



Medicine for Humanity and MUST collaborate to fight Urogynecology disorders



A team from Medicine for Humanity visited MUST Faculty of Medicine to participate in a 5-day urogynecology medical camp from 5th to 10th September 2022 at Mbarara Regional Referral Hospital. A team of 14 persons travelled to Uganda to join their counterparts at Mbarara University of Science and Technology (MUST) to give hopes to women with gynecological challenges.

The team was led by **Dr. Christopher Tarnay**, a Urogynecologist from University of California, Los Angeles and President of Medicine for humanity and **Dr. Shelley O'Connor**, the Executive Director Medicine for Humanity.



Dr. Christopher Tarnay and Dr. Shelley O'Connor from Medicine for Humanity.

According to Dr. Christopher, the aim of Medicine for Humanity to heal women and train Doctors with a purpose of changing lives. Dr. Musa Kayondo is one of the Doctors that has been mentored by Medicine for Humanity.

“We mentored Dr. Musa Kayondo when he had just started his career as a Doctor, he is now doing a great job of saving lives and training other Doctors to do the same. We are proud of him” Said Dr. Christopher.



Dr. Christopher further added, the collaboration between Medicine for Humanity and MUST/ MRRH that has existed for 12 years has registered a number of achievements including;

1. Establishment of a 50-bed capacity ward for women with urological disorders
2. Capacity building of fellows in Urogynecology
3. A lecture hall for the Obstetrics and Gynecology classes
4. Annual fistula camps

Speaking about the camp, Dr. Musa Kayondo, the head of Department Obstetrics and Gynecology, said, the camp was planned to support 50 women fully sponsored by Medicine for Humanity.

“Medicine for Humanity has not only sponsored the fistula camps but also supported urogynecology fellows who later become mentors to the residents and play a big role in saving lives. This is priceless to us as an institution, we are grateful for the generosity exhibited by the team from Medicine for Humanity”. Said Dr. Musa Kayondo.



First-Mile community health program equips Health Facility in-charges with pedagogical skills



The Department of Community Health through the First-Mile Community Health Program held a two-day leadership training in Continuous Medical Education (CME) for in-charges of health facilities in southwestern Uganda. It was the second of leadership training to be held in southwestern Uganda.

The training which was held at Peak hotel in Bushenyi district from 13th – 14th September 2022 and was attended by 30 in-charge of in health facilities from districts such as Bunyangabu, Bushenyi, Ibanda, Isingiro, Kabale, Rubanda, Kabarole, kasese, Kiruhura, Kitagwenda, Mbarara, Mitooma, Rukiga and Sheema.

The training was held under the theme “improving the quality of community placement experience through partnership in southwestern Uganda under the following objectives;

- Improving community entry skills among site supervisors participating in community-based medical education programs in southwestern Uganda.
- Improving community diagnosis skills among site supervisors participating in community-based medical education program in southwestern Uganda.
- Providing mentorship roles for site supervisors participating in community-based medical education programs in southwestern Uganda”.

The in-charges were trained on community entrance and diagnosis, mentorship opportunities, problem prioritization, evidence-based planning, supervisory responsibilities, public relations and customer care.

Dr. Gad Ruzaza Ndaruhutse, a senior coordinator for Community-Based Education Research and Service (COBERS) in the Community Health Department oriented the health facility in-charges of Leadership Community Placement (LCP) which is one of the pillars onto which Mbarara University of Science and Technology was built. He described that LCP was introduced into the MUST curriculum in the year 2010 to engage more communities in the identification of their health problems.

“When you learn together, you’re able to work together. This is why we place medical students in various communities so that they can engage communities/societies in identifying health challenges and work together to solve them amicably. This is done through collaborative learning together with health facilities, Village Health Teams (VHTs) through Community Based Education that builds on the needs of communities,” he described.



Mr. Ntaro Moses, the assistant program director for First Mile Community Health Program delivered a talk about what takes place within communities where health professional students are placed. The session involved usage of a challenge model, basics of community entry and diagnosis, and techniques of community mobilization and participation. During this session, in-charges shared success stories while working with students that resulted into improved service delivery within their respective health facilities. These included patient care improvement, provision of health talks to patients, problem diagnosis, and information interchange



The program director, Professor Edgar Mulogo revealed how the program connects medical students and the health facilities and how they are supported.

