CELEBRATING 12 YEARS – THRİVE GULU UNIVERSITY

MAY 2021
THRiVE-GULU UNIVERSITY LEADERSHIP

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MAY 2021

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This year marks the twelfth anniversary of a formidable research collaboration between Gulu University and Training of Health Researchers into Vocational Excellence in East Africa (THRiVE) program. The story begins in 2009 when the Northern Region, Uganda was beginning to heal from more than two decades of war, challenged by vector-borne diseases such as malaria and river blindness transmitted by mosquitoes and black flies, respectively.

However, in the last 12 years, with funding from THRiVE, the university has made great strides in research, infrastructure development and research mentorship. In keeping with the University’s motto, ‘For community transformation,’ students and staff of the university have undertaken various research projects to improve on the life of the local populace in the region. For example, Dr Richard Echodu, a Senior Lecturer and Director, Multifunctional Research Laboratory obtained a THRiVE Career Development Award to undertake research to determine the insecticide resistance levels in mosquitoes in northern Uganda. The outcome of his research, reaffirmed that it is essential to use alternative insecticides for indoor residual spraying in the region rather than the commonly used pyrethroids to which mosquitoes have developed resistance. It also emphasized the need for continuous monitoring for insecticide resistance.

Going forward, we aspire to create more innovative and progressive research projects that impact on policy and practice. The COVID-19 crisis has showed, more than ever, the value of nurturing strong research partnerships in order to deal with emerging health crises. Right across the university, our researchers have risen to the challenge, bringing their expertise in epidemiology, diagnostics and clinical practices to address the pandemic. Thus, the university will continue to strengthen its partnership with THRiVE so that we’ll grow into an institution renowned for producing outstanding research in neglected tropical diseases, communicable and non-communicable diseases.

I hope you will enjoy this special anniversary magazine which looks back on the achievements attained by the university courtesy of THRiVE; highlights of research undertaken and activities of community engagement undertaken by our researchers.

Prof Elizabeth A. Opiyo
THRiVE-2 Gulu University Co-Applicant
SIGNIFICANT EVENTS FOR THRiVE AT GULU UNIVERSITY

1. **2009**
   - THRiVE Collaborates with Gulu University to foster science research

2. **2010 - 2012**
   - Several capacity building trainings held e.g ICT, SPSS and grants.

3. **2013 & 2014**
   - First masters scholarships awarded; establishment of a Grants Management Unit, New Multimedia ICT lab established

4. **2015 & 2016**
   - Pump Priming Grants awarded;

5. **2018**
   - THRiVE awards 5 researchers with Career Development Awards and 4 students with Masters Scholarships

6. **PRESENT**
   - Establishment of a Graduate Resource Centre; Introduction of the QuickBooks financial system
THRiVE was established in 2009 with an underlying 10-year vision of developing a regional network of research excellence, including some of the best universities and research institutions in East Africa. THRiVE’s vision is that by 2030, Africa will lead research that has a major impact on health in the region and make significant contributions to world health. THRiVE thematic areas are Infectious diseases/neglected tropical diseases (IDs/NTDs); Maternal, neonatal and reproductive health (MNRH); communicable diseases (CDs) and Non-communicable diseases (NCDs).

Gulu University is THRiVE’s partner institution in northern Uganda, a region that is at the epicenter of emerging and re-emerging diseases. The northern region is a post-conflict area recovering from a more than two decades of war. The district faces numerous challenges of vectors and vector-borne diseases in addition to other health threats such as mental health illnesses, Ebola, Bilharzia, River Blindness and Nodding Syndrome. Furthermore, the region is prone to influxes of refugees from the neighboring countries that are sources of imported NTDs, IDs and some of the emerging and re-emerging diseases.

Therefore, since its inception, THRiVE has collaborated with Gulu University in order to produce world class scientific research that addresses the prevailing health challenges in the region.
MEET THE CURRENT THRiVE-2 GULU UNIVERSITY TEAM

