings which provided practical hands-on knowledge and skills on how to raise the profile of the DELTAS Africa work, monitor and evaluate what we are doing and provide good stewardship of the DELTAS funds.



My postdoctoral field and networking experiences

Joel Bargul, THRiVE-2, Postdoctoral Fellow

My field studies in the northern Kenya finally became a reality in the month of September 2017 after almost a year-long plan since inception of the research proposal funded by THRiVE-2 fellowship. My research interest focuses on improvement of camel health through establishment of the prevalence of surra (also known as camel trypanosomiasis) and unravelling of its transmission route. The main objective of this study was motivated by our preliminary studies showing presence of surra infections in camels in Laisamis (Marsabit County, northern Kenya) despite the absence of tsetse fly, a wellknown biological vector of this disease. Therefore,

our study will determine disease transmission and maintenance mechanisms. The findings will lead to improved disease control strategies leading to improved production of milk and meat, better nutrition, and reduction in poverty in the marginalized northern regions of Kenya where nomadic pastoralism forms the key economic mainstay.

Our journey from *icipe* (Nairobi) to Laisamis, a remote region located about 400 km north of Nairobi city, took over 7 hrs. My team consisted of an MSc student working on an aspect of the present study, and a technician/ driver. We spent the early morning session of the



Joel Bargul after receiving conference participants at his poster

next day sensitizing the area chiefs, leaders, and the farmers on the objectives of the field study and expected outputs. Following their warm reception of our research ideas, they provided continuous support for the next five days of intensive field experiments that included; collection of camel blood samples, measurement of PCV (packed cell volume) levels to study anaemia status, on-site screening to identify camels infected with trypanosomes, treatment of trypanosomeinfected camels, collection of hematophagous camel keds (hippobscids) that could transmit disease pathogens during blood feeding process, and sampling of other biting flies using monoconical traps.

During our 5-day field experiments, we sampled blood from 251 camels, and collected over 4000 camel keds. However, the procedure for restraining Rendille camels prior to collection of 5 ml of blood samples from the jugular vein, using heparinized vacutainers, was demanding, high-risk (in terms of likely kicks and bites that could cause serious injuries). and energy-draining exercise. Thankfully, the farmers volunteered to handle and restrain their animals. as they understood them better.

Importantly, during my interaction with camel keepers, we exchanged many ideas on better practices for increased livestock production through improved breeding strategies, nutrition, pest and disease control, disease prevention, detection, and response— in line with one health approach to control epizootic and zoonotic diseases. Our discussion on the role of biting flies in disease transmission attracted much attention.

In addition, I delivered mentorship talks aimed at inspiring, guiding motivating high school students of Laisamis Secondary School in Laisamis. My talk was focussed on "the academic pipeline to becoming a career professional in Kenyan setting; the role of science and technology for development"

Our field trip was, therefore, very successful as planned. The on-going phase of my studies involve lab experiments at *icipe* (Nairobi) to conduct molecular identification of disease pathogens in field-collected samples, as well as establishing of lab colony of camel keds for vectorial capacity studies.

Apart from the field visits I also attended conference where I networked with experts doing work in insect science. I attended the Uppsala Health Summit from 9-11 October 2017. The theme of the conference was "Tackling infectious diseases threats - prevent, detect, respond with a a One-Health approach." I was nominated by the International Foundation of Science (IFS) which also provided me with an award of \$12,000 to support the ongoing postdoctoral research on camel trypanosomiasis and transmission mechanisms of epizootic and zoonotic disease pathogens in northern Kenya.



My postdoctoral field and networking experiences



I was, therefore, nominated by Dr Ingrid Leemans (Scientific Programme Coordinator, IFS) and IFS fully supported my travel to attend and participate in Uppsala health summit in order to receive training and as well exchange scientific knowledge on tackling of infectious zoonotic pathogens through One-Health approach. Based on my research interests on animal health and zoonotic diseases, I chose to register for two themes; (i) Zoonotic diseases in livestock - mitigating risk behaviour, and (ii) Which priorities count? Empowering scientific capacities for locally relevant and sustainable solutions to infectious disease threats.

