

Editorial

Dear Reader,

The end of 2021 is here and yet it feels like the year started yesterday. That is a reminder that though time is an ever-present resource, it is an irreplaceable perishable good. Within the limits of what is humanly possible we should complete the work that should be completed today. We should embrace 2022 with a resolve to complete what must be completed as soon as possible and before diverting to new agendas.

I thank all stakeholders for making THRiVE a recognised high-quality research capacity building initiative contributing immensely to enhancing excellence in research and science on the African continent especially in East Africa. It is gratifying to see that resident African researchers are increasingly winning globally competitive grants and contributing to the global health research agendas important to Africa. Dr Francis Collins, who has been NIH Director (USA) for 12 years, summarised this very well on his last day in that office on December 19, 2021. He reiterated the importance of funding African investigators directly to identify and pursue research-based solutions for local priorities. He stated, "Scientists on the African continent are now the recipients of one-third of all NIH merit-based grant awards to foreign institutions globally—a stark reversal from the scenario ten years ago, when virtually all NIH support to African scientists constituted

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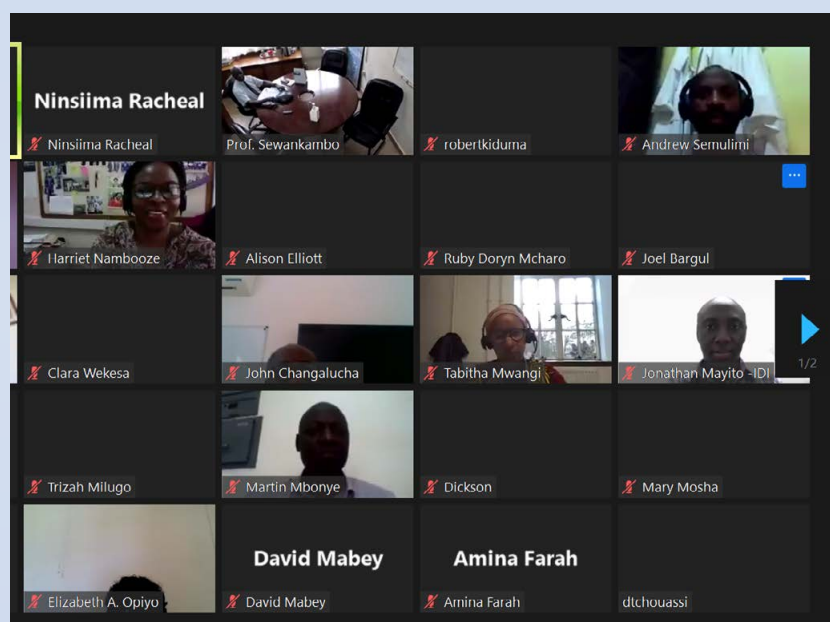
THRiVE successfully runs its first online AGM

By Racheal Ninsiima - THRiVE Communications Officer

In the midst of the ongoing COVID-19 pandemic, THRiVE held its first online annual general meeting (AGM) between November 29 and December 1 2021. The AGM had been scheduled to happen physically in June 2020 in Mombasa. However, with the persistence of the pandemic, it was shifted online.

The meeting was well attended with over 50 participants from different academic institutions on

each of the three days. Participating institutions were: Makerere University; International Centre of Insect Physiology and Ecology (icipe)-Nairobi; Cambridge University; London School of Hygiene and Tropical Medicine (LSHTM); Gulu University; Kilimanjaro Christian Medical University College; Uganda Virus Research Institute (UVRI) and the National Institute for Medical Research (NIMR) in Tanzania.



A screenshot of participants during the first online THRiVE AGM.

In his welcome remarks, Dr Daniel Masiga, chair of the organizing committee welcomed participants and thanked the team which tirelessly worked to make the virtual meeting a possibility. He appealed to them to spread the message of the meeting widely so that more people could join in the three-day deliberations. In a special way, Dr Masiga requested members to observe a

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MUST READ

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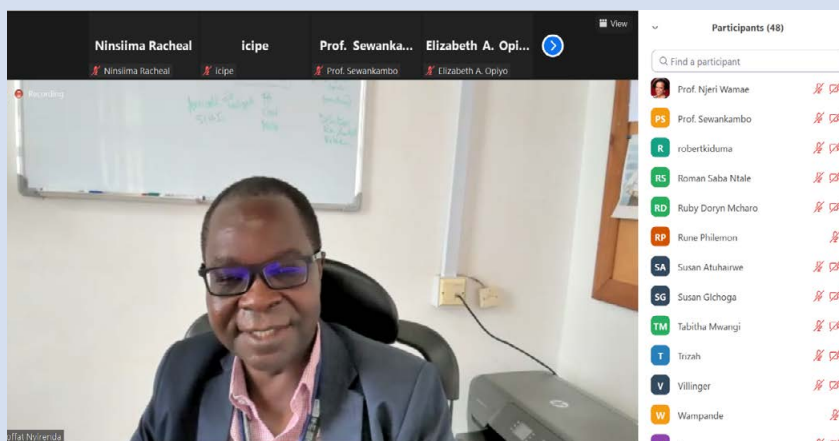
sub-contracts to U.S. institutions". In this respect with this we celebrate all our Fellows. Success in grant making is illustrated in this issue of THRiVE News by Angelina Kakooza, a post-doc fellow who recently won an NIH grant to research on epilepsy. She is a very strong advocate for embedding public engagement in research, an area THRiVE has emphasized in doctoral training.

Merry Christmas, Happy holidays, and a prosperous New year.

