Since 2004, there has been rapid rollout of antiretroviral therapy (ART) providing treatment for about 5 million people in Africa. As a result, treatment coverage has increased and over 300,000 HIV infected individuals were on ART in Uganda alone by end of 2012. However, HIV treatment is confounded by challenges such as the high viral mutation rate and the need for lifelong ART, and so there is a public health concern about the potential for rapid emergence and evolution of HIV drug resistance (HIV-DR). There is therefore an urgent need to continuously monitor and control the development of resistance.

Testing for HIV drug resistance (in Uganda available mostly at national HIV-DR reference labs) is currently performed with protocols requiring very expensive and cumbersome transportation of plasma samples in liquid nitrogen. This has limited its use to mostly research settings where inference based on a few samples is made to generalize findings. In control programme settings, however, where field surveillance data is needed for monitoring and evaluating performance, one may need to test most of the patients in the country-side and it is inconceivable that plasma or serum samples can be transported from remote parts of Uganda in liquid nitrogen.

Prefering blood sample spots at the UVRI HIV Reference Laboratory (HRL)
Editorial

Dear Readers,

The global community is increasingly recognizing Africa as a burgeoning global power. With over a billion people, half of whom below 20 years old Africa is a potential source of human capital for the world. This can only be achieved with a good strategic plan that should be well implemented. An important observation is that unless there is heavy investment on the continent in science, technology and innovations Africa may not be able to realize the above dream. Funding from governments and regional entities supplemented by various funders will make very useful contributions to the realization of Africa’s dream. It is our duty to turn Africa into a preferred destination for investment of global resources and partnerships. The continent needs knowledge generating institutions that show sustained performance improvements in discovery, delivery, implementation science and knowledge translation. We owe it to the young generation to create an enabling environment that will enable development of emerging scientists to unleash their intellectual potential and engage fully in contributing to Africa’s development into a knowledge and evidence driven economy.

In this 21st century we must produce Nobel laureates. This thinking is not too far fetched as we have begun to see investments made so that the next Einstein comes from Africa. We must take bold decisions like this and one that led to the creation of the US National Academy of Sciences. Ralph J. Cicerone, one of the Presidents of US National Academy of Sciences said, “Creating the National Academy of Sciences in 1863, in the middle of the Civil war was bold……(T) he bold act can now be judged as a wise act, for science permeates our daily lives in ways unimaginable in 1863”. THRiVE should go down in the annals of history for making similar bold decisions.

Currently, there are about 400 Ministry of Health (MoH) accredited facilities providing ART country-wide in line with WHO guidelines. In these health facilities, viral load monitoring is rarely done and long-term virological data is therefore scarce. Consequently, ART is probably continued indefinitely in a portion of persons with virologic failure, providing a context for evolution of drug-resistant viruses. Moreover, there is no widespread surveillance method to evaluate the prevalence of drug resistance in the field and health center setting in Uganda, and available data comes from just a few published research study cohorts or trials.

So far we are finding that there is a significant emergence of primary HIV-1 DR in Uganda after rapid scaling up of ART. About 4.5% of the individuals initiating ART already have resistance, raising concerns about the risk of early treatment failure in patients with primary HIV-1 DR. There is a need to design interventions to prevent the transmission of HIV-1 drug resistance as a way of preventing treatment failure and improving patient outcome.

In this regard, UVRI/MRC and Makerere University in a THRiVE collaboration have sponsored my (H. Sendagire’s) post-doctoral training in which I am evaluating a cheaper and simpler method of collecting blood and blotting it on filter paper for use in HIV-DR diagnostics involving dried blood spots. The lab work is being carried out from three UVRI laboratories; the MRC basic sciences laboratory, the THRiVE co-funded UVRI centralized molecular biology/bioinformatics core laboratory and UVRI HRL QA/QC laboratory.

The collected blood samples are dried at room temperature to make dry blood samples (DBS). They are then stored and transported to the laboratory under ordinary conditions at room temperature and in an ordinary envelope. This method has been proven to work in many settings, in such a way that very useful results have been obtained by the Early Infant Diagnosis of HIV (EID) programme of the Ugandan MoH. However, the use of DBS in monitoring HIV viral load and HIV-DR resistance testing in field programmes in Uganda is a new adoption and had not been fully evaluated.