Prof. Elizabeth A. Opiyo
Co-Applicant, THRiVE-2
Gulu University

Dr Tabo Olok
Geoffrey-IT Support Officer, THRiVE-2 Gulu University

Robert Kiduma -
Research Administrator, THRiVE-2, Gulu University

Walter Onen Yagos
- Monitoring and Evaluation Officer, THRiVE-2 Gulu University

Charles Opira –
Finance Officer THRiVE-2 Gulu University
Opiyo is a Professor of Parasitology in the Department of Biology at Gulu University and co-applicant with THRiVE. She wields a four-decade long research career in vector-borne (VB) Neglected Tropical Diseases (NTDs). Most of her research has been on tsetse flies and trypanosomiasis (T&T) and on mosquitoes and malaria with a view to understand the epidemiology that would inform target interventions. Previously, Prof. Opiyo has worked as Director for the Institute of Research and Graduate Studies at Gulu University; Deputy Dean, Faculty of Science - Gulu University; Expert seconded to the Pan Africa Tsetse and Trypanosomiasis Eradication Campaign (PATTEC) Coordination Office, Addis Ababa, Ethiopia; Research Entomologist, International Atomic Energy Agency; Kenya Trypanosomiasis Research Institute (KETRI), Muguga, Kenya, currently called the Biotechnology Research Institute and Principal Research Institute. Additionally, Prof. Opiyo is a Global Assessor with the Royal Society of Tropical Medicine and Hygiene and continues to mentor junior faculties especially in the area of NTDs and VB diseases.
Dr Tabo Olok Geoffrey-IT Support Officer, THRiVE-2 Gulu University

Tabo is a lecturer at the Department of Computer Science at Gulu University. He holds a PhD in user-driven innovation, learning and design from Aalborg University, Denmark and a Master of Science in Computer Science from Makerere University, Uganda. In addition to teaching and research obligations, he is active in outreach activities. His involvement in research spans over a decade of working in many research and development projects in higher education. He does research in user driven innovation, learning and design. His other research areas include eHealth, eLearning, Human Computer Interaction and Information Systems. His journey with THRiVE is a positive culmination of research and career growth.
Robert Kiduma - Research Administrator, THRiVE-2, Gulu University

Since 2009, Robert has dedicated himself to research and grants management by serving in various capacities as Research Administrator, Project Coordinator, Finance Officer and Ethics Administrator. He has been at the fulcrum of small, medium and large-scale research undertakings where he has performed duties on research operations, grantsmanship, financial management, and ethics and integrity administration. He has played a key role in the mobilization of resources and management of over 15 projects. As the Ethics Administrator at Gulu University, he has organized and effectively coordinated the ethics review and compliance of over 350 Research protocols from within and across the globe. He contributed to the development of the National Research Information Management System (NRIMS), by Uganda National Council for Science & Technology (UNCST). The system aims to enhance the effectiveness and efficiency of managing Research Ethics in Uganda. Subsequently, he has trained Research Ethics Reviewers and Investigators in the use of NRIMS. As a promoter and defender of research interests, he looks forward to the moment where research will be at the core of decision making in the determination of development initiatives in Uganda.
Walter Onen Yagos - Monitoring and Evaluation Officer, THRiVE-2 Gulu University

Yagos has served and has experience working as a Librarian in Gulu University for more than 17 years. Yagos holds a Bachelor’s Degree in Library and Information Science from Makerere University and Master of Public Administration and Management from Gulu University. Currently, Yagos is the Head of Medical Library at Gulu University where he has served for 11 years. He serves in various projects and is the Monitoring and Evaluation Officer for THRiVE-2 Gulu University. He is also a Vice Secretary of Gulu University’s Research Ethics Committee and member of AFREhealth Library and Information Science Working Group. Yagos is a multidisciplinary scholar with strong knowledge, skills and experiences in medical library management, public administration, research methodology, teaching, research ethics and human subject protection. He is dedicated to promoting modern academic library services including use of ICT for health. Based on his research and academic profiles, Yagos is currently a reviewer for several international journals including International Journal of Health Policy and Management and Medicine Access @ Point of Care: SAGE Journals
CONTRIBUTIONS OF THRiVE TO GULU UNIVERSITY IN THE LAST 12 YEARS

GRADUATE RESOURCE CENTRE

In September 2020, Gulu University unveiled a state-of-the-art graduate resource centre for science students at the Multifunctional Research Laboratories. This Centre is equipped with computers, software for data analysis, reference management software and other equipment to support research. This resource center doubles as a research ideation, research presentation and knowledge sharing environment for researchers in biological and life sciences. Additionally, it provides an interactive research atmosphere for peer learning and mentorship amongst graduate students and researchers. The center contributes to improving the research environment at Gulu University by providing high-end ICT infrastructure, equipment, and services for researchers.

Dr. Tabo Geoffrey supervising staff duties in the Graduate Resource Center.

CAPACITY BUILDING FOR FACULTY & SUPPORT STAFF

THRiVE has supported several trainings at Gulu University including data management, Endnote reference manager, SPSS and grants writing trainings. In May 2012, Prof. Emilio Ovuga, the THRiVE co-applicant then, and two senior researchers at the university conducted a three-day intensive course for 10 members of the university academic staff in writing scientific publications and grants writing. The objectives of the publications training workshop were to create a critical mass of mentors in grants writing and scientific publication and promote inter-disciplinary and multi-professional collaboration in research.
and publications. Since this training, the number of academic publications has steadily risen.