... from Pg. 1 minute of silence in remembrance of Prof. Egbert Kessi, the former provost and professor of Orthopedics and Traumatology of Kilimanjaro Christian Medical University College who died on November 20 2021.

During the three days, 13 PhD fellows presented progress of their research work, community and public engagement projects and publications in peer reviewed journals. Topics varied widely and included: Liver fibrosis among individuals with HIV infection by Dr Clara Wekesa; Improving malaria transmission-blocking potency through structural modification of compounds isolated from star weed by Trizah Koyi; Sexually transmitted infections and sexual behaviour among young adults attending Higher Learning Institutions in Mbeya region, Tanzania by Dr Ruby Mcharo and baseline quality of life among patients with end stage kidney disease in a resource limited setting; among others. Additionally, Dr Joel Bargul, a postdoctoral fellow attached to icipe, made a presentation on the role of *Hippobosca camelina*, also called camel keds, in the transmission of camel diseases.

The meeting was also graced with three top-level scientists as keynote speakers. These were: Prof Nicky Mulder, Head of the Computational Biology Division at University of Cape Town who discussed the progress of data science and genomics in Africa; Dr. Jeremy Herren, a molecular biologist based at icipe who talked about a microbe that blocks malaria transmission and Prof. Moffat Nyirenda, a diabetologist and Professor of Medicine at LSHTM who spoke on differential manifestation of non-communicable diseases in Africa and implications for diagnosis and management.



Prof. Moffat Nyirenda was one of the keynote speakers during the AGM.

THRiVE postdoc fellow wins NIH grant for epilepsy research

By Harriet Namboozee, THRiVE Coordinator

The National Institutes of Health (NIH) has awarded a \$2.5 million grant to Assoc. Prof. Angelina Kakooza-Mwesige to clinically characterize a Ugandan national sample of patients with epilepsy, investigate the magnitude and drivers of epilepsy stigma among adolescents and evaluate the effects of a community-based engagement program on reducing this stigma in the community (AWE Change project).

This five-year project will be done in collaboration with colleagues from Duke University's Division of Global Neurosurgery and Neurology, Durham, USA. As Principal Investigator, Assoc. Prof. Kakooza will work with a team of top-tier researchers at Makerere University including Assoc. Prof. Noeline Nakasujja; Dr. Mark KadduMukasa; Dr. Kajumba Mayanja and Dr. Martin KadduMukasa.

Their grant application was in response to the call on Global Brain and Nervous System Disorders Research across the Lifespan by the NIH. As a neurological disorder, epilepsy contributes a significant proportion

of the world's burden of disease and is associated with widespread discrimination and stigma. These, together with other drivers of the treatment gap, prevent most people with epilepsy from reaching medical care.

According to Assoc. Prof. Kakooza, a complete understanding of epilepsy's characterization, comorbidities and risk factors is inevitable for developing targeted preventive strategies and other interventions. Furthermore, community engagement programs addressing epilepsy related stigma especially among the vulnerable adolescents can favorably impact quality of life, reduce disability, and create a fundamental shift in the perception of and behavior related to epilepsy.

A massive well-done to Assoc. Prof. Kakooza



➡ *This research will clinically characterize a Ugandan national sample of patients with epilepsy, investigate the magnitude and drivers of epilepsy stigma among adolescents and evaluate the effects of a community-based engagement program on reducing this stigma in the community (AWE Change project).*



Assoc. Prof. Angelina Kakooza-Mwesige, THRiVE-2 Postdoctoral Fellow.

Experiences and Best Practices of Working With Media to Appreciate the Research Process



By Emily Nyanzi K, Nviiri R, Naluwuge R, Kayondo J, Ssesanga D and Seeley J

The Uganda Virus Research Institute (UVRI) with financial support from the Training Health Researchers into Vocational Excellence in East Africa (THRIVE2) organized a training workshop on effective communication, science and media on the 8th and 9th November 2021. The workshop was premised on the appreciation for scientists to effectively communicate research findings with stakeholders and media, they had to understand the research process and ethics. The main objective of the training was to continuously mentor scientists in basics of effective communication of research results to reach the targeted audience.

The workshop was attended by 20 participants from UVRI and 10 from media including the team from the New vision, Daily monitor, Central Broad Casting Services (CBS) FM, Chimp reports and Nation Media. The participants were purposely selected from the submitted application forms following an advert. Facilitators included senior research scientists from UVRI research and communication departments and re-known news anchors and writers from the media. The training started with the lead facilitator, who is also the senior training Officer at UVRI- Ms. Emily Nyanzi asking the participants to fill the pre-evaluation forms in google to get an understanding of their knowledge of effective communication. A post evaluation was carried out at the end of the training.

The methods of instruction involved sharing of experiences from the media team and scientists, role played, group work presentations and panel discussion of the topical issues in media.

The trainees were asked to differentiate communication and effective communication. So, amazing the kind of answers we received from the trainees. Other topics included the barriers and solutions to effective communication, finding merits and demerits in effective communication and the use of PEST analysis for the message passed on to reach the intended audience. The panel discussion by the representative of Media- Ms Flavia Nasaka, the representatives of scientists – Dr Jonathan Kayondo and policy makers -Hon Minister of Health- Ms Esther Makula from Chimp reports excited the trainees.

Lessons learnt involved use of the digital space (WhatsApp, Twitter, Facebook, and Instagram) in reporting science to stakeholders and scientists were encouraged to regularly work and inform the media of

the research progress for the media to pass on the right message to the public.