In addition, as part of this post-doc training, I spent 3 months at the London School of Hygiene and Tropical Medicine (LSHTM) between Oct and Dec 2012, working and doing courses in epidemiology. I thank so much the Wellcome Trust, the THRiVE consortium and the secretariat, field staff in the three research sites, Mbale, Nsambya and Masaka, the Department of Microbiology, the Ministry of Health, the UVRI laboratories and support staff for all the support they have accorded me during my post-doctoral training.

Membership of the THRiVE Advisory Board

1. Prof. Wilfred Mbacham, Chair, Rest of Africa
2. Prof. Hannah Akullo, Outside Africa
3. Dr. JPR Ochieng’Odero, Other Consortia
4. Prof. Jerome Kabakyenga, Uganda
5. Dr. Val Snewin, Wellcome Trust
6. Prof. Dominic Makawiti, Kenya
7. Prof. Ainory Peter Gesase, Tanzania
8. Prof. Nelson K. Sewankambo, Director, THRiVE
9. Dr. Saidi Kapiga, Deputy Director
10. Dr. Jean Baptiste Mazarati, Rwanda
fellow selected during the first phase of THRiVE, studied at icipe under the mentorship of Baldwyn Torto and Dan Masiga, in collaboration with David Spring of Cambridge University. Her work focused on the interactions between plants and the mosquitoes that carry malaria. This study on mosquito phytoceuticals was recently published in *Parasites and Vectors* (doi: 10.1186/1756-3305-7-312; PMID: 24996560). Sabina has since returned to her post as a researcher at the Kenya Medical Research Institute, with new knowledge and skills, and extended contacts within the THRiVE consortium.

icipe also welcomed two scientists on THRiVE mini-sabbaticals: Matthew Lukenge from the Uganda Virus Research Institute and Dorothy Ndagire from Makerere University.

THRiVE and icipe are also working to boost skills through training workshops. We recently joined a science-writing workshop at Kilimanjaro Christian Medical Centre in Tanzania, and have hosted a GIS training workshop, with participants from other THRiVE partners.

Our training activities within THRiVE have been boosted by an award of £5000 from the Cambridge-Africa Research Fund to hold a course on bioinformatics approaches for Next Generation Sequencing analysis, to be held at icipe in November 2014 (http://www.cambridge-africa.cam.ac.uk/initiatives/alborada-research/funded-projects-201415/). This is a growth area for icipe and THRiVE, as we recognize the critical role genomics data will play in identifying new tools for disease control.

Through joint research projects, and capacity building activities, we’re building stronger connections in East Africa. icipe looks forward to building stronger connections between the THRiVE partners, and boosting the capacity of East African researchers to understand and respond to health issues that affect the region.
THRiVE in Cambridge continues to buzz with activity on its own and as part of the wider Cambridge-Africa Programme which of course was born out of the achievements of THRiVE and MUII.

Cambridge was delighted to welcome THRiVE Director, Professor Nelson Sewankambo back to Cambridge in June 2014, to contribute to an interdisciplinary conference on ‘Making Scientific Capacity in Africa’. The conference was organised by the Centre for Research in the Arts and Social Sciences and Humanities (CRASSH) in Cambridge. The THRiVE representatives were Professors Sewankambo, David Dunne and James Wood. They took part on panel discussions on capacity-building in Africa as a moral imperative and ‘varieties of capacity experiences’. Professor Sewankambo expertly chaired a panel discussion on the role of African Universities in shaping capacity building. See photo below:

THRiVE in Cambridge is also very pleased to have been able to offer workshop places to five THRiVE research management and administration staff (Harriet Nambooze and Regina Namirembre of Makerere, Amina Farrah of KCMC, Arnold Mindra of Gulu University and Appolo Semirembe from UVRI) to attend a Research Management workshop that members of the University of Cambridge’s Research Operations Office organised at Makerere University in May 2014. The course was conducted as part of the CAPREX initiative (which falls under the Cambridge-Africa Programme), and aims to strengthen research management and administration capacity in Africa - a vital tool for developing sustainable excellence in research.