**RESEARCH ADMINISTRATION AND GRANTS MANAGEMENT**

Progressively, the university is moving towards institutionalizing research administration. Under the leadership of Prof. Ovuga, a research grants unit was established. This unit frees researchers from the daily hassles of financial and other aspects of research management, thus that ensuring that faculty focus on the science which guarantees that the quality of research conducted at the institution is valid and of credible standard. The GMU at Gulu University’s Faculty of Medicine consists of six sub-units, namely: Finance and Accounts, Administration, Scientific, Grants, ICT, and Internal Audit. The Finance and Accounts sub-unit is manned by a Finance and Accounts Officer, an Accounts Assistant and an Assistant Cashier. By the time of its establishment in 2010, the administration was getting fairly organized and starting to apply for grants. Currently, over 50 grants have been won by Gulu University staff owing to the new research activities at the university. Faculty staff are now venturing into research and publication apart from their routine teaching.

THRIVE-Gulu University established a formal research management structure with positions including Co-PI as the overall coordinator, administrator, IT officer and finance officer.

**GULU UNIVERSITY RESEARCH AND ETHICS COMMITTEE (GUREC)**

THRIVE was instrumental in establishing the Gulu University Research Ethics Committee (GUREC) which grants approval to academic and other research projects. Since its establishment in 2011, GUREC has seen an increase in the number of proposals that are ethically reviewed. The committee also conducts ethical reviews of proposals from other universities such as Lira, Muni and Soroti. Before THRIVE came in, only medical studies were being ethically approved and this was being done at different institutions such as Makerere University.

**I.T. INFRASTRUCTURE DEVELOPMENT**

At the time of THRIVE’s inception into the university, it (university) had only 128 kilobits per second which was extremely low and most of this was going to the department of Computer Science. Today, through the support of THRIVE and other projects, the university has increased its bandwidth to 40 megabits per second, which is much faster. Additionally, Gulu University’s internet connectivity is now through optic fiber rather than copper. THRIVE also supported the development of an IT policy to be able to integrate new tools into the research environment at the university. Additionally, under THRIVE-1, the Faculty of Medicine received 30 new computers.
We are grateful to THRiVE for training our staff to undertake research and this has built the capacity of our science lecturers. Beneficiaries of THRiVE are transferring these skills to students and other staff. Currently, we are in the process of expanding our research scope from areas such as parasitology, tsetse fly and mosquito control to agricultural research. Additionally, we want to expand our laboratory capabilities so that we can have more teaching laboratories in order to strengthen our research and teaching capacities.
The greatest impact that THRiVE has had on the University is that it has built research capacities of students and staff. Additional grants from the National Institutes of Health (NIH) and World Health Organization further boosted training of postdoc; PhD and Master’s students, which all contributed to raising the research portfolio of the university. Under THRiVE, the University also purchased and installed closed-circuit television (CCTV) cameras at the Faculty of medicine library. This new development saw a reduction in the theft of books and vandalization of property. Prior to the installation of these cameras, people would vandalize even the sockets. Furthermore, through THRiVE and the NIH-funded project dubbed Medical Education Partnerships Initiatives (MEPI), we rolled out fiber cable to the entire university. I am also proud to say that I was able to instill professional discipline among medical students.
We are grateful to have THRiVE in Gulu district. Gulu is recovering from a decade long war & is confronted with many infectious diseases & NTDs. We need researchers decipher these new diseases.

Universities ought to position themselves as powerhouses that can conduct research to offer solutions to day-to-day problems such as NTDs. We are thankful to THRiVE for the capacity building it is offering our researchers to be able to conduct this research.
Prof. Elizabeth A. Opiyo

THRiVE’s career development awardees have boosted the research capacity of the university through their research on topics such as infectious diseases and NTDs. The findings from some of this research is transforming policy. For example, for more than a decade, Gulu and Pader districts in the northern region have utilized mass drug administration (MDA) of ivermectin to control river blindness. This has significantly reduced the disease in the area and locals say that the MDA should continue. Lately, we are working on traditional medicine used for TB treatment and we are teaching locals how to preserve these plants. Some of the THRiVE-1 awardees are currently pursuing PhDs and some have risen to the level of associate professor.