Recommendations from the training involved; a) appeal from the media fraternity to UVRI communication to work with UVRI management to come up with a digital communication strategy (usage of WhatsApp, Twitter Corporate, You Tube channel and Instagram) to give UVRI visibility in the digital age; b) The communication team at UVRI to finalize the communication strategy for UVRI; c) to create story lines of the previous management and upload them on the UVRI website.

We acknowledge the financial support extended to UVRI by THRIVE-2 that made this training a success. THRIVE2 is funded through the DELTAS Africa Initiative # DEL-15-011. The DELTAS Africa Initiative is an independent funding scheme of the African Academy of Sciences (AAS)'s Alliance for Accelerating Excellence in Science in Africa (AESA) and supported by the New Partnership for Africa's Development Planning and Coordinating Agency (NEPAD Agency) with funding from the Wellcome Trust grant #107742/Z/15/Z and the UK government.



Trainees acting out a scene on barriers to effective communication.



Scene played out: Talk show on HIV status in Uganda and plans for the Ministry of Health.

Making a cut as a new THRiVE-2 coordinator at Cambridge, UK

By Dr Tabitha Mwangi



Dr Tabitha Mwangi.

My first day of work was the 21st January 2021 and like all things during the pandemic, it was not normal. It was odd meeting workmates for the first time, stuck in their small little squares on my computer screen. Over a couple of months, as restrictions were lifted, we were finally meeting in person again. It is with some childlike excitement that I have been sitting in the Cambridge-Africa office, away from household clutter, to focus on work.

There are a lot of interesting

things happening with our partners and collaborators but what I like most is working in this fantastic team.

Writing about African scientists is a bit of a hobby so I have enjoyed telling the stories of all these brilliant people. The enthusiasm of the THRiVE scholars I have spoken to is infectious. When talking with Dr Joel Bargul, you feel like there is nothing more important on this earth than working out how diseases in camels in North-Eastern Kenya are transmitted.

Perhaps because he works in the village where he grew up, his relationship with the farmers and the students he mentors in the local school, is more than just work. He is totally committed.

I interviewed THRiVE scholar, Dr Peace Bagasha, for a series, 'Brilliant Minds' that I am writing for Kenya Airways flight magazine, Msafiri. I enjoyed writing about a little girl scared of studying medicine because of the fear of patients dying in her hands, who was now working in nephrology, a field where death was not so far off. Her dedication to her patients and her colleagues is way above her call of duty.

Recently, I have also been listening to THRiVE scholars during the virtual AGM (30th Nov to 1st Dec). Whether it be the PhD students or Career Development Awards, fellows have been super productive, publishing multiple papers and winning grants. I was left feeling that there is something about the way the THRiVE program works that produces a unique blend of people committed to solving African problems in Africa. I dare say, perhaps presumptuously, that if they did not have mouths to feed and people to take care off, this is work these scholars would do for free!

I have been putting together a report on the outputs of the Alborada Covid-19 Emergency Research Awards. Researchers from African Universities and research institutions paired with colleagues from the University of Cambridge to conduct Covid19 research in early 2020. A total of 15 pairs were awarded funding of up to £20,000. It has been amazing to see what could be done with a rather small grant.

One of the most outstanding was a collaboration between Mr. Mayamiko Nkoloma of the Malawi polytechnic at the University of Malawi and Dr Lucia Corsini from the University of Cambridge. It all began when a Facebook post showing Mr Nkoloma printing 3D reusable face masks in Malawi was spotted and the two brought together. Using the Cambridge-Africa Alborada grant, Mr Nkoloma acquired twelve 3D printers and a laser cutter. With 24 people employed at Twenti Makerspace, over 6,000 reusable face masks were printed within a short period of time. Locally, the project generated a lot of interest, with the Malawi Agriculture and Industrial Investment corporation (MAIIC) providing additional funds (£10,000) into the project. Twenti Makerspace received further funding (€100,000) from the German Development agency, GIZ. To date, Twenti Makerspace continues to print these reusable facemasks. Who would have thought a Facebook post and a small pot of money would stretch so far?

Although there is a lot of amazing stuff going on, it has not been breezy. The cutting of UK funding to support African research programs has generated uncertainty and this had been felt by our partners, THRiVE and MUII. I continue to hope that funding for these programs will come through.

Cambridge-Africa is not exempt from the head-scratching business of fund-raising and the accompanying uncertainty, but we remain hopeful.

I look forward to meeting many more collaborators over the years and wish everyone well with your future plans.



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Here is a medical illustrator putting a soft edge on hard sciences

By Racheal Ninsiima - THRIVE Communications Officer.

Names and faces behind amazing scientific illustrations are often times missed because art and science are perceived to be unrelated disciplines. But did you know that art plays a significant role in the sciences, helping to visualise medical, anatomical and related knowledge? Think about the science textbooks you used in school, images and models in a library you visited, or maybe even that poster in a doctor's room that shows what your organs look like. This body of work collectively highlight a discipline called medical illustration and is created by professionally-trained specialists known as medical illustrators.

Jacob Nansinguza fits this narrative like a hand in glove. He is a trained medical illustrator who has used his artistic skills to create scientifically accurate visual images that enrich communication in health, for health professions, patients and the general public. During an interview with THRIVE, he stressed that scientific illustration is more than just an artwork.

"Unlike art that sometimes serves an aesthetics role, medical illustration goes beyond and serves several purposes such as patient education, teaching and research," Nansinguza said in an interview.

Since their first appearance on stone, silk and papyrus sheets, human body illustrations have come a long way in rendering complex science concepts in simple ways. Historical drawings featured the work of research anatomists such as Andreas Vesalius and Leonardo DaVinci. DaVinci's anatomical illustrations came from his personal dissection of over 30 bodies, which he performed between 1489 and 1513. As Leonardo neared the end of his career, Andreas Vesalius started his medical career by authoring and publishing *De Corpus Fabrica Humani*, the most well-known book of anatomy in history. Today, medical illustration is very integrated in the visual communication of sciences.