“We assist our students in the process of problem identification/diagnosis of the varying health problems within the community and how to solve them. This is done through the use of problem prioritization skills. This aids them to achieve their set objectives in places where they are positioned for community placement,” Prof. Mulogo stated.

Prof. Mulogo also trained the in-charges on how to incorporate evidence-based planning into the management of their health facilities. According to Prof. Mulogo, evidence-based planning can be used in aspects such as identification of inequities and health systems performance

bottlenecks which affect attainment of universal health coverage.

The university’s Public Relations Officer Ms. Angella Nakato Muyingo mentored the in-charges on incorporating up-to-date public relations in their facilities to improve services. She revealed that public relations in medical practice have a vital role in creating and maintaining communication between the medical professionals, clients and the general public which can result in building health facilities as reputable brands.



The training was graced by Mr. Melchoir Byaruhanga, the University Secretary who applauded the program director and his team for their tireless efforts towards coming up with ideas that are aimed at improving the delivery of health services within southwestern Uganda.

“One of the pillars onto which MUST was established is the community approach through engaging both the students and the staff in the neighboring communities. This is why MUST students are always placed in different places for them to appreciate what takes place within communities and come up with solutions. Through this, the university is also taken into communities,” He quoted

‘Apart from what the Government offers to us, First Mile supplements our resources by aiding us in areas where our resources can’t reach. I

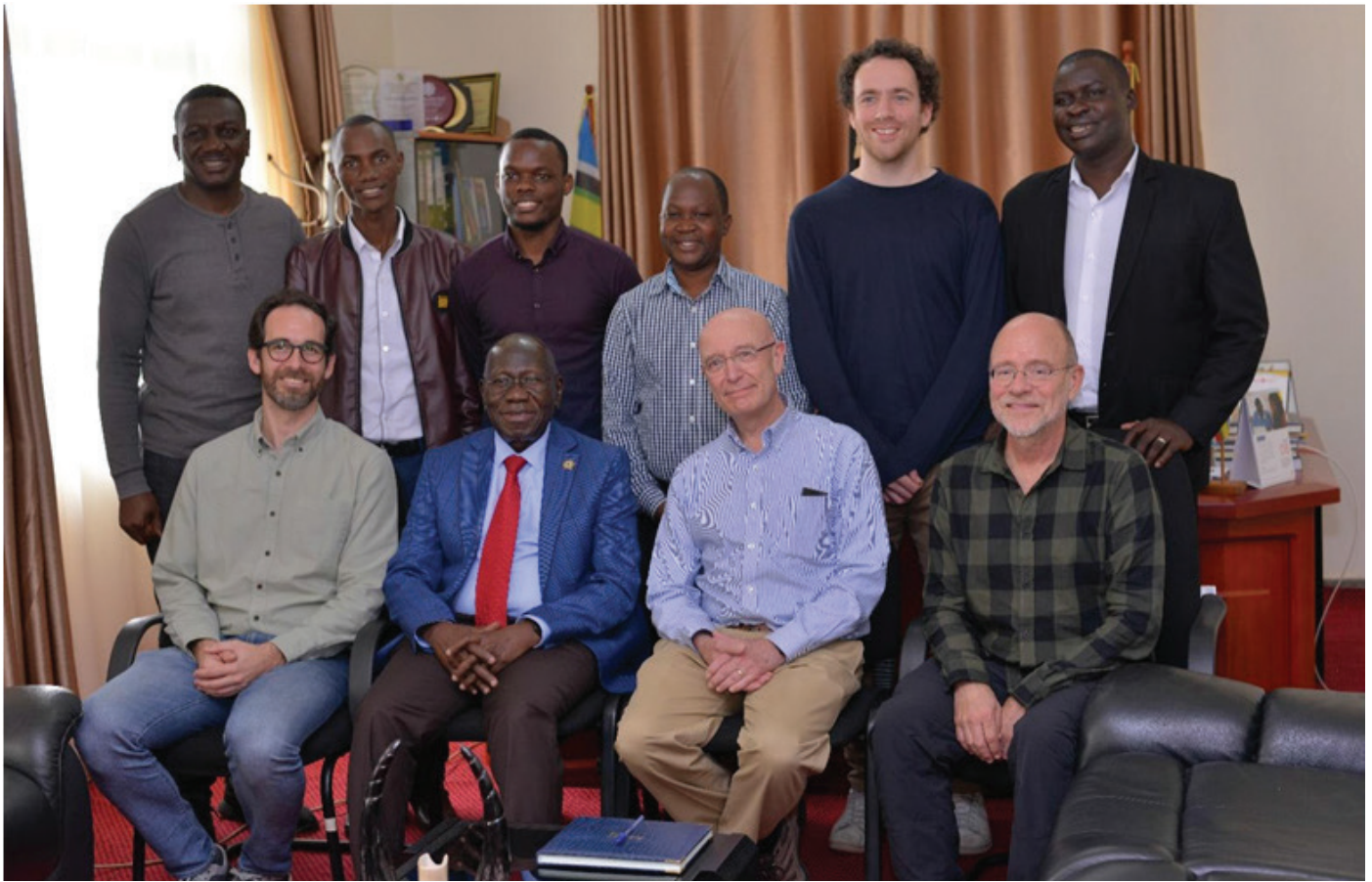
applaud Prof. Mulogo and his team for working hard to secure this grant and using it in helping our communities through training both the health officers and students. He added.