Robert Kiduma

Traditionally, there was a thick wall between researchers and research administrators but now there is a mutual working relationship between the two. Trust between researchers and administrators has been built over time. On my part, I have been able to disseminate funding opportunities to researchers; helped faculty to develop research budgets and prepare documents for submission for approval to the ethics committee and Uganda National Council of Science and Technology (UNCST). Additionally, we used to conduct most of our trainings in hotels because we lacked confidence in our systems. However, THRiVE came with a policy that all trainings should be held in-house and now we host events within the university which has helped us manage costs. Also, the robust annual audits done by THRiVE have helped to boost the university’s reputation. My advice to universities like ours is to institutionalize research management and not just leave it to be funded by projects. There has to be a sustainability mechanism.

Walter Onen Yagos

Through THRiVE, I joined GUREC where I have worked as vice secretary for six years. I appeal to THRiVE to bring more computers for post graduate students. We have also been missing out on PhD scholarships and it will be good if the university benefitted from them. I also appeal to THRiVE to expand the thematic areas to include pure sciences such as chemistry and mathematics.

Dr. Geoffrey Tabo

Working with various researchers on THRiVE was a springboard for me to pursue a PhD because I was exposed to research and mentorship. I applied for funding from the Danish International Development Agency (DANIDA) to pursue a PhD in ICT and learning. My PhD explored designing infrastructure for learning and human praxis. This study emphasized socio-cultural and socio-technical perspectives. The argument I made in my thesis is that practice should be able to shape technology but not
vice versa. This implies that technology should afford what we want to practice.

I completed my studies in 2020. I have worked with and mentored many masters students and examined theses from different faculties such as the Faculty of Business and Development studies. I continue to receive more mentorship from Prof. Elizabeth A. Opiyo.

To further improve the research climate at Gulu University, THRiVE can facilitate the formation of research teams which then become knowledge groups and these can also double as mentorship forums for younger researchers. These teams can be within a given health domain that could promote inclusion of different disciplines to tap into health. THRiVE can also identify research leaders/mentors to encourage researchers from other disciplines such as business, communication and finance to participate in health research. This can help them relate their professional orientation to health. This will expand the horizon of what we know in health.

Charles Opira – Finance Officer THRiVE-2
Gulu University

THRiVE has equipped me with skills and knowledge to handle multiple grants such as the Wellcome Trust and National Institutes of Health Grants. I have learned to adhere to financial reporting timelines; work with different reporting templates and I am knowledgeable about the allowables and disallowables of different grants. When I joined THRiVE-1 in 2016, we were manually feeding in information into an excel sheet. However, with THRiVE-2, QuickBooks, an accounting software package, was introduced and rolled out to the entire university. Working with THRiVE encouraged me to pursue a masters in Business Administration and I am also pursuing a Certified Public Accountant certificate. I appeal to THRiVE to help the university develop financial policies.
I joined THRiVE as a Finance Officer in 2011 and stayed until May 2017. During this time, I attended many trainings that exposed me to financial reporting for projects and have now mastered that skill. This knowledge has helped me manage other projects. During my time as a Finance officer, THRiVE introduced a financial tallying system which standardized and eased financial reporting. This system has been replicated throughout the university.

John Nyeko – Ag Bursar, Gulu University

Dr. Richard Echodu is a Senior Lecturer of Molecular Biology at the University and also Director of the Multifunctional Research Laboratories. THRiVE-2 career development awardee. His research has focused on population dynamics of the anopheles’ mosquitoes and their level of insecticide resistance to pyrethroids in northern Uganda. This study hypothesized the development of insecticide resistance to common pyrethroids for mosquito control in northern Uganda. The study area was in the districts of Gulu, Oyam, Agago, Kitgum and Moroto.

“We visited households, used questionnaires and conducted
Dr. Obai’s study aimed to determine the barriers to and facilitators for retention of HIV infected women and their HIV exposed infants in HIV care. His study sites were Gulu Regional Referral Hospital and St. Mary’s Hospital Lacor.

Among the reasons for missing appointments were mothers forgetting appointment dates, lack of privacy during counseling, lack of transport, fear of disclosure of HIV status to the spouse and unfriendly health workers. Consequently, Dr. Obai undertook quality improvement measures to address the health facility related barriers. Among the changes were; synchronizing appointment dates for both mother and baby; keeping mother and baby cards together; active identification of HIV exposed infants during immunization; escorting mother and baby to the service point and ensuring privacy during counseling. These measures saw a marked improvement in the rate of retention of mother-baby pairs in care. Facilitators for retention of mother-baby pairs included having mother and baby weighed, having the baby undergo medical examination and treatment, mothers’ interest in knowing more about baby feeding, availability of transport and need for more counseling for the mothers.