Due to the variety of specialty areas needing medical illustrations, the work of medical illustrators is vast. For example, Clinicians and physicians visual materials to assist in patient education; the

pharmaceutical industry needs materials to explain mechanism of action of drugs; medical litigators need clinical photographs and illustrations for courtroom exhibits, and health science learners need visual materials to enhance learning of abstract ideas and concepts. This list goes on.

Currently, Nansinguza's work plate is kept full by graduate and postgraduate researchers who require technical input in their research papers and print materials.

"This kind of work comes with a tight deadline and a lot of pressure to deliver it. A typical working day or week may not be sufficient for such work. Someone can send you work off working hours and they want an update the next morning," he said, speaking about the demands of the career.

Therefore, owing to the meticulous stresses of the work and tight deadlines, one must love the discipline.

Nansinguza looking through his portfolio of at the Department of Medical Illustration, MakCHS.

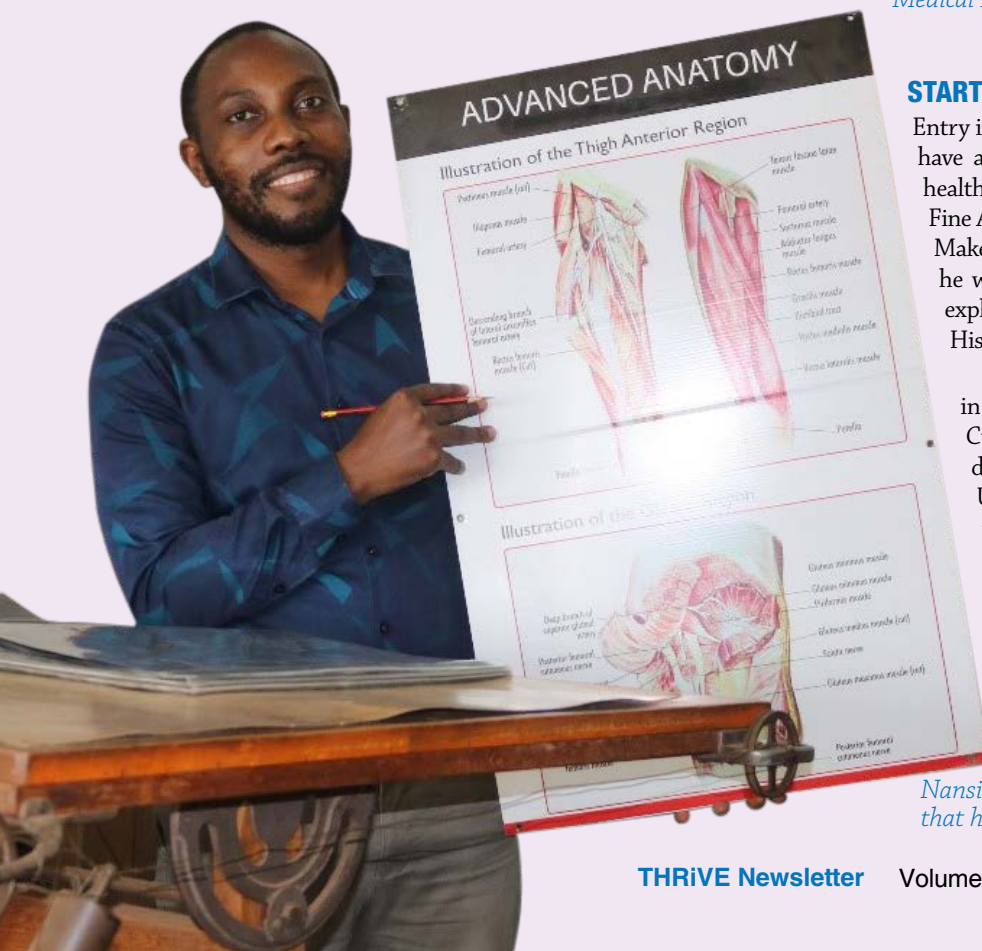
STARTING OUT

Entry into this unique field not only necessitated that Jacob have a strong background in art but also an affinity for health sciences. He possesses a Bachelors of Industrial and Fine Art and Master of Science in Medical Illustration from Makerere University. During his undergraduate studies, he was exposed to 'Drawing Special', a course unit that explores drawing of the human body on a specialized level. His captivation with scientific illustration was sealed.

Shortly, after completing his undergraduate program in 2011, he had a short work stint with the National Curriculum Development Centre (NCDC), producing drawings for curriculum books. A while after, Makerere University College of Health Sciences (MakCHS) put out a call to train medical illustrators and he capitalized upon this opportunity. In the meantime, he also enrolled for his masters' studies.

During his masters, in the advanced anatomy course unit, he did dissection from the postgraduate anatomy lab, from which he created illustrations. For example, he created an anatomical drawing of muscles in a human thigh.

Nansinguza displays his illustration of the human thigh that he created while an MSc student



"In the anatomy lab, specimens are discolored but a medical illustrator is required give them life," he underscored.

His thesis assessed the 'Knowledge, Attitudes and Usage of medical animations as a complementary learning resource by undergraduate students at MakCHS. Findings from the triangulated study (qualitative and qualitative methods), showed that medical animations assisted participants to deconstruct abstract ideas such as glycolysis (how energy is extracted from glucose) and stimulate learning. Almost all participants recommended the use of medical animations for learning health sciences.