In addition to plenary talks from distinguished delegates focusing on One-Health, we were organized into small groups to discuss and formulate policy strategies for Prevention, Detection, and Response to infectious disease-causing zoonotic pathogens. These round-table training workshops allowed us to examine the interractions between human-, animal-, and environmental-health (i.e. One Health) and how multi-disciplinary collabo-

rations could help in tackling infectious disease threats. One hundred and sixty (160) delegates were drawn from diverse fields of specialization including; biologists, veterinarians, medical doctors, social scientists. communicators, and journalists. Delegates represented the following institutions; Universities, Research Centres, Ministry of Health, Centre for Disease Control (e.g. European CDC), Ministry of Economic Affairs, World Health Organization (WHO), World Bank, **Bill Gates Foundation** and Donor agencies e.g.

IFS, Doctors Without Borders, Church (e.g. Church of Sweden), among others.

Uppsala Health Summit 2017 has equipped me with new skills on how to draft policies for disease prevention, detection, and response. Importantly, I have met and interacted with delegates working on animal health and zoonotic diseases and this could foster future collaborations.

I also attended and presented my research work during the 22nd meeting and scientific conference of the African Association of Insect Scientists (AAIS) in Wad Medan Sudan from 23-26 October 2017. The events were attended by over 100 African scientists. This is the most important international meeting in insect science held in Africa and is held every two years and hence I was happy to attend it for the first time. Importantly, since all participants were insect scientists, all presentations were relevant, exciting and generated important discussions. This meeting offered unique opportunity to know and connect with scientists sharing similar research interest thus stimulating research collaborations.

My THRiVE-2 Internship and Mentorship Experience

By Anthony Ssebagereka, THRiVE-2 Intern

I was privileged to be competitively awarded the THRiVE-2 Secretariat's Internship award for the period June to November, 2017. In my internship position, I was tasked with providing support to the THRiVE-2 Monitoring and Evaluation (M&E) team and Community and Public Engagement functions. I am extremely delighted to say that my internship experience exceeded my very own expectations.

In my role I have had the pleasure of participating at the THRiVE Secretariat weekly Institutional Imple-

mentation Committee meetings. I appreciated the nature and highly professional manner of the conduct and coordination of these meetings, especially among members who have very busy schedules. I also salute the THRiVE Secretariat for the high level of commitment they have towards the success of THRiVE-2.

I was part of the site visit team to the Uganda Virus Research Institute (UVRI). I was actively engaged in the reviewing and updating of the THRiVE online M&E tool, with regular interactions with the software development team of the



THRiVE-2 Awards its first Cohort of Career Development Awards

By Harriet Nambooze

In September 2017, the THRiVE-2 Career Development Award Committee (CDAC) awarded 10 collaborative Career Development awards to researchers in THRiVE institutions. The awards are intended to foster collaboration between THRiVE institutions and to stimulate research excellence and progression to research leadership. The call for applications which was posted in June 2017 attracted 64 applications from all institutions (Gulu – 10, *icipe* – 2, Makerere University – 31, KCMUCo – 13, NIMR – 3 and UVRI – 2). The review process entailed weeding out applications that did not conform to the guidelines stipulated in the advert. The 26 shortlisted applications were reviewed by experts in the various fields. The CDAC then used the review scores to select those to be awarded the awards. Below are the details of the awardees.