This quarter also saw Ronald Kiguba make his first visit to Cambridge, and there was a second visit for Amos Mwaka. Ronald undertook training to hone his skills in conducting Systematic Literature Reviews, and both Amos and Ronald completed and submitted research manuscripts, and gave oral presentations about their THRiVE fellowship research to a varied audience in Cambridge. They also attended several lectures and seminars (including those organised by the Cambridge-Africa Programme and the Centre of African Studies in Cambridge). Ronald presented a poster on at an Early Career Researcher Symposium on Public health in Cambridge, and Amos presented a poster at the National Cancer Intelligence Networks conference on cancer outcomes in Birmingham. Congratulations to Amos who had his paper published in the European Journal of Cancer Care.

THRiVE attending Research Management Workshop run by Cambridge Africa Programme in Uganda

THRiVE speaking at the Conference on Scientific Capacity Building in Africa run by Centre for Research in the Arts and Social Sciences and Humanities, Cambridge

Amos speaking about Cultural Perspectives on Preventing Deaths from Cervical Cancer in Uganda

Amos Mwaka with mentor Martin Rowland at the Institute of Public Health, Cambridge
It is also a new beginning for THRiVE in Cambridge, as we now have a part-time Coordinator — Sophia Mahoo. Sophia graduated from the Cambridge University School of Clinical Medicine in 2009, and has since worked on a variety of projects in the UK charity sector. She recently worked for Addenbrooke’s Abroad (a global health initiative that facilitates overseas health work for staff and students of the Cambridge University Hospitals), and administered partnerships with institutions in Botswana, El Salvador and Myanmar. We are confident that Sophia will be a great asset to the THRiVE and wider Cambridge-Africa Programme.

Message from Pauline: This will not be the end of my interaction with the THRiVE family, though, as I am currently coordinating the Wellcome Trust-Cambridge Centre for Global Health Research (which includes THRiVE as a partner) and the Cambridge-Africa Programme (which includes THRiVE). It has been a great, great pleasure working with such a fantastic team in Cambridge and East Africa for the past four and a half years, and I look forward to seeing THRiVE reach even greater heights, in the future. Àsante sana, and kwahe rini........

By Joseph KB Matovu, THRiVE PhD Fellow, Makerere University College of Health Sciences

I had the pleasure of attending the recently concluded ‘Emerging Scientific Researchers Conference & Meeting of the Wellcome Trust Research Capacity Strengthening Initiatives’ held at Lake Victoria Serena Hotel, Kampala, from May 20-22, 2014. This was my first appearance at this kind of meeting.

At the meeting, I presented a poster entitled, “I told her ‘I don’t trust you’… she also told me, ‘I don’t trust you [too]’”: Motivations for and barriers to couples’ HIV counseling and testing (couples’ HCT) among married couples in Rakai, Uganda”, which was one of 40 posters presented at the conference. By the time I received the email inviting us to submit abstracts, I had already completed data collection for the qualitative sub-study; one of the three that constitute my doctoral research entitled, “Demand Creation for Couples’ HCT, Linkage to and Retention in HIV Care among Married Couples in Rakai, Uganda”. This qualitative sub-study explored the motivations for and barriers to couples’ HCT in order to generate data necessary to inform the design of a community-based intervention to increase couples’ HCT uptake in Rakai, Uganda.

While at my poster, I received quite a number of individuals who were interested in my study; many of whom told me that they had chosen to come because the poster had a captivating title. One of the visitors told me that they last tested for HIV together during courtship but had never done so since they became married. There were also questions regarding my next course of action, having documented the motivations for and barriers to couples’ HCT uptake. I told them that the study was conducted as a preliminary step to gather data necessary to inform the design of a couples’ HCT promotional intervention and that the intervention is currently underway.

I must admit that I did not expect that my poster would attract the attention it did or be selected to be among the best posters presented at the conference. Nevertheless, while my poster did not win the award, I am pleased to mention here that it was among the best posters presented, and it was considered to be among the best six out of the 40 posters presented. When my name was mentioned, I was asked to stand up for recognition and later on, took a group photo with the other best oral and poster presenters.

The conference was a great opportunity for me to learn more about the research that other emerging researchers are undertaking, and I must admit that I was greatly mesmerized by the quality of the science and presentations made. One important message that I picked from the conference is the need for all of us — emerging researchers — to identify and conduct research that has got a great potential for further research. In other words, it is best to take time to think about the kind of doctoral research that we choose to conduct, so that when we do, our research can generate insights into further areas of research — areas that we can pursue as part of postdoctoral and future research.