Keeping the mother and baby in care allows for proper care to reduce the chances of maternal HIV transmission during the breastfeeding period.

**Dr. Gerald Obai – Chairperson, Gulu University Research Ethics Committee (GUREC)**

Dr. Obai is a THRiVE-1 Masters Awardee. His study aimed to determine the barriers to and facilitators for retention of HIV infected women and their HIV exposed infants in HIV care. His study sites were Gulu Regional Referral Hospital and St. Mary’s Hospital Lacor.

Among the reasons for missing appointments were mothers forgetting appointment dates, lack of privacy during counseling, lack of transport, fear of disclosure of HIV status to the spouse and unfriendly health workers. Consequently, Dr. Obai undertook quality improvement measures to address the health facility related barriers. Among the changes were; synchronizing appointment dates for both mother and baby; keeping mother and baby cards together; active identification of HIV exposed infants during immunization; escorting mother and baby to the service point and ensuring privacy during counseling. These measures saw a marked improvement in the rate of retention of mother-baby pairs in care. Facilitators for retention of mother-baby pairs included having mother and baby weighed, having the baby undergo medical examination and treatment, mothers’ interest in knowing more about baby feeding, availability of transport and need for more counseling for the mothers.

Keeping the mother and baby in care allows for proper care to reduce the chances of maternal HIV transmission during the breastfeeding period.
Dr. Pamela Atim – THRiVE Masters Fellow and Lecturer, Department of Public Health

A THRiVE-1 beneficiary of a master’s scholarship and graduated in 2015 with a Master’s in Public Health from Makerere University. During my Masters studies, I conducted two studies, one on Nodding Syndrome which was published in the Plos One Journal. After my masters, I was promoted from being a graduate trainee to lecturer. I started supervising students research work because I was now more empowered with knowledge and skills. Since 2015, I have supervised one masters student to completion and 10 undergraduate students. Additionally, after my masters, I joined GUREC as a member and I am now able to review different research proposals.

THRiVE has equipped me with hands-on training and the ability to expose my students to field work e.g., if I am teaching about waste, they need to know how waste is generated and managed. I also acquired skills in grants and manuscript writing as a result of THRiVE trainings. Five years from today, I envision having completed my PhD, applied and won some grants and having a strong mentorship program for students.

Dr Robert Opiro – Ag head of the Department of Biology, Gulu University

I was awarded a THRiVE CDA grant in 2018 and my study examined trypanosome infection prevalence in tsetse flies and cattle in the transition zone in northern Uganda. The study was conducted in Oyam and Otuke districts that are within this transition zone. This was a cross-sectional survey and tsetse flies were trapped using biconical traps. The study revealed that ticks and tick-borne diseases are a big problem within the region and yet the veterinary staff are constrained when it comes to accessing drugs to treat the animals. Thus, farmers need to be sensitized about tick-borne diseases.

Under the mentorship of Prof. Elizabeth A. Opiyo and Dr. Richard Echodu, Opiro has been able to author over 10 publications and he says that young researchers need mentors to break new ground.
COMMUNITY & PUBLIC EDUCATION INITIATIVES UNDERTAKEN

1) Awareness drive for proper child nutrition

Martha Alaroker (THRiVE 2 Masters Research Grant Awardee) a MSc Student in the Faculty of Agriculture and Environment Gulu University in collaboration with Gulu Regional Referral Hospital (GRRH) Nutrition and Feeding Department successfully conducted Community and Public Engagement (CPE) on March 27 2018. This engagement enabled the researcher to interact with the community in order for them to gain knowledge on how to use the local foods such as cassava and roasted soya beans in order to improve the nutrition of their children.

Martha Alaroker demonstrates how to make a nutritious baby paste using cassava and soya beans
2) Public dialogue on River Blindness

Under the stewardship of Dr. Geoffrey Malinga, a THRiVE-2 Career Development Awardee, Gulu University held a public dialogue to evaluate the community and public perception of government’s intervention against river blindness in Awere Sub-county, Pader District. The dialogue dubbed, “The Government of Uganda has been carrying out intervention against Onchocerciasis or River Blindness for about 12 years in Pader District. Should the Government continue with this effort or not?” was held on June 27 2019.