Awardees	Institutions	Title of research	Thematic Area
Dr. Agnes Nyabigambo (PI) Dr. John Doorbar	MakCHS Uganda University of Cambridge	Feasibility of Patient-Led High Risk HPV DNA Screening at a Rural HIV Clinic in Uganda	IDs/NTDs
Ms. Beatrice John (PI) Dr. Jenny Renju Dr. Johnson Mahande Dr. Catherine Kansiime Hellen Weiss Belen Torondel	KCMU College Uganda Virus Re- search Institute LSHTM	Strengthening Menstrual Health re- search across East Africa.	MN/RH
Billy Mayanja Nsubuga (PI) Dr. Geraldine O'Hara	Uganda Virus Re- search Institute LSHTM	Prevalence and incidence of Hepatitis B infection among HIV-positive individuals on long-term antiretroviral therapy – a pilot study 17analysis of stored serum samples	IDs/NTDs
Dr. Michael Okal (PI) Dr. Barbara Blacklaws Dr. Daniel Masiga Dr. Jandouwe Villinger	<i>icipe</i> University of Cam- bridge	Investigating livestock as reservoirs of emerging zoonoses in the human-wild- life-livestock interface of Kubo South, Kwale County, Kenya	IDs/NTDs
Dr. Richard Echodu Prof. Elizabeth Auma Dr. Lutwama Julius Julian	Gulu University Uganda Virus Re- search Institute	Population Dynamics Of <i>Anopheles</i> Mosquitoes And Their Level Of Insecticide Resistance To Pyrethroids In Northern Uganda	IDs/NTDs
Haika M Osaki (PI) Dr. Gerry Mshana Prof. Janet Seeley	NIMR Mwanza UVRI	Exploring the mental and social well- being of adolescents living with HIV in Tanzania	IDs/NTDs
Dr. Joseph Mugisha Okello (PI) Dr. Hannah Kuper Prof. Janet Seeley	UVRI LSHTM	Feasibility of village health teams (VHTs) in using a smart phone guided interven- tion to link older Ugandans with chronic conditions to care	NCDs
Dr. Michael Johnson Mahande	KCMUCo	Acceptability and uptake of the intrauter-	
Dr. Gerry Hillary Mshana	NIMR Mwanza	ine contraceptive device and implants as immediate postpartum family planning in Ushirombo District, Geita region	MN/RH
Dr. Noah Kiwanuka (PI) Dr. Fred Bategenya	Makerere University College of Health Sci- ences	Social networks as a route for enhancing the uptake, adherence and retention of HIV prevention and treatment strategies by adolescent girls and young women	IDs/NTDs
Kassim Mwanika	Gulu University	(AGYW) in Uganda: an exploratory study A process evaluation of two trials that	
Dr. Daniel Semakula Dr. Abubaker Swaib Lule Ms. Allen Nsangi	MakCHS Uganda UVRI	evaluated the effectiveness of a school- based intervention and a community- based intervention for improving people's ability to assess the trustworthiness of claims about the effects (benefits, costs and harms) of treatments.	Cross cutting



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My THRiVE-2 Internship and Mentorship Experience

THRIVE M&E online reporting system which also helped me appreciate the opportunity that technology offers, so as to facilitate reporting by the partner institutions and in a more reliable and timely manner. More importantly, I was actively involved in the rigorous process of updating the M&E online system, following the indicator specifics in the grant proposal and guidance from AESA.

I have participated in THRiVE Public engagement activities, and also participated in the drafting of the public engagement framework on THRiVE. THRiVE offers more rigorous approaches to Public engagement to increase uptake of research. These activities provided a memorable learning experience for me. My most exciting experience was the interaction I had with the PhD and Postdoctoral fellows regarding holding their school and community engagement activities. During this interaction, the fellows were in Kampala attending the leadership and epidemiology courses held from 6th to 18th November 2017.

The public engagement activities are aimed to stimulate uptake of science (among school-going children and target communities) and research findings. The scope of the discussion with the fellows included, among others, their implementation plans for the school mentorship and community engagement activities, briefly discussed the THRiVE guiding documents on Public engagement to assist the fellows to systematically and efficiently carry out public engagement activities as well as demonstrate how their public engagement activities have influenced the target audiences.

THRiVE also provided training opportunities to strengthen my research capacity; for example, I attended an epidemiology course organized by THRiVE.