I am grateful for the support from the Wellcome Trust (UK) for funding my research through THRiVE and for the financial support that enabled me to attend the conference. I am happy that my abstract was selected out of over 170 abstracts that were submitted to the conference. I am also grateful to the THRiVE Consortium Secretariat at Makerere University College of Health Sciences that coordinated the production of posters and provided useful insights during poster preparation. I am particularly grateful to Ms Harriet Nambooze who coordinated the printing of the posters and ensured that we had a quality product to present.

My Experience at the Emerging Researchers’ Conference, Kampala, Uganda
The mission of any university is built on the pillars of education, research and service and these three are mutually reinforcing. Generally universities strive for excellence. While the road to excellence is paved with ambitions and good intentions but clearly these are not enough to realize the expected rewards. We at Makerere University College of Health Sciences which is home to THRiVE Secretariat look back over the last 5 years to review a few of THRiVE’s contributions to the university’s progress towards sustainable academic excellence. Although developing or sustaining excellence requires dedicated effort sustained over long periods of time THRiVE has certainly made significant contributions to the long match to institutional research excellence.

A vital area that is often neglected by many institutions and funders alike is paying adequate attention to enhancing institutional research administration and management (RAM). Significant progress has been made and broken new grounds that the College had never engaged in. Examples include developing a College grants and contracts office which is positively changing the face of resource mobilization and management. In addition the university has opened its attention to Masters’ level training in RAM. One of our staff has graduated after online training for a Masters’ degree in Research Administration. This has already influenced another university in Uganda, Mbarara University of Science and Technology to pursue the same route. Researchers need competent research administrators in order to conduct quality research with minimum administrative hurdles.

Building and supporting the next generation of researchers through doctoral and post-doctoral training has been one of our major focus areas. We have previously emphasized our incessant attention to quality education and training through joint supervision (between United Kingdom and African institutions academics), dedicated mentorship and attendance of relevant course work as required. We believe that well selected course work is essential to quality doctoral education. In addition trainees should acquire soft skills like grant writing, both oral and written communication and project management which are all necessary to be a successful researcher. Attention must be paid to issues of research integrity, ethical and responsible conduct of research to prevent some vices like plagiarism or unethical human and animal research.

The institutional environment itself has increasingly become more supportive to researchers and trainees. Speed of and access to Internet communication has markedly improved and clearly information, communication technology (ICT) is an enabler that must receive as much attention and support as for example laboratory reagents and supplies.

The value and synergies achieved through multidisciplinary partnerships within Makerere and with other institutions in THRiVE, in the country and globally cannot be over-emphasized. That is an aspect of doctoral training that trainees have greatly enjoyed and found very beneficial as it exposes them to different capabilities and creates opportunities for networking and bidirectional knowledge sharing.
Developing a new Masters course in Epidemiology and Applied Biostatistics (MSc EAB) at KCMU

THRiVE support to the conception, birth and development of the course

By Jim Todd (LSHTM/KCMUC)

The idea for a new course was conceived early in 2010. The mother of the course, who carried the course to term and delivered the programme to expectant students was Kilimanjaro Christian Medical University College (KCMUCo). The concept was enabled through EDCTP funds for supporting students and courses within East Africa. The money came through Kilimanjaro Christian Research Institute (KCRI) and supported four students in the first year.

Fertilization of the idea came from LSHTM, and specifically from David Mabey. LSHTM has developed and delivered many different courses for Masters level training in Epidemiology and Biostatistics. A LSHTM Senior Lecturer, Jim Todd, had helped develop many different short courses in East Africa, teaching Epidemiology, Biostatistics and Research Methods in a range of different institutions. Using THRiVE funds LSHTM recruited Jim Todd to develop short courses to enhance research in East Africa (THRiVE’s mandate is Training Health Researchers in Vocational Excellence). Jim soon realised that short courses were not enough and, in March 2010, he joined up with a recent PhD graduate, Seif Shekalaghe, to develop the Masters curriculum.

The midwife to the course was the THRiVE Education and Small Grants Committee. Headed by Hugh Reyburn, in early 2010 the committee carried out an Assessment of Training needs among THRiVE partners. In the responses, Epidemiology and Biostatistics was top of the list. Despite the short courses available, it was difficult to put them together to get a rounded out view of how to use the different methods, which methods were appropriate for different studies, and how to integrate the statistical methods with other disciplines. Many comments were received about the need for a longer more integrated approach to research methods, including study design, epidemiology and applied biostatistics. Other support for the course came from THRiVE, by purchasing a proper computer lab for postgraduate teaching (64 PC computers and a dedicated fibre optic internet connection).