MSc. Medical Illustration, being a degree awarded on successful completion of coursework and research (dissertation), he conducted an exhibition, in addition to

the dissertation, as part of the graduation requirements. For this, he exhibited a body of work featuring anatomical, pathological and surgical illustrations, part of which included "anatomy of the human thigh" illustration. During the parallel trainings, he learned a lesson that has stuck with him until today.

"One must know how to draw and draw well because medical illustrations aren't any kinds of drawings. If someone is to rely on what you have produced to teach a concept and it's wrong, it will have serious negative consequences. Therefore, precision matters and the work one produces must communicate!" he emphasized.

A PULSATING CAREER

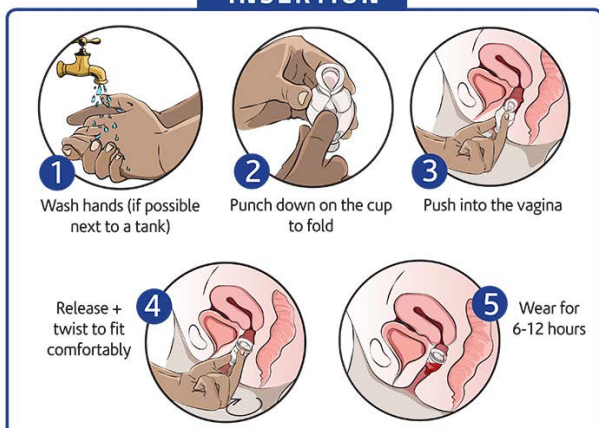
Today, Jacob brings to the table almost 7 years of medical illustration experience, doing works for diverse clients including practicing physicians, researchers, university students

and agencies. He boasts of three outstanding works in his portfolio. One was a poster he developed for students of Duke University who were on an exchange program at MakCHS's Department of Surgery. The purpose of the poster was to assist in teaching caretakers of patients with trauma on how to feed the patients correctly.

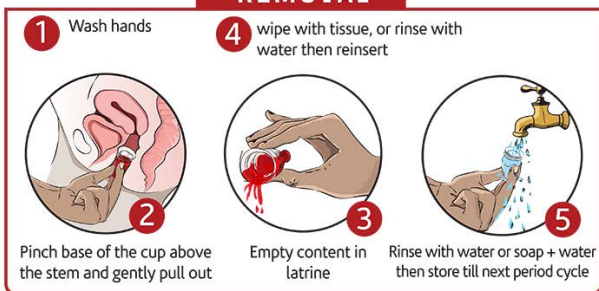
The other rewarding works include illustrations he developed on how to use a menstrual cap intended to help girls in rural areas adopt its use and posters for use in emergency centers. The work on menstrual caps was later adopted for use outside Uganda. In addition to illustrating 10 Emergency care posters, a project supported by the Korea Foundation for International Healthcare (KOFIH) in partnership with Ministry of Health Uganda.

Using A Menstrual Cup

INSERTION



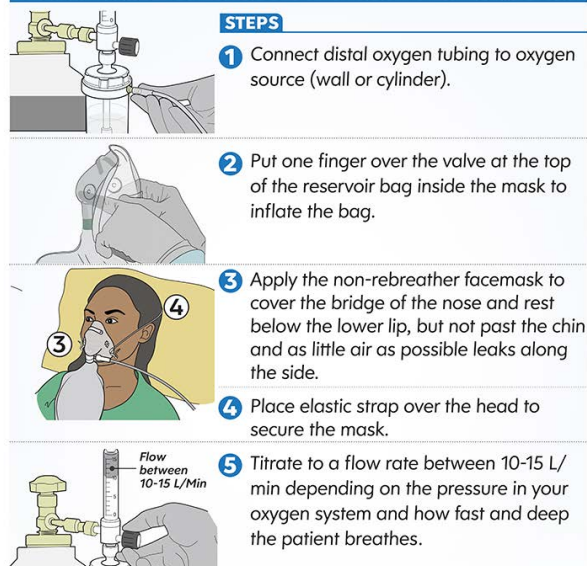
REMOVAL



Commissioned by: Women's Global Health Innovations | www.wghi.co
Illustrated by: Nansinguza Jacob, BIFA (Mak) MSc. MSMI (Mak) | www.behance.net/NansinguzaJacob

HOW TO USE A NON REBREATHER OXYGEN MASK

STEPS



Caution!

For patients who appear extremely hypoxic or who still have signs of hypoxia with a simple facemask, oxygen can be delivered through a non-rebreather facemask. This provides close to 100% oxygen if the reservoir bag is full.

NEVER put a non-rebreather facemask on before it is connected to oxygen. A true non-rebreather mask will not allow outside air in and can worsen difficulty in breathing and hypoxia if there is no oxygen flowing through the tubing.

Do not remove the two flap valves on either side of the mask on the outside and the one from on top of the reservoir bag on the inside of the mask.

If the patient is still hypoxic or the non-rebreather facemask bag does not fill, increase the oxygen flow rate.



Supported by the Korea Foundation for International Healthcare (KOFIH) in partnership with Ministry of Health
Content adopted from World Health Organisation (WHO) Basic Emergency Care participant Manual



Some of Nansinguza's best works. Using a menstrual cup (Left), and How to Use a non-rebreather Oxygen mask (Right)

Most fulfilling from his career is the fact that he has learned a lot in health sciences that he would not have otherwise learned if he had no exposure.

Although it thrills illustrators to know that their work has had impact, Jacob says there is an enormous need for awareness about medical illustration.