3) Open Science Day

On February 22 2021, various faculty of Gulu University funded by THRiVE-2 showcased their research in an open day under the theme, “Enhancing Public & Community inclusion in research and decision making.” The theme emphasized the need to engage communities to discuss research outputs as one way to improve research uptake within the region. The day was graced with four presentations from Career Development Awardees (CDAs) of the university who presented their research findings and how these are impacting policy and practice. The studies were conducted within northern Uganda, covering Non-Communicable Diseases (NCDs), Neglected Tropical Diseases (NTDs) and vector-borne diseases that pose great health challenges to communities.
Researchers that have been supported by THRiVE at Gulu University

Under the strategic opportunities offered by THRiVE that aim to produce world class scientific research that addresses African health and research priorities, several Gulu University researchers were supported with Pump Priming, Master’s and Career Development Award (CDA) grants to conduct research in areas of NTDs and infectious diseases.

**Postdoc**
1) Amone P’Olak Kennedy: War-affected youths in northern Uganda

**Career Development Awards**
1) Dr Christine Oryema et al: “Medicinal Plants used in the Treatment of Tuberculosis in the Acholi Sub-Region, Northern Uganda.”

2) Dr Richard Echodu et al: “Population dynamics of Anopheles mosquitoes and their level of insecticides resistance to pyrethroids in northern Uganda.”

3) Dr Simon Peter Alarakol et al.: “Spatial Distribution and Prevalence of Taenia Solium Porcine cysticercosis among Households in two Districts of Gulu and Amuru, Northern Uganda.”

4) Dr Geoffrey M. Malinga et al.: “Impact of Annual and Semi-annual Ivermectin treatment of Onchocerciasis on disease occurrence in Pader and Kitgum Districts, Northern Uganda”;


**Master’s Research Grant Awardees**
1) Dr. Derrick Amone: “Short term outcome of laparotomy in the two teaching hospitals of Gulu University.”

2) Alaroker Martha: “Effect of malting soy on nutritional quality of gari-soy composite designed for children 6-14 years old.”

3) Julius Iga: “Susceptibility of malaria vectors to selected indoor residual spray insecticides in Nsinze Sub-County,”
4) **Oyet William:** “Status of Onchocerciasis after more than a decade of Mass drug Administration (MDA) for Onchocerciasis in Awere Sub County, Pader District.”

5) **Pamela Atim:** “Health screening practices among secondary students in Lira District: A mixed method design.”

6) **Carolyne Oleo:** “A case control study on maternal serum 25-hydroxyvitamin d3 levels and the risk of very early onset neonatal sepsis in Mulago Hospital.”

7) **Dr. Gerald Obai:** “Non-retention of mother-baby pairs in care in elimination of mother to child transmission of Human Immunodeficiency Virus in Gulu District, Uganda.”

**Pump Priming Awardees**

1) **Pontius Bayo:** Hepatitis B Virus Infection among Pregnant Women in Gulu: Prevalence, Infectivity, and Associated Factors.

2) **Grace Akello-Ayebare**, Denis Anywar,: School children as agents of change for childhood risk behaviours exposing them to Schistosomiasis: A preliminary study to assess their perspectives in control and management of a neglected tropical disease in Wakiso and Kitgum districts in Uganda.

3) **Moi Kenneth Lulyama:** Sero prevalence of African tryps in Gulu.

4) **Obol James Henry:** CC study of risk factors for nodding syndrome

5) **Wanyama Ronald:** Renal disease in HIV infected adults in Gulu

**Interns**

1) Ms. Esther Nakafu
2) Mr. Emmanuel Kamali
3) Ms. Aol Caroline Eve
4) Mr. Okot Denis

Julius Iga presents his research on “susceptibility of malaria vectors to selected indoor residual spray insecticides in Nsinze Sub-County, Namutumba District”, during a site visit by the THRIVE Secretariat.
### THRiVE-2 Gulu University’s Training Summary Report

<table>
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<tr>
<th>S/No.</th>
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<td>QuickBooks training</td>
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<td>Basic data analysis with SPSS</td>
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Julius Iga, GM Malinga, R Echodu, A Nakamaanya, EA Opiyo (2019). Susceptibility of malaria vectors to selected indoor residual spray insecticide in Namutumba District Eastern Uganda. AAS Open research


Amone-P’Olak, K., Lekhutlile, T.M., Meiser-Stedman, R., et al. (2014). Mediators of the relation between war experiences and suicidal ideation


### Book Chapters


Dr. Simon Peter Alarakol, a THRiVE Career Development Awardee presenting his research to participants of the Gulu THRiVE Science Open Day.

Prof. Elizabeth A. Opiyo, THRiVE’s Co-Applicant being interviewed by media personnel during the Science Open Day.

Prof. Nelson Sewankambo, THRiVE’s Director makes a presentation during the Science Open Day.