For the course to be a success, the modules needed to be properly prepared. Jim Todd, Seif Shekalaghe and Jonathan Levin (Uganda Virus Research Institute) met in July and spent a week developing four modules that would be the basis of the MSc in Epidemiology and Applied Biostatistics (MSc EAB). These were the introduction to different regression techniques (Linear regression, Logistic regression and Poisson regression, along with a simple description of Likelihood). The MSc would utilise many of the modules from the LSHTM Masters in Public Health to teach students about Epidemiology.

The students were enrolled on the new course in October 2010. The new modules were popular, with an extra 5 students turning up for the regression modules. However it was difficult, as the background the students had in statistics was poor, and a lot of time was spent in basic statistical concepts. In 2011, Jenny Renju was appointed as a new joint LSHTM/ KCMU College Senior Lecturer in Epidemiology. Jenny not only reorganised the Epidemiology modules, which were useful for both MSc EAB students and MPH students, but she also devised the idea of a Foundation course. The Foundation course is for all Masters students in KCMU College, and covers the basic topics of Epidemiology, Basic Biostatistics, and Research Methods. This has taken three years to develop into a proper, integrated course, but it has been worth watching it grow. The sessions have changed from didactic lectures on Research methods to a more practical-based approach based on the development of a research proposal. This has included group work focused on an Outbreak investigation, and practical analysis using the free Epi-Info software. We are confident that the majority of masters students graduating from KCMU College can now analyse the data from their own research project.

By the second year of the course, external lecturers were being asked to come and contribute to the course. Two advanced modules were taught by LSHTM lecturers, and one by a lecturer from the University of Copenhagen (through the BSU collaboration). Two different NIMR centres contributed lecturers in different areas, with Bruno Mmbando (NIMR Tanga) teaching the R module, and Wambura Mwita (NIMR Mwanza) teaching the Logistic regression modules.

The first year of students graduated in 2012. Although the course was difficult for them, and still being developed while they were being taught, both students and staff learned some new and interesting concepts in epidemiology, statistics and teaching through those times. It did not do those students any harm, as after they graduated they are now teaching four modules on the MSc EAB (with mentoring from senior staff) and three out of four have enrolled in PhD studies.
In the THRiVE news of June/July 2013 edition, I discussed the need for East African senior researchers, universities and research institutions to induct undergraduate students in scientific research early. I argued that doing so would attract some of our best undergraduate students to the field of multi-disciplinary and multi-professional research. In part I said: “... a group that will enjoy doing research driven by the passion and a desire to make the lives of fellow human beings worthwhile, and their environment safer to live in”. In this edition of THRiVE news, I share my experience in interacting with the students of Nabisunsa Girls’ Secondary School in order to keep alive my arguments for inducting students early in the process of building a critical mass of researchers for future East Africa.

Gulu University in collaboration with Muni University, Uganda National Council for Science and Technology (UNCST), and the University of Osaka, Japan organized an international scientific conference on behalf of the Society for Advancement of Science in Africa (SASA) on May 6-9, 2014. Five senior four students from Nabisunsa Girls’ Secondary School participated at the conference on the recommendation of the UNCST. The students not only confidently presented a science project to improve water supply to their school but they also supported various speakers by operating projector system to the delight of all senior researchers at the conference.

On the last day of the conference, I invited four of the students to sit with me at lunch so that I would encourage them to pursue research in their respective careers. Two of the students planned to be electrical engineers in order to make life better for Ugandans. The two students argued that there was no justification for Uganda to experience power blackouts since the country was rich with plenty of sunshine, biomass and water falls on many of the rivers in the country. Two other students planned to be medical doctors, with one of them saying she wanted to be a general physician and a researcher. The second student planned to be a pediatrician that would ensure she worked to improve the lives of children in northern and northeastern Uganda.