"Most people do not know where to get what service when they need it. In fact, many people aren't aware of what we do. When I tell them

what I do, many seem to be hearing it for the first time," he said.

To scale up awareness of what illustrators do, he suggested that open days about medical illustration be organized and that final year medical illustration students' exhibitions be open to stakeholders.

Medical illustrators are constantly being challenged to keep up with visualization technology advancement in the field of medical illustration. This emanates from some

of the clients' ideas which may not fit within a medical illustrator's current technological capacity. Jacob is mainly involved in print and electronic media, particularly, illustration and editorial design, in relation to the market trends. His print and electronic media tools, besides the occasional pencil and paper for illustrations, are a set of applications from the Adobe creative suite like Adobe Illustrator, Adobe Photoshop, Adobe InDesign, Adobe Premiere pro and Adobe After Effects.



Nansinguza using a Wacom digital tablet to digitally sketch out some ideas.

LOOKING AHEAD

Jacob's goals for the future are to have a visual lab where research ideas can be developed; create awareness about the MSc in Medical Illustration and have a team of specialized people who may undergo further training in the various aspects of the discipline.

For those considering a career in medical illustration, he advises that you must undertake the MSc program; interest yourself in health sciences; have the ability to draw well and be willing to put in lots of work hours to develop accurate and realistic images, considering that the MSc. Medical Illustration is a full-time and collaborative program.

In the meantime, Jacob continues to produce images that facilitate communication in the health sciences.

My PhD journey so far

By Martin Mbonye – THRiVE-2 PhD fellow

In my experience there are three main stages of the PhD process that I have encountered so far. The first stage is the development of the concept, the second is writing the proposal and the final is writing the thesis. In this short piece I share my experience of the three process.

The concept development stage

During this period, I established contact with my supervisors who started helping sharpen my ideas and offered advice on the journey ahead of me. By October 2017, I had developed the concept, presented it to my department and later to the school of medicine IRB. I was then offered my one year provisional admission which was to run for a year

The proposal stage

After the concept had been submitted to the higher degrees department at Makerere University, I embarked on the process of drafting my proposal. This period also involved attending some cross-cutting courses organized by the university which helped me improve the proposal. By the time I presented the proposal to the Ethics committee, I had benefitted from feedback I got at department level and in the THRiVE meetings that I attended.

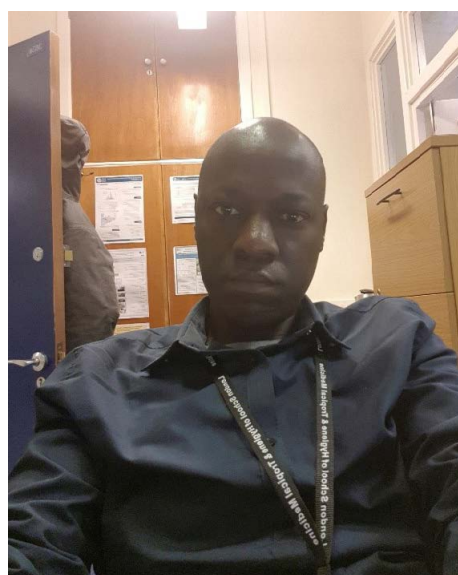
By January 2019, I was ready to embark on the year-long ethnographic study. My study population was men in relationships with female sex workers whom I knew to be hard to reach so part of my field work emphasized building good rapport. I enjoyed interacting with the men, their partners and others in their different settings. By the end of field work some major themes were already emerging from the data.

Writing the thesis

In 2020 I made plans to attend a course at the London School of Hygiene and Tropical Medicine which would enhance my data analysis skills. I planned to spend the first five months in London but this was disrupted when COVID-19 happened. I had to be evacuated and endured some uncomfortable 4 weeks in mandatory quarantine. This was a trying moment for me as I went through a period of the unknown. It also disrupted my progress but I was able to recover thanks to the excellent support from supervisors, THRiVE and UVRI secretariats among others. I started drafting the first manuscript in 2020 and by the end of the year I had submitted it for peer review.

In 2021 I continued to focus on the analysis and drafting of manuscripts. In April I had my first manuscript published in an international journal and this boosted my morale. In April I also submitted for review another manuscript. However, six months later, this manuscript had not been reviewed and this frustrated me a lot. I have only recently obtained the comments after writing a protest note to the journal. However, a third manuscript received a fairly faster review and I am currently working to address the comments. The thesis is currently in advanced stages of being drafted.

This is my journey so far.



On the left: While at the London school before Covid-19 struck. On the right, during field work

Doing monitoring and evaluation for THRiVE's RECPE project — Our Experience

By Dr Raymond Mugume – Team lead, RECPE Evaluation

Our aim as a team of six research assistants (RAs) composed of two medical officers and four medical students was to monitor and evaluate THRiVE's Research Enrichment Community and Public Engagement (RECPE) project. The project aims to prompt PhD and postdoctoral researchers to engage non-scientific communities such as students and indigenous communities with their research. This is

intended to have communities enrich the scientist's work through their input. The project is now in its third year.