In his concluding remarks, Mr. Byaruhanga thanked the in-charges for accepting and mentoring MUST students within their health facilities and he also awarded trainees with training certificates.

According to Dr. Peter Kawungezi, the First Mile brings the community to MUST and MUST to the community through field attachments of Postgraduate trainees (PGs) for experiential learning and sponsorship of community health-focused research projects.

“We shall also support health officers in disseminating their research success stories in community health at regional, national, and international levels. They will be linked to well-known researchers to enable them move to another level,”

MUST to spearhead the low-field MRI project in Sub-Saharan Africa



Mbarara University of Science and Technology (MUST), Department of Biomedical Engineering in the Faculty of Applied Sciences and Technology (FAST), led by Dr. Johnes Obungoloch has embarked on a project to construct a low field magnetic resonance imaging (MRI) to address clinical imaging needs in developing countries like Uganda. The project is supported by the National Institutes of Health through Dr. Steven J. Schiff of Yale University-School of Medicine and collaborators from the CURE Children's Hospital in Uganda, Leiden University Medical Center and the Technical University of Delft, both in the Netherlands, the German Paraguayan University in Paraguay and the Uganda National Planning Authority.

The team from the collaborating institutions led by Dr. Steven Schiff from Yale School of Medicine camped at the MRI laboratory at MUST for two weeks to build a low-field MRI, the first of its kind in sub-Saharan Africa to mainly focus on imaging of hydrocephalus in Ugandan children.



During the two-week period of September 26th-30th, the MRI and its collaborating partners also held the first low field sub-saharan Africa MRI training workshop at MUST. The workshop was supported by the Smart Africa Network and funded by the Chan Zuckerberg Initiative. The workshop brought together MRI scientists and students from several African Countries including Nigeria, Ghana, Uganda, Cameroon, Mozambique and South Africa. Other participants were from Paraguay, the Netherlands and United States of America.

Dr. Steven Schiff team leader from Yale School of Medicine.



Dr. Jones Obungoloch making a presentation during the workshop

According to the Dr. Johnes Obungoloch, the Dean FAST, the MRI project will be piloted for clinical trials at Cure Children’s Hospital in Mbale City, Eastern Uganda after which, the innovation will be taken into use by other health facilities around the country. With the support from the Chan-Zuckerberg Initiative, the team has trained scientists from Nigeria, Botswana, Zimbabwe, Kenya, Ghana, and Uganda including MUST Engineering students in building MRI training that was hosted by FAST. This was aimed at ensuring the sustainability and extension of MRI projects within Africa.



From left to right: Tom O’Reilly from Leiden University Medical Center (LUMC), Joshua Harper from German Paraguayan University in Paraguay and Wouter Teeuwisse from LUMC

In his welcoming remarks, Prof. Celestino Obua, MUST Vice-chancellor applauded Dr. Schiff and his team of engineers for choosing MUST as their base in providing solutions to African health problems.