Were these students engaged in wild dreams? Indeed the students themselves said that their colleagues and some teachers thought they were daydreaming. To check out, I asked each of the students some questions in order to gauge their academic potential and aptitude, and to encourage them to pursue their dreams realistically. It was no surprise that the school sent them to the conference. Each of the students was an “A” student. They were all articulate in communication. I firmly believe that it is feasible to induct young aspirants such as the students from Nabisunsa Girls’ Secondary School into the field of research. The challenge should be to search for ways of identifying such aspirants early and to encourage them to pursue their research interests alive before they join university. Is THRiVE willing to take on the challenge? Yes, I believe THRiVE should.
New postgraduate courses and joint research projects: LSHTM’s contribution to THRiVE

practical skills in research methods, epidemiology and biostatistics. Materials from LSHTM MSc Biostatistics courses were adapted to develop modules in the college, and lecturers were invited from NIMR, UVRI and LSHTM to help deliver the initial courses. To support the course, KCMU College formed the Department of Epidemiology and Biostatistics.

Teaching practical skills in Epidemiology and Biostatistics is essential to all Masters level students. After the first year, Jenny Renju (LSHTM and KCMU) developed a 6-week Foundation course which was taken by all Masters level students (around 70 students per year), and which taught basic concepts, and skills using Epi-Info. The benefits of this are that all students are now expected to analyse and interpret their own project data (which had not always been the case beforehand). With the backing of the Director of Postgraduate Studies, and in collaboration with the DANIDA-funded ‘Building Stronger Universities’ programme, the Masters courses in KCMU College were revised to incorporate shared modules across the different MSc programmes. PhD candidates, and external students, were then able to take selected modules, which brought in short course fees to the College.

There were 4 students on the first year of the new MSc course, who not only learned the statistical skills for themselves, but also had the opportunity to provide assistance to other students and staff during, and after, their studies. On completion, three of the four students have now enrolled in the PhD programme in KCMU College. Student numbers are building slowly, with around 16 new students accepted for the 2014/15 academic year. With limited staff numbers, the most difficult aspect is the student attachment for research experience, and the supervision of the projects in the second year of the course. However, five members of staff from KCMU College will have completed the course by 2015 and they will be mentored to provide supervision to future students, and to lecture in various MSc and undergraduate programmes. With the difficulty in finding good epidemiologists and biostatisticians in Tanzania, becoming self-reliant and growing your own is definitely a viable alternative.

The East African DTM&H course was set up in 2011 as collaboration between LSHTM KCMU, Makerere University, John Hopkins University and the University of Washington. The course is offered to 40 fee-paying international doctors each year, and scholarships are available for 20 East African doctors. In addition to teaching on clinical aspects, laboratory diagnosis, prevention and control of diseases of public health importance in the region, students are given an introduction to research methods, and are expected to do a short research project while on a rural placement in Tanzania. In June 2014, one group presented a poster describing the results of their research at the British Infection Association meeting in London, and were awarded the prize for the best poster.

New Research Projects:

Jim Todd and colleagues at KCMU were recently awarded a two and half year project, “SEARCH”, funded by the Bill and Melinda Gates Foundation. SEARCH is a new project aiming to develop the analysis of routinely collected HIV data in Malawi, Tanzania and Zambia, thereby leading to strengthening of health services and transparency on the equity and benefits of HIV services. An essential component of the project is the training of three data analysts from the Ministries of Health in each country, enabling long-term sustainability of the project.

The foundations of the project were laid in Tanzania, with previous work on the national care and treatment clinic (CTC) database. In 2010 and 2013, LSHTM supported the Tanzanian Ministry of Health in analysing and writing the national HIV Care and Treatment report, and in doing so developed some of the analyses that could be used in the SEARCH project. The results will help identify gaps in services and groups of people who are particularly at risk, and will shortly be submitted for peer-reviewed publication.

The SEARCH project will develop new analyses of CTC data, prevention of mother to child transmission (PMTCT) data, and HIV testing and counselling (HTC) data, and these promise to uncover some of the impact that routine HIV services are having on the lives of Tanzanians. In Tanzania, the training of the data analysts will be done in collaboration with KCMU College, where the three analysts will be enrolled into a PhD programme, thereby giving recognition of their work. The research questions, analysis and interpretation will be developed in conjunction with personnel from the Ministry of Health and Social Welfare, academics from KCMU College and LSHTM staff. Further background and output from SEARCH are available on our website: searchproject.lshtm.ac.uk. On the same theme of promoting collaboration between policy makers and the research community, Jim Todd and colleagues at KCMU, NIMR and the University of Copenhagen submitted a successful letter of intent to the EU in response to a call for supporting public health institutes; they are now working on the full proposal, which will be submitted in August.
My PhD Experience; it is a Journey of a Lifetime