As I enjoyed my internship experience, there are key memories that I will carry along:

- How to review and use an M&E online system to facilitate timely and efficient data entry as well as reporting
- Appreciated the link between the Theory of Change and M&E activities, as well as its relevance in the life of a project.
- Use of robust public engagement approach to increase uptake of research, across various fields of science.
- Application of epidemiological concepts in the design of research studies

THRiVE provides enormous mentorship opportunities which vary from building a research career, monitoring and evaluation, public engagement, leadership, information technology and administration. For example, under the Leadership of Prof. Nelson Sewankambo, I participated in the drafting of a concept paper on the Pharmaceutical trade and drug development landscape in Africa, an activity that cemented my background training in Pharmacy, giving me a continental perspective of the Pharmaceutical sector.

My heartfelt thanks go to the THRiVE secretariat team for their guidance and support through my internship. I would like to especially thank the THRiVE Director, Prof. Nelson Sewankambo, the M&E Officer Dr. Achilles Katamba, and the Innovation and Knowledge Transfer Officer Dr. Daniel Semakula for the extraordinary mentorship, trust and support accorded to me throughout my internship.

My PhD Experien



By Martin Mbonye, UVRI THRIVE PhD fellow

I received the letter of award for my THRiVE-2 supported PhD fellowship on 30th May 2017. I have received support from the THRIVE Secretariat and the Uganda Virus Research Institute office that is implementing my PhD fellowship.

The registration process at Makerere University involves a lot of back

KCMUCo and LSHTM

By Dr. Jenny Renju (LSHTM/KC-MUCo), Mr. Gaspar Mbita and Dr. Mwaka Kakolwa (recent graduates of MSc Epidemiology and Biostatistics)

In 2016 Gaspar and Mwaka graduated from the LSHTM supported MSc in Epidemiology and Biostatistics at KCMUCo. In this year I was fortunate to co-supervise two excellent



Mwaka Kakolwa, in Dar es Salaam 2017

ce on THRIVE-2 so far

and forth, moving from one office to another and reading notices here and there as one tries to make sense of the process. Take for example certifying academic documents. This takes about 14 days. It starts by going to pay in the bank, then taking the bank slips to the accounts office in another building in Makerere University. You then bring a stamped copy of the slip you are given from there and together with your originals that need certifying, you hand over to the staff at the certifying office. In these offices you have to be ready with everything they need (usually instructions are placed on the doors or notice boards and so the advice is to read them otherwise you will be tossed up and down). You are then given a date 2 weeks from the day of submission. The Makerere University College

of Health Sciences Guidelines for Supervision of Doctoral students, guided me in preparing for the registration and how to prepare my concept. I was lucky that I already had my supervisors in place so all that was needed was to tick the other boxes. It also helps talking to other fellows as someone may know what is going on that might be helpful. So I was invited to present my concept to the Child Health and Development Centre-Mulago, where I will be based for a significant period of my PhD journey. I received very useful comments from the members of staff, revised the concept and shared it with my supervisors, before then submitting to the College of Health Sciences, School of Medicine Research Ethics Committee, with a supporting letter from the department. Together with one

of my supervisors, I presented my concept note for my project which focuses on masculinity and how it influences health seeking behavior among men in relationships with female sex workers in Kampala. On the 25th of September 2017, the concept was presented and on October 17th 2017, I received a letter with comments which I promptly addressed and emailed the revised concept to the selected reviewer. I have now submitted the documents to the relevant office in Makerere University, awaiting admission. I have received tremendous support from the MRC/UVRI Uganda Research Unit, Child Health and Development Centre and the THRIVE Secretariat during this period. Now i have been registered

supporting the pipeline to develop East African researchers.

students (with Jim Todd (LSHTM), Hugh Revburn (LSHTM) and Sia Msuya (KCMUCo). In my mind these students were excellent because they worked hard both independently and as a team and were committed to learning and pushing themselves beyond their limits. In class they were always attentive and enjoyed engaging lecturers and classmates in interesting discussions related to the subject matter. Both embraced their independent research projects and applied their coursework well. Now seven months after successfully defending their work and four months after graduating we touched base with them to see where they were and what they were doing now....