“When many people and institutions are involved in a project like this one, there is sharing of great ideas to make the project meet its set objectives, this MRI project will meet its purposes. Thank you for bringing the project to MUST, this will not only increase MUST’s visibility to the world but will also bring affordable medical imaging services closer to the people. Many African experts go out of the continent to work in health facilities in other continents due to a lack of equipment such as MRI. This project is intended to maintain our skilled health experts to solve complex health issues. Thank you for putting MUST to the rest of the world through such ideas and collaborations. the rest of the world will now know that MUST is a real university of science and technology despite its rural location,” Prof Obua explained.



Dr. Schiff and Dr. Obungoloch talking to the VC MUST

Dr. Godwin Ogbole from the University of Ibadan Nigeria asserted that this is setting up a low-field MRI in Africa, particularly in Uganda is a dream come true. He thanked Dr. Obungoloch for his networking and lobbying skills to see that MRI is built at MUST and that this will widen the expert base on MRI systems.



Magnetic resonance imaging is a key diagnostic tool in modern healthcare yet it can be cost-prohibitive given the high installation, maintenance and operation costs of the machinery. There are approximately seven scanners per million inhabitants and over 90% are concentrated in high-income countries. MRI enables physicians to visualize various types of tissues and assess their structural and physiological integrity.



The MRI system that was fabricated

This low field MRI system with field strength of about 0.05T will be inexpensive, easy to install and maintain- and makes it suitable for low-resource settings like sub-Saharan Africa.

MUST mourns Her Majesty Queen Elizabeth II



Mbarara University of Science and Technology joined the rest of the world to mourn the passing on of the longest serving monarch in United Kingdom, Her Majesty Queen Elizabeth II and the Head of the Common Wealth. MUST has been a beneficiary of the Association of Commonwealth Universities (ACU) through scholarships to staff in PhDs and Masters programmes. Some of the notable staff who completed PhDs includes Dr. Simon Arunga and Dr. Martin Karuhanga while Assoc. Prof. Gertrude Kiwanuka finished her post doctorate. Furthermore, twelve staff have completed their Masters while five PhDs are currently supported. These scholarships provide life changing opportunities to promote positive change in their communities and beyond. The commonwealth scholarship made Dr. Arunga to become the first eye doctor to receive a PhD in Ophthalmology in Uganda and has been instrumental to MUST and the region



Dr. Simon Arunga with the Queen.

Mbarara University is also privileged to partner with Universities in the United Kingdom in advancing its mandate in teaching, research and community engagement.

Born on 21st April 1926, Her Majesty the Queen has lived 96 years, 70 of which she reigned after ascending to the throne in 1952. She has been succeeded by her son King Charles III.

On behalf of MUST, the Vice Chancellor Prof. Celestino Obua, University Council, entire top management, staff and students condole with the royal family and the ACU in grieving this great monarch!

The Ambassador of Tanzania to Uganda launches Kiswahili Club at MUST.



The international student's community at MUST held the 6th annual international dinner. This was held on September 23, 2022. Characterized by traditional dances and cross-country presentations, the event brought together students from different Nations at an exciting evening notwithstanding a moment for management to interact with international students and set new strategies in fulfillment of the internationalization agenda.

This year, the highlight of the evening was the launch of the MUST Kiswahili club by the guest of honor, H.E Dr. Aziz Ponary Milma, the Ambassador of the United Republic of Tanzania to Uganda who commended MUST for ensuring that a newly UN recognized language is taught at MUST.



H.E Dr. Aziz Ponary Milma signing after launching Kiswahili club



Mr. Emmanuel Kyagaba the Dean of Students giving his remarks.



Financial Attache of the Tanzania High Commission in Uganda

Other dignitaries present were Mr. Timothee Munga Lemba, Administrative Secretary/Education Attache, Democratic Republic of Congo Embassy in Kampala and Mr. Hashim Karumba, the

Mr. Timothee Lemba the Education Attache of the DRC Embassy in Uganda

Accompanied by the Deputy Vice Chancellor – Academic Affairs, Dean of Students, some Faculty deans and staff, Prof. Celestino Obua, the Vice Chancellor of MUST appreciated the efforts of the International Relations Office to coordinate MUST international partnerships and collaborations and requested students to be good ambassadors of MUST. He appreciated the launch of Kiswahili club and encouraged students to not only belong but ensure that they use the language that is integrating African dialects.