Stella Kepha, Makerere University College of Health Sciences

I embarked on my PhD studies, three and half years ago with zeal, enthusiasm and an action plan of how this PhD process would unfold. The process has been a long journey totally different from how I had imagined it would be, however I have had learning opportunities that have made me a better person. The first hurdle was to get approval from Makerere University where I'm registered as a graduate candidate and Kenya Medical Research Institute (KEMRI) which authorizes medical research in Kenya. The back and forth from the two committees helped me gain a good grasp of research questions. With the approval the next step was to identify a suitable site for the study. The area that we had previously proposed in the then Nyanza province proved to have low prevalence of the worms we were interested in and the community was not accommodative to the prospect of a new study, because there have been several studies conducted in the last decade. This took me back to the drawing board; because of the ongoing national deworming programme it was not possible to assess the current worm prevalence based on available published data. Conducting a country-wide survey to identify a suitable site was not a feasible task for me because of logistics (time, funds and infrastructure).

Fortunately in March 2012, KEMRI did a nationwide survey from which I was able to pick three districts as potential study sites. I then visited the districts assessing them for various factors such as infrastructure, community’s receptiveness, presence of other on-going research activities etc. I finally settled on Bungoma County, which has seven districts. Next I visited all the seven districts to get permission of the local government leaders to conduct a pilot to pick the best district. From the pilot, Bumula district had the highest prevalence of worms. Before starting any activities I had to meet the government official, local leaders and religious leaders which was followed by community meetings from where I got consent from willing parents. As I was writing my proposal I had no idea that this was the path that I was to take; setting up a clinical trial is a very slow, time-consuming and expensive process that sometimes lacks tangible deliverables. For me this was challenging yet rewarding, it has helped me gain skills that I would not have acquired in a lecture or a book. I have had opportunities to give talks in local leader’s meetings, churches and school meetings. Working and talking to a range of people from diverse cultures and backgrounds has boosted my confidence, improved my public speaking and presentation skills. I have organized and conducted seminars with both head teachers of the study schools and field workers recruited to carry out community mobilization and consenting. In addition, in my study which is co-funded by the EU-IDEA consortium; I bear the responsibility of ensuring that both the THRiVE and IDEA financial statements of the disbursed funds are up to date. Finally conducting the study has given me competencies in organizing, planning, negotiating and managing people, a skill important for an independent researcher; which is my aspiration.

Currently the study is in its eighth month of active case surveillance; we have 2,200 children who are visited twice every week and assessed for malaria. In the last three years I have built competencies and skills necessary to set up and run a clinical trial study. I have also benefited from my supervisor’s Prof. Simon Brooker’s scientific network by attending meetings and having informal discussions with his professional colleagues. This has been beneficial for my research work and has expanded my scientific network.

During this period, I visited LSHTM in May where I was able to get practical orientation in using STATA; I also registered and/or attended some courses, including; statistical methods and epidemiology (SME) and spatial epidemiology for public health. The visit also enabled me work closely with my supervisor to discuss my plans and progress. I was assigned Dr. Birgit Nikolay with whom we explored my data and identified gaps that still needed further follow up. By the end of my stay, I had submitted one abstract for the American Society of Tropical Medicine and Hygiene, had a draft manuscript and an outline for a second one.

Calling out the register during a follow-up exercise to one of the schools
My PhD Experience; it is a Journey of a Lifetime

During my stay at LSHTM, I was surrounded by epidemiologists who have a good grasp of statistics and were happy to answer my questions and help me think through my data. The LSHTM has a vibrant academic and scientific environment with many seminars and talks organized on various themes every given day. It was good to hear what’s currently happening and I was inspired to give a talk in KEMRI which I have scheduled for July. I was able to interact with various PhD students from different fields which expanded my scope of knowledge and birthed new research ideas.

THRiVE has been a wonderful experience for me; it has given me ‘licence’ to do science by funding my PhD undertaking. With the experience from Kenya, Uganda and London am confident that I will be able to write a solid thesis.