Jenny: Gaspar please can you tell us about how you came to study the MSc at KC-MUCo?

Gaspar: My interest in data use as evidence for decision making began when pursuing my Bachelor of Statistics degree at the

University of Dar es Salaam (UDSM) in Tanzania. My interests became my responsibility when I started working with organizations dealing with public health such as African Medical and Research Foundation and with Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) in Tanzania. With support from EGPAF, I attended a Master's of Science in Epidemiology and applied Biostatistics (EAB) at KCMCo.

Jenny: What have you been doing since completing your MSc in EAB at KCMCo?

Gaspar: Before the training I was able to conduct only some basic analysis to produce statistical summaries but my skills enhanced after completing EAB program. Immediately after the completion of EAB program in 2016 I was promoted to lead Evaluation unit at EGPAF working as senior Manager Evaluation. Since then I am leading the implementation of three IRB evaluation protocols in terms of human subject ethics training, field implementation and analysis.

Jenny: What advice would you offer to young scientists interested in advancing their research career?

Gaspar: To open up and see the opportunity at KCMCo and other related training institution to acquire these skills for betterment of our country and Africa at large. KCMCo which has significantly contributed to my analytical skills on designing, implementation, analysis and reporting of research protocols. Such knowledge and expertise is urgently needed in Tanzania where there the demand is huge.

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KCMUCo and LSHTM supporting the pipeline

I would like to express my sincere gratitude to the KCMCo for establishing and facilitating this program and special thanks and appreciation goes to my supervisors Dr. Jenny Renju, Jim Todd, Dr. Michael J. Mahande, Tara Mtuy and Seema Vyas for their valuable and educative guidance in the work. KCMCo program has brightened my career.

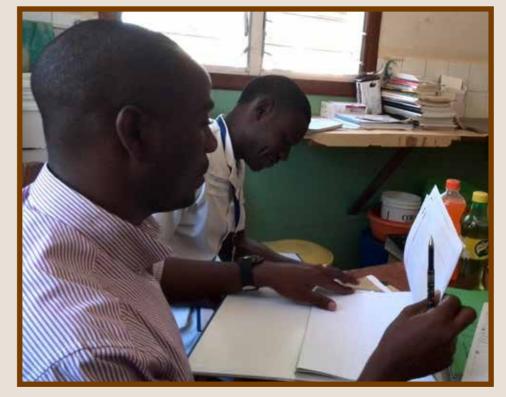
- Jenny: Hi Mwaka, please can you tell us what led you to undertake a Masters in Epidemiology and Biostatistics?
- Mwaka: Before the course, I worked at Ifakara health Institute for four years as a clinical coordinator in different clinical trials. My day to day to activities was; coordination of the team, randomizations, keeping and updating master file, quality control of the data, accountability of the investigation products and much more.

Jenny: Since studying your MSc in EAB have your roles and responsibili-

ties at IHI changed? During the course, I was able to learn and got strong bases on Epidemiology, **Biostatistics and Public** health. Not only that, but the course broaden and prepared me to work independently as a scientist. It enabled me to build new networks among fellow students and teachers. Even though after the course I maintained the same position at work, but it changed my performance, efficiency and confidence on my day to day activities. It improved my interaction with other scientists, my thinking and opened a new door of my career and future academic plans.

Jenny: Since successfully graduating please can you tell us about vour future plans as a researcher? During the second year of the course, I applied for the clinical research fellowship position offered by WHO and EDCTP. In the same year, I was offered this placement to work as a clinical research fellow at GlaskoSmithKline (GSK) in East London for the period of one year starting the year 2017. I believe this scholarship will give me an opportunity to

learn more about clinical research starting from early clinical trial activities (phase 1 and 2) to phase 3. I will take part and learn more about statistics. protocols, standard operating procedures (SOPs), Case report forms (CRF) development and much more. I'm expecting to start this fellowship mid of this year. I hope this will add more on the knowledge I have and strengthen my career path in clinical research, epidemiology and statistics. When I'm back from the fellowship I will remain at IHI for not less than two years (according to the EDCTP contract). My plan is to start applying for PhD when I'm approaching the end of my fellowship. I will keep in touch and let you know what is happening.



Picture of Gaspar Mbita supervising data collection on an EGPAF project, 2017

Cambridge Harnessing the potential of Technology to keep fellows connected to Knowledge resources



The mighty Titan Arum in Cambridge ready to bloom

By Corinna Alberg

Tourists replace students in Cambridge during the long holiday period. One of the more dubious attractions in Cambridge that some of the more intrepid visitors have experienced is the Titan Arum which is thriving in the botanical gardens close by to our offices and has flowered for the first time in 13 years. Its flower is over three foot long but it is its awful smell that is its greatest claim to fame - in the wild attracting carrion beetle pollinators over huge distances. I am keeping my windows shut. Unfortunately, no THRiVE fellows have been in Cambridge to partake in the spectacle but we are delighted that we will be hosting many THRiVE fellows over the life of THRiVE-2, even if are likely to be denied the experience of this plant.

One of the highlights of my first year in post was the THRiVE

AGM held at the lovely Sagana Getaway Resort, Kenya in May. It was exciting to hear about the great research projects that are being initiated. We wish both intakes of fellows all the best for getting over registration hurdles and initiating their research. It was also a pleasure to get to meet the fellows and colleagues from the various THRiVE partner organisations.

One of the THRiVE partners is UVRI and we have initiated with MUII-plus, which is based at UVRI, an expert seminar series. The focus is on immunology and clinical microbiology to support a new Masters course at Makerere University. We have had our first series of seminars presented by professors from the University of Cambridge and our second series is underway and will continue until the end of November, taking place

on Wednesday afternoons. Further series will follow. The seminars are transmitted via a video link from Cambridge, are live and foster interaction with attendees being encouraged to ask questions throughout each session. They have been very well received and are open to other postgraduate students, researchers and faculty including THRiVE fellows who are at Makerere. The full programme is available on the MUII-plus pages of the Cambridge Africa website https://www. cambridge-africa.cam.ac.uk/ assets/Uploads/Seminar-flyer-Uganda-timings-Series-2.pdf. Please do attend if you are based at or near Makerere and benefit from the partnership of THRiVE institutions working together. It will be a Titan arum free zone!

Lastly, do check our website https://www.cambridge-africa. cam.ac.uk/opportunities/

Cambridge Harnessing the potential of Technology

funding-opportunities/ where we post information on a wide range of funding and career development opportunities that are relevant to THRiVE fellows and alumni. For example, at the moment applications are open to attend a Global Challenges Global Engagement meeting in Nairobi at the end of January. The event will showcase the opportunities available through the Global Challenges Research Fund, will bring together developing country and UK researchers and will be an opportunity for networking. Attendees travel, accommodation and any visa costs will be covered.



Dr Dora Pereira delivering a videolinked seminar from Cambridge-Africa to Makerere University postgraduate students

THRiVE-2 Institutions Recruit Masters Research Fellows and Graduate Interns Masters Fellows

In order to ensure a continuing pipeline, THRiVE-2 institutions have recruited masters research fellows and graduate interns. Masters research fellows are supported for one year and are provided with funds to carry out their masters' research. The graduate internships take a duration of 3-6 months and interns are expected to support the core THRiVE activities at the partner institutions. Highlighted below are details of those so far recruited.

Names	Research title	Institution/course
1. Amuga R. Meda <i>NIMR, Mwanza</i>	Prevalence of sepsis among critically ill medical patients at BMC Mwanza Tanzania	Catholic University of Health and Allied Sciences (CUHAS) MMED Internal Medicine
2. Marygoretti J. Changalucha <i>NIMR Mwanza</i>	Incidence of fever and infections and factors associated with fever among cancer patients within 90 days of chemotherapy	Catholic University of Health and Allied Sciences (CUHAS) MMED Internal Medicine

3.	Namugula Annet Caroline <i>Makerere University</i>	Mortality and associated risk factors among neonates admitted to the special care unit of Kawempe hospital	Makerere University M.Med Paediatrics and Child Health
4.	Namata Christine Makerere University	To compare clinical outcomes of patients sedated with ketaminemidazolam against those sedated with morphinemidazolam.	Makerere University M.Med Anaesthesia and Critical Care
5.	Ssimbwa Danstun <i>Makerere University</i>	Molecular characterization of uropathogenic <i>Escherichia coli</i> isolates from community-acquired urinary tract infection outpatients in Kampala District.	Makerere University MSc. Immunology and Clinical Microbiology
6.	Kikomeko Sharif <i>Makerere University</i>	Relationship between glycosylated hemoglobin A1C and ocular arterial circulation by Doppler ultrasonography among diabetes mellitus patients at Mulago hospital.	Makerere University M.Med Radiology
7.	Kavuma Arthur Mwanje Makerere University	Correlation between CD4 counts and the immune status in critically ill HIV negative patients admitted to intensive care units	Makerere University M.Med Anaesthesia and critical care
8.	Justine Namukasa Makerere University	30 days post discharge outcome and associated factors among patients admitted with acute heart failure at Uganda Heart Institute.	Makerere University M.Med Internal Medicine
9.	Maria Nannyonjo UVRI	The effect of pre-existing minority HIV-1 drug resistance in drug naive patients on the subsequent response to antiretroviral therapy	Makerere University Masters in Molecular Biology & Biotechnology
10.	Nanyinji Hasifa UVRI	Establishing an in-house B-cell ELISPOT protocol to assess immune response to Hepatitis B vaccine in PBMC of recipient using commercially available reagents	Makerere University MSc. Immunology & Clinical Microbiology
11.	Orgeness J. Mbwambo <i>KCMUCo</i>	Single, double or multiple doses antibiotic prophylaxis in transurethral reaction of prostate patients from August 2017 – February 2018 at KCMC	KCMUCo MMED Pediatrics
12.	Annete Baine KCMUCo	Immediate outcomes of preterm babies presenting with respiratory distress syndrome treated with bubble-crap compared to oxygen at KCMC	KCMUCo MMED Pediatrics



THRiVE-2 Institutions Recruit Masters Research Fellows and Graduate Interns Masters Fellows

13. Derrick Amone Gulu University	Short term outcome of Laparotomy in the two teaching Hospitals of Gulu University	Gulu University M.MED Surgery
14. Martha Franny Alaroker <i>Gulu University</i>	Nutritional quality of gari-soy composite for feeding children aged 6-14 years".	Gulu University MSc Food Security and Community Nutrition
15. Careen Naitore Ikunyua icipe	Identification of miRNA in Glossina brevipalpis at key developmental stages	JKUAT MSc Bioinformatics and Molecular Biology
16. Lilian Waithera Wanjiru <i>icipe</i>	Investigation of Plasmodium transmission by diverse Anopheline species in Western Kenya	Egerton University MSc Medical Parasitology

Graduate Interns

Name	Highest qualifie	cation	Awarding institution
1. Lucy Bernard D NIMR, Mwanza		Sciences	University of Bedford- shire, UK
2. Wende Clareno fari <i>NIMR, Mwanza</i>		S	Hasselt University, Belgium
3. Anthony Sseba	-	vices Research	Makerere University
4. Esther Nakafu <i>Gulu University</i>	BSc Biology		Gulu University
5. Sally Ireri icipe	MSc Biochemist	ry	University of Nairobi