Kenyans posing after their fashion show

The International Relations Officer, Mrs. Sheila Niinye Twinamatsiko said that MUST has continued to open big doors for students on full time programmes from Kenya, Tanzania, Zambia, Nigeria, Somalia, Burundi, Ethiopia, Rwanda, Cameroon, Sierra Leone, Democratic Republic of Congo, South Sudan and India. She further noted that despite the effects of COVID-19, there is now a steady increase of international students on electives who come from America, Europe and Asia.



DRC during their dance



Rwandese performing their cultural dance

On average, MUST hosts 300 international visitors mostly scholars and project partners across the globe annually. She also noted that one cannot go wrong with learning Kiswahili that is spoken by 200 million people across the globe according to UNESCO

Appreciation goes to students, staff, management and international visitors who graced the occasion.

Camtech Uganda held its 8th Medtech Hackathon @ MUST



Mbarara University of Science and Technology through the Consortium for Affordable Medical Technologies (CAMTech) successfully organized the 8th annual MedTech Hackathon. This year's hackathon ran from 30th September – 2nd October 2022 under the theme “Building a Resilient Health Care System in the Era of Emerging Pandemics through Innovations”

A total of 180 participants who took part in this year's Hackathon came up with innovative ideas and later developed prototypes aimed at improving healthcare service delivery within Uganda



Innovators developing a prototype during the 8th MedTech Hackathon

The 3-day workshop was inaugurated by the Vice-chancellor of MUST Prof Celestino Obua and was graced by the Executive Director of NITA-Uganda and Minister of State for ICT Hon. Joyce Nabwoga Ssebugwawo. The country director of CAMTech Uganda, Dr. Data Santorino said that CAMTech Uganda has been in existence for 10 years and within this period, its innovation ecosystem raised more than \$15.5M to support different initiatives in the country and it has created 216 direct jobs through the initiatives of MUST, Massachusetts General Hospital, and partners. He commended the partnership between the ICT Ministry, MUST leadership, and NITA-Uganda which provided 100 Mbps of internet dedicated to the CAMTech innovation hub.



While delivering his speech, Prof. Obua applauded president Museveni for coming up with the idea of setting up a university in an area that people used to call a village.

“We thank the president of Uganda for the wisdom towards setting up a university in a setting that many regarded as a rural one. Many thought a university could only thrive in Kampala but MUST’s journey has proved otherwise” said Prof. Obua.

“We hope that when these young men and women get to present their ideas, the winning innovations don’t only stop here but get funding through the Ministry of ICT so that we can arrive at meaningful community impact” He requested the ministry.

Dr. Data Santorino, Country Director- CAMTech Uganda



Prof. Celestino Obua- MUST Vice Chancellor

On behalf of the Government, Hon. Ssebugwawo acknowledged MUST and CAMTech for leading the innovation's path because hackathons are significant launch pads for Uganda's innovations. She pledged Ministry's commitment towards supporting CAMTech in order to address pressing problems for national development. Hon. Ssebugwawo congratulated all the innovators who took part in this year's Hackathon and encouraged them to keep the candle burning.



Minister Joyce Naboosa Ssebugwawo

Out of the 9 groups that reached the final pitching at the hackathon, three groups were awarded cash prizes and the two members from the 1st and the 2nd groups will be facilitated to travel to the USA's Silicon Valley.

Team catheter monitor emerged as 2nd runner-up and they received a cash prize of UGX 2M. Their innovation aimed at developing a device that detects infusion flow and allows communication between nurses and infusion devices.



Team catheter monitor-2nd runner-up

Team Panty Pad was the 1st runner of the hackathon whose innovations was focusing on creating a menstrual package with affordable reusable panty and disposable pads made from banana fibers and won UGX 2.5M.