Dr. Christine Oryema, a THRiVE Career Development Awardee presents her research during the Science Open Day.
How the THRiVE Post-doctoral Grant Changed my Mind about Working outside Uganda

Kennedy Amonye-P'Olak, Gulu University

Upon completing my PhD in 2009 at the University of Groningen in the Netherlands, I wondered where the wind would blow me next. Uganda was last on my list of possible destinations until my wife exerted more pressure on me to get serious and head home or else she would leave without me. As they say, the rest is history. We left the Netherlands and headed home to Uganda. Little did we know what awaited us in Uganda! From the airport to Kampala, courtesy of friends and relatives, we were welcomed by a blackout. My son had never had this experience in his life. "Uganda is full of darkness, Daddy," he commented. At Gulu University, I was getting less than one sixth of what I was earning as a junior researcher while pursuing my PhD. Infrastructure for any meaningful training, leave alone research, was absent! Most colleagues only talked about payments for extra workloads and the University did not have any funding for research or conferences! Welcome to Gulu University! Welcome home, I said inwardly.

Coming from the University of Groningen, where the infrastructure for research and postgraduate studies was enormous, one needed a big heart to continue at Gulu University. Soon, the search was on and offers for attractive positions from Southern Africa were trickling in. One day, as I was coming to terms with deciding where to go next, a friend sent me an advert for post-doctoral research fellowship. Armed with a post-doctoral research fellowship tenable in Uganda and a break or two in Cambridge, I declined all the juicy offers from down south. Indeed, I was beginning to thrive.

Beginning with a research methods training in Mwanza, Tanzania in February 2011 to the current position as a Visiting Scholar at the University of Bergen, Norway, the journey has been fruitful and iconic. Within the two years, I was at the University of Cambridge a record four times! I followed statistical courses, made presentations about my research, and attended several lectures, workshops, and weekly seminars with different research groups within the departments of Psychiatry and Psychology. I enjoyed the very academic atmosphere at Cambridge. To date, I have five articles submitted for publication, a letter published and the Current profile of my study participants is in press.

My fourth and final visit to Cambridge was in preparation for the intermediate Research Fellowship grant application interview in London. Earlier in March 2012, I had submitted a 200 word synopsis following a call for application for the Intermediate Research Fellowship. I was subsequently invited to submit a full application in May. In September 2012, I was invited to spruce up my application in areas found wanting and in December 2012, I was invited for an interview at the Welcome Trust offices in London. I had to go to Cambridge a week before the interview to prepare. I had mock interviews with Prof. Peter Jones, my mentor and head of Psychiatry Department, Dr Richard Meisser-Stedman, and Prof. Tim Croudace of the University of York. Dr Pauline Essah arranged for a meeting with Prof. David Dunne. I must say, I drank deep from Prof. Dunne's experience. Although I was not successful in getting the grant, the feedback I received was very enlightening and I learnt a lot from it and my next grant application will not be wobbly; it will thrive.

The opportunity THRiVE gave me, my association with the University of Cambridge, the network I built as a result, has not only made me thrive but also given me confidence and drive to pursue research with a renewed vigour. I am currently a Visiting Scholar at the University of Bergen where I co-supervise two PhD students in the area of mental health. My career is thriving!
Reflections On The Way Forward for THRiVE Institutions

Emilie Orupa
Gulu University

At a recent scientific meeting, a former classmate who is an influential academic and researcher informed the audience, as he reminded me, that he and I would conduct an undergraduate research during our first year at medical school. Unfortunately neither of us published our research findings. For one, I did not even recall that I had conducted research to "determine the concentration of sodium in urine" during my first year of medical school. What I do remember though is that I applied for a competitive undergraduate British award for undergraduate medical students in my first year at medical school, but I did not get the award, as I had no skill in what I was venturing into. There was of course no prestige in supporting undergraduate students at the time in 1971.

The message in these revolutions is to highlight the fact that while we could have been spotted as potential researchers in our early formative years, trained, mentored and supported to become researchers faster, this did not happen. As far as I can honestly guess, there of us out of 120 students in first year, as a student cohort of 1971 have since become active researchers and are committed to combined research and academic life in Uganda.

It is known that Sub-Saharan Africa (SSA) carries the greatest disease burden in the world. The continent also has the least number of health care providers and researchers relative to its population and health care needs. Improving the health situation in SSA through the creation of a critical mass of health researchers is indeed noble and urgent. The assumption that the health situation in SSA could be improved through the training of upcoming health scientists is based on the belief that a new generation of health scientists will hold steadfast to their newly acquired skills and knowledge in research in an environment marred with harsh and unfriendly economic landscape. A corollary to this belief and assumption is that the future generations of health sciences students will consider research as their career as my colleague and I did in our cohort of 1971 that I have referred to, only 3.3% of us have taken on research as a professional career. This development to a large extent is based on our personal efforts.