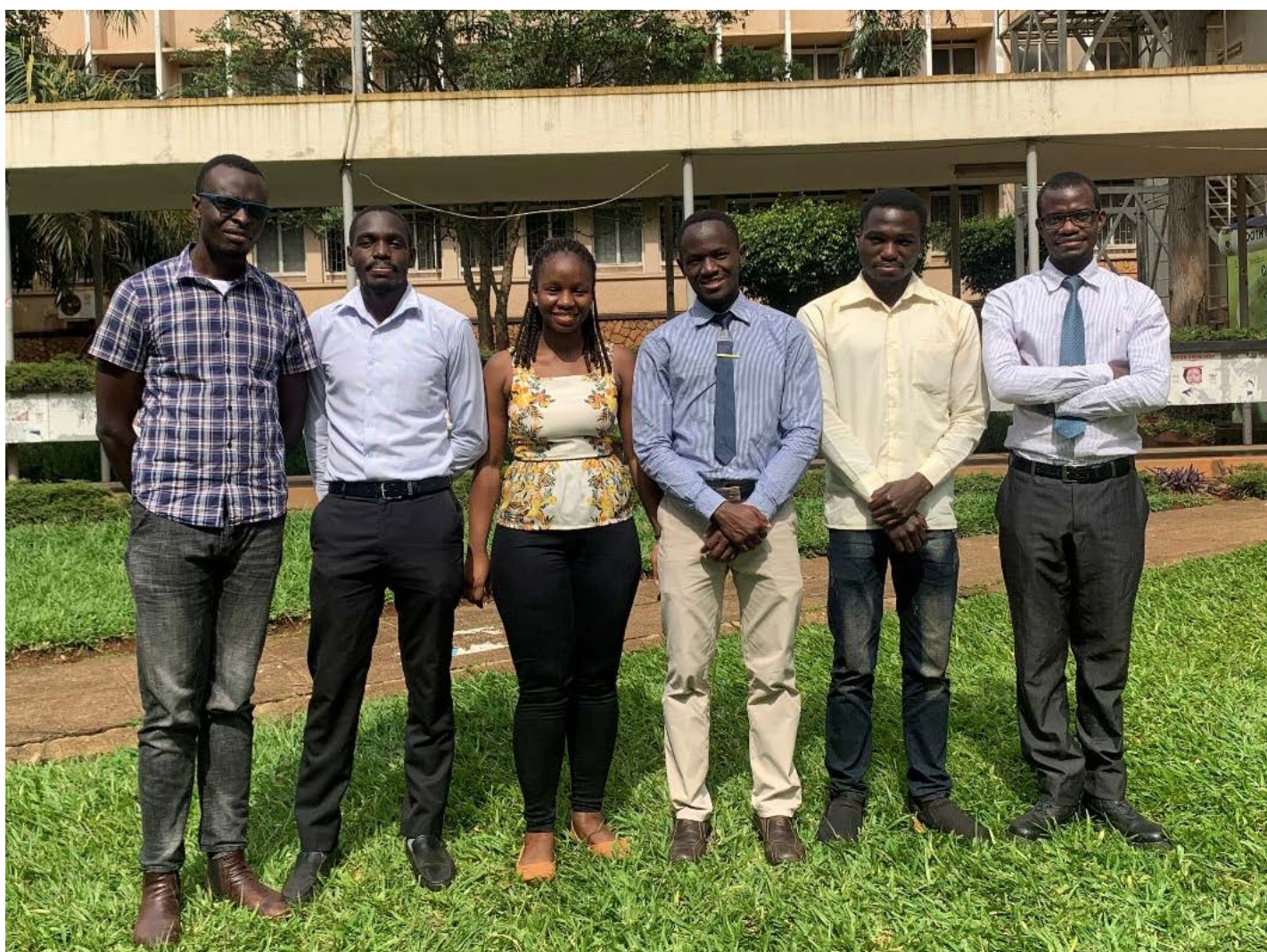
Our M&E work started with meeting Dr Daniel Semakula, the Information and Knowledge Translation Officer of THRiVE who brought us to speed about protocol development, standard operating procedures, data tools and team building. We later scheduled a meeting with the THRiVE secretariat to orient

ourselves with expectations and formulate a plan for interviews for the fellows and transcription of data. Thereafter, we conducted interviews with PhD fellows, and co-applicants, supervisors either virtually through Zoom or in person. This experience rewarded us with stronger interpersonal and communication skills.

Working with THRiVE for the past three months has been a period of learning and reflection. Right from the day we started

as a data collectors to-date, we have gained several skills such as transcribing and public relations with former/current lecturers. Additionally, the vast response from the fellows has inspired us to appreciate community and public engagement in research.

As RAs we acknowledge that research is dynamic and poignant at the same time. Therefore, it is a privilege to be learning the skills with the THRiVE secretariat.



TH_11: The team of research assistants that conducted the RECPE Evaluation



Working with THRiVE for the past three months has been a period of learning and reflection. Right from the day we started as a data collectors to-date, we have gained several skills such as transcribing and public relations with former/current lecturers.

Connecting the dots between Zika Forest and the Zika virus: What's in a name?

By Assoc Prof. Angelina Kakooza-Mwesige – THRiVE-2 Post Doc fellow

Just as it takes a village to raise a child, it takes a great sense of culture and history to name one. Looking back at my old school days I recall complaints from the teachers to some of my classmates similar to "I find your name quite hard to pronounce do you have a shorter name we could use?" or "Your name is not familiar to me, which part of the country (Uganda) do you originate from?". Such experiences often led to some intimidated classmates compromising their names to whatever pronunciation would be easiest for the teacher or alternatively adopting a nick name to avoid all confusion and mockery. Such a scenario is quite disheartening, because a personal name is a vital aspect of cultural identity.

In any society there exist names of any nature, which often reflect the prevailing social dynamics of the societies where they are found. Society performs a critical role in guiding the choice of names given to individuals and entities which are dependent on the respective functions they serve in their societies. While names can bring together communities, they can also serve as a means of breaking up various communities. The latter activity can be quite disruptive since it is from names that one can learn the various cultures that have been present in a particular place, and have an understanding and the appreciation of the history of a place.