Team Panty Pad- 1st runner-up

Team Sukari Care group emerged as champions of the 8th MedTech hackathon walking away with a cash prize of UGX 3.5M. The team's innovation focused on Continuous glucose monitoring and real-time intervention by auto-injecting insulin using an insulin pump and keeping records in the sukali App as well as alerts on the phone in case of hypoglycemia.



Team sukari care group- Champions of the 8th Hackathon



Kobusingye Mercy, a fifth-year medical student from Team Sukari Care group was awarded as the best presenter. She received a brand-new laptop courtesy of Think Innovations and Empower Youth in Technology (EYIT)

MUST Students and Staff innovate an organic fertilizer (i-soft)



September 23, 2022, Mbarara University of Science and Technology (MUST) organized its maiden agricultural innovations exhibition at its town campus in Mbarara city.

The exhibition was organized by the Faculty of Interdisciplinary Studies (FIS) in conjunction with the Centre for Innovations and Technology Transfer (CITT) under the theme "Higher Technical Education in Africa for an innovative and skilled labor force towards Agriculture transformation"

The chief guest was Hon. Frank Tumwebaze, the Minister for Agriculture, Animal Industry and Fisheries, and other dignitaries which included Hon. Robert Kakyebazi Mayor of Mbarara city, Robert Kanusu, Deputy RCC in charge of Mbarara city North division.



MUST partners in Agricultural development with Hon Frank Tumwebeze and Dr. Medard Twinamasiko (PhD) extreme right

During the expo, students pursuing Bachelor of Agricultural livelihoods and Farm Production and other external exhibitors from Bishop Stuart University, Mbarara City Traders' Association exhibited a number of agricultural products.

In his opening remarks, Dr. Medard Twinamatsiko, the Director of CITT explained the role of agricultural exhibitions as a platform where several agriculturalists showcase their innovations and learn new methods and skills that can increase their farming yields. He also briefed the Minister and the gathering about the uniqueness of the agriculture program offered at MUST.



Mr. Joel President of the Agricultural association



Dr. Rogers Bariyo (PhD) Dean FIS



Prof. Celestino Obua Vice Chancellor MUST

Hon. Frank Tumwebaze Minister MAAIF

According to Dr. Medard Twinamatsiko, the Bachelor of Agricultural livelihoods and Farm Production's curriculum was designed to allow students work with communities through a program called the Students Community Twinning Project (STP). In STP, students work with selected communities for a period of one full year to identify agricultural challenges and are able to come up with solutions in form of projects. This has resulted in the development of these communities. Our students are able to learn the real agriculture outside the lecture rooms. Through this wonderful programme, we were able to develop an organic fertilizer i-soft which is friendly to the environment and affordable to all farmers," Dr. Twinamatsiko explained

The Dean Faculty of Interdisciplinary Studies, Dr. Rogers Bariyo requested Hon. Tumwebaze and his ministry to support the Faculty with machinery such as tractors and an Agriculture laboratory which are crucial for students to conduct practical lessons but also help the University save on transport costs incurred to transport students to modern agricultural labs in Kampala.

Prof. Celestino Obua, MUST Vice-chancellor commended Hon. Tumwebaze for loving his University as an alumnus and also investing in his home area Mbarara. He revealed that FIS was transformed from the faculty of Development Studies under the guidance of President Yoweri Museveni to produce problem solvers and job creators. He pledged full support towards the sustainability of FIS projects.



Later on, Hon. Frank Tumwebaze launched a locally produced organic fertilizer made by a team led by Dr. Medard Twinamatsiko and directed the National Agricultural Research Organization (NARO) to work with MUST to ensure that the fertilizer is fully authorized to be on the market for other farmers in the country to use.

In response to the requests submitted by Dr. Bariyo, Hon. Tumwebaze assured to offer a 90- Horsepower tractor to the FIS Agriculture Department to support them with mechanization needs. On the Agriculture laboratory, he explained that it will be integrated into one of the Ministry's projects so that one can be based at MUST. On behalf of the government, Hon. Tumwebaze declared that MUST shall receive any form of support it needs because it's a public university that contributes to the country's development



Prof. Celestino Obua urges Mastercard Foundation to orient MUST Staff on the use of eLearning