To create a critical mass of health research leaders, we should be considering the following issues that will undeniably affect the building of research capacity among health researchers in East Africa. Less than 5% of all student cohort will probably consider research as their career. Out of this, those who will eventually become professional researchers will do so because research will probably appeal to them.

Any cohort of students has an open career landscape to choose from: namely: clinical specialties, biomedical sciences, public health and or its subspecialties, health professions education, business in health professions, forensic and legal medicine, health economics, research, etc. in order to encourage students that wish to consider research as their future career, opportunities for the students concerned to become research should be promoted to those students.

The environment that makes this possible should be created, and research should be made appealing, friendly and easy for students at all levels. In my days at medical school, adventure into research was stressful and highly discouraging; only those who had stamina permitted to become successful researchers. Research should be demystified and the values of research, dissemination of results and publications should be made apparent to students. In this respect, research could have personal benefits as well as benefits for institutions and health systems. Individuals that wish to contribute to social welfare through research would find their involvement in research particularly appealing and as a result, expansion of the research capacity is only going to appeal to those that wish to choose research as their career.

Gulu University Reaping from THRiVE ICT Initiative

Tabo Olok, Geoffrey, Open Walter Tuyens and Prof. Emilie Orupa, Faculty of Medicine, Gulu University

Faculty of Medicine at Gulu University has been struggling to adopt, integrate and implement ICT in its operations since its establishment in 2004. However, THRiVE funded ICUs has eased the challenges evident through significant increased of ICT usage. In August 2012 the project established a new multimedia laboratory. This has boosted availability of faculty and confidence of faculty and students that allowed them to vigorously engage in meaningful teaching, learning and most importantly research. The idea was to make Faculty of Medicine at Gulu catch up with the rest of the world by harnessing ICT potential to aid teaching, learning and research. Innovative ICT services at Faculty of Medicine Gulu University. An example is researcher, David Masali who was permitted to use the multimedia lab daily whenever he is in Gulu.

Among the benefits realised, the following areas have been outstanding as narrated by randomly selected medical students in a simple interview after obtaining their consent by the medical librarian.

"Due to the availability of new computers at faculty of medicine, I am able to access many medical sites for latest medical literature, download journals, eBooks, reports, study questions and dissertations. I also use the computer and Internet to communicate with fellow students and lecturers" (Emmanuel Candies MBC12H) personal communication, December 13, 2013.

"The benefit I get from using the new computers are countless; the one thing I say is that I am able to access eBooks; the computers..."
THRiVE has grown and evolved for the last 12 years reaching several milestones and creating networks along the way.

Training Health Researchers into Vocational Excellence (THRiVE) was established in 2009 as a regional network of research excellence, including some of the best universities and research institutes in East Africa with support from two leading UK universities. We have built a robust network that has led to strong and productive collaborations in research, training and supervision, with more than 300 joint publications between THRiVE partners since 2010. Our network has also made concerted efforts to improve institutional capacity in research administration and management.

Our Vision

Our Vision is that Africa will lead research that has a major impact on health in the region by 2030. We aim to be a leading network of excellence in building health research capacity in Africa.

THRiVE Objectives

1) To implement high-quality scientific research training aimed at producing research leaders in East Africa through joint North – South and South – South supervision and mentorship

2) Conduct high impact scientific research that addresses African health research priorities through equitable (North-South) collaborative research that conforms to international standards and guidelines

3) To Implement public engagement programs in Kenya, Tanzania and Uganda that promote understanding the value and use of science among the lay public, policy makers, civil society and secondary school students

4) To cultivate professional environments to manage and support scientific research

THRiVE funding has empowered African institutions to develop their infrastructure and their administrative and scientific staff capacity to support and lead world-class research programmes.

THRiVE has offered outstanding young researchers (post-graduate and post-doctoral fellows) the opportunity to be mentored by committed teams of scientific advisers. Many academic institutions in sub-Saharan Africa face significant challenges with regards to information technology and laboratory infrastructure.

THRiVE has been committed to improving internet access and capacity through the development of enhanced electronic communication systems and websites. In addition, while members have a range of laboratory facilities, further strengthening has been done, particularly for those institutions impacted by regional distress including northern Uganda (Gulu University) and Kirimanjaro Christian Medical University College (KCMUCo) in Tanzania. Rather than building new facilities, focus has been on upgrading existing laboratory infrastructures. The program's aim is to enhance governance and research management by strengthening institutional systems like ethical review boards.
For more details about THRiVE and its activities, contact:

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