My Experience at London School of Hygiene and Tropical Medicine

By Sam Ononge, Makerere University College of Health Sciences

As an ‘occasional’ student in London School of Hygiene and Tropical Medicine, it was great opportunity to do two in-house short courses (‘Advanced Statistical Methods in Epidemiology’ and ‘Statistical Analysis with Missing Data’) and spend 3 months from April to June 2014 in a very motivating academic setting. By the end of June, it was hard to believe it was time to return home. It felt like I had just been there one month. The whole period was a race against time doing the course work and analysis of data of my project. My skills in data management, ability to conduct statistical analysis and interpretation of results were greatly enhanced by the two courses. I was impressed by the well-structured lectures and practical sessions managed by dedicated academic staff who shared their experience and advice. Every day had its own experience.

The researcher (extreme right, second row) poses for a photo with school head-teachers after a meeting

Sam Ononge poses for a photo with Wellcome Trust Masters students and staff
My Experience at London School of Hygiene and Tropical Medicine

My favorite part of the course was the practical of each lecture and group discussion where classmates (MSc and PhD) were of great help. I enjoyed the well-equipped 24/7 computer study rooms and support from IT department.

My words aren’t enough to express my appreciation to my supervisor Professor Oona Campbell and staff of Department of Epidemiology and Population Health for their caring and continued support I received. Professor Oona was very supportive and enabled me meet a number of young and senior academicians within and out of school. Having an Obs/Gyn background gave me a unique position as a reproductive consultant to young academicians who are pursuing their careers in maternal health. This being my first time at London School Hygiene Tropical Medicine, I am grateful to Frankie Lewis (LSHTM THRiVE coordinator) and David Mabey for their care and support. I truly can’t emphasize enough my appreciation for the support I received.

I had an opportunity to share my ‘journey as a PhD student’ with Wellcome Trust funded MSc students in their final year of masters course. It was so good to see in the meeting organized by Wellcome Trust, a number of faces who attended Advanced Statistical Methods in Epidemiology Course. I felt happy and grateful to Wellcome Trust that I could share my experience with other upcoming and potential PhD students. You never know, that presentation may have influenced their career path. That meeting was a great opportunity for me to learn the various funding support by Wellcome Trust to different initiatives. Likewise I was inspired by Dr. Charles Wondji from Liverpool School of Tropical Medicine, who passionately shared his humble beginning as a young researcher, whose determination and hard work have seen him build his research career on Mosquito biology and genomics to the level he is now a Senior Wellcome Trust Research Fellow.

My experience on THRiVE Mini-Sabbatical to THRiVE Northern Institutions

By Regina Namirembe, Makerere University College of Health of Sciences

In March 2014 (17th – 21st), Harriet Nambooze and I travelled to London School of Hygiene and Tropical Medicine (LSHTM) and University of Cambridge on a mini-sabbatical grant visit.

We were fortunate to visit LSHTM when there was a one-day course for staff on “Introduction to Project Management”, which we attended. We went through the project lifecycle from the concept phase to the close of the project. The course involved group discussions and exercises which made it more enriching. The facilitator emphasized planning well, managing risks, keeping and involving and managing all stakeholders. All of which are key elements to an institution like MakCHS whose research profile is continuing to grow.

We spent day three meeting with various officers at LSHTM especially those who are in research administration and management, among them the Coordinator of the Bloomsbury Centre for Global Health Research who introduced us to the operations of the centre and the general administration at LSHTM. The centre recruits and trains scientists in global health research, provides support and training to researchers. It was fascinating knowing the central services departments of human resources, research operations, finance, IT support and procurement. All these departments talk to each other through an accounting system known as “Agresso”. The system links all departments together. Learning how the Agresso system works was very timely as Makerere University College of Health Sciences is in the process of establishing a Research Support Centre. At the Research Operations Department, the Research Finance Officers took us through a demonstration of how the Agresso system actually works. The fact that the system can send reminder to the PI and administrators when project reports are due, makes it a necessity at MakCHS where individuals work very busy schedules.

We were also privileged to meet with the Overseas Projects Coordinator who took us through the process of applying and managing grants both at LSHTM and with the overseas projects.

We spent a day at the University of Cambridge, where we visited the Universities’ Research Operation Office (ROO) and met with the Training Manager of this office who took us through the operations of the office. We also visited the Department of Veterinary Medicine and met with administrator of the department who also shared with us how she carries out the administrative duties of the department. The visit to the two UK institutions was very educative and informative, especially learning how research administration tasks are handled in a developed world.