It is against this backdrop that I became especially intrigued when during the setting up of my post-doctoral project entitled "Zika virus: prevalence, neurodevelopmental dysfunction and genotype in Uganda." I was perplexed when I discovered in several of my conversations with the locals living around the Zika forest that the majority had no idea about the Zika Virus, its discovery in the Zika forest or its complications in humans. Furthermore, I was made to understand that the Zika forest was found in Ziika Zone, Katabi Town Council, Entebbe. I noted a discrepancy between the name 'Zika' and 'Ziika' prompting me to inquire more about the issues underlying this naming. I wondered whether it was a naming misnomer or could there be hidden connections behind it?

This led me to conduct a study to explore the origins and meaning of the Zika Forest and whether it had any implications to the naming of the Zika virus. I believed by unearthing the information surrounding the origins of the Zika forest and the Zika virus discovery through utilizing facts from science, history and the society, I would be able to connect the dots and form a logical,

coherent story underlying the basis of understanding this topic. I was not disappointed in my quest for what I found out surprised me a great deal.

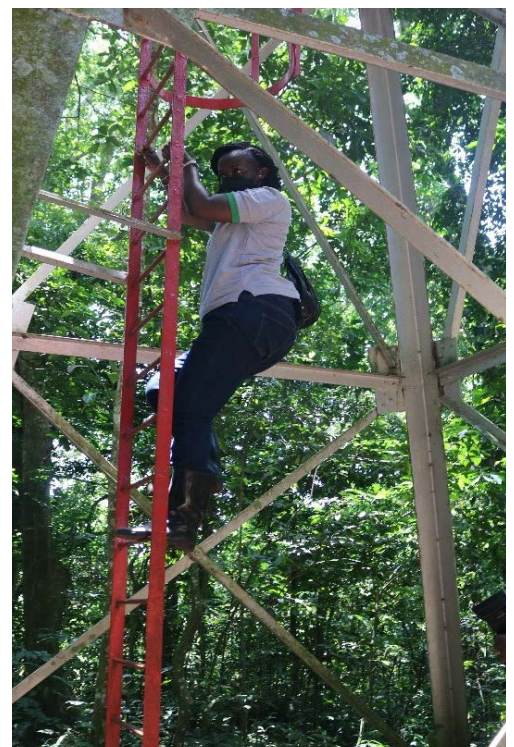


Assoc. Prof. Angelina Kakooza-Mwesige (In black coat) interacts with residents of katabi zone where Zika forest is located.

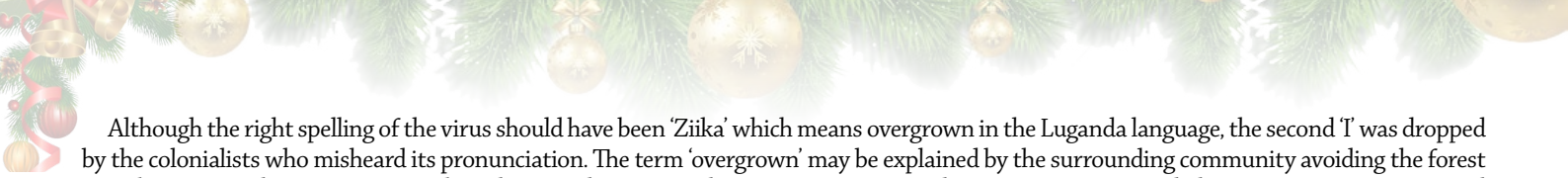
IMPORTANT DISCOVERIES

I discovered that the forest is a cultural heritage site for the Buganda Kingdom and the seat of an ancient King - Bamba Musota. He was a tyrannical ghost snake King of Buganda in the 15th Century famed for killing his enemies and burying them in the forest, hence the name Ziika. One respondent said they were told "Bwogenda e Ziika todda" (meaning once the king took you to the Zika Forest that meant your death).

On the other hand, medical history records reveal that colonial researchers in the 1940s used the forest to study yellow fever, thought to originate in the area. Scientists caged monkeys in wooden platforms high among the jackfruit and mango trees, where mosquitoes were most likely to breed. Investigations intensified in 1960 when a 120 ft steel tower was relocated from Mpanga Forest to Zika Forest to study the vertical stratification of mosquito activity, especially the sylvan yellow fever virus (YFV) vector *Aedes (Stegomyia) africanus* Theobald. Asian sentinel rhesus monkeys, locally known as *ssewagaba*, were placed on different height-points of the tower to identify viruses carried by mosquitoes. One of the monkeys fell ill with a fever and was taken to the Uganda Virus Research Institute (UVRI) for examination. Its blood samples revealed an unknown virus. The monkey's serum was injected into the brains of mice and they fell ill. ALAS - a new virus had been discovered! As protocol dictated, it was named Zika after the forest in which it was identified.



Assoc. Prof. Kakooza climbs up the 120ft steel tower on which traps were placed to catch mosquitoes



Although the right spelling of the virus should have been ‘Ziika’ which means overgrown in the Luganda language, the second ‘I’ was dropped by the colonialists who misheard its pronunciation. The term ‘overgrown’ may be explained by the surrounding community avoiding the forest area due to its evil associations as a burial site in the past resulting in excessive growth of vegetation. Nevertheless, my investigations reveal that the meaning of the name “Ziika” is still contentious and may be associated with the Luganda term “overgrown” or related to the Luganda term “to bury”



Assoc Prof. Kakooza engages with the caretaker and guide of Zika forest.



A community member explains to Assoc Prof Kakooza one of the tree species found in the forest.



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*Merry
Christmas*
& HAPPY NEW YEAR!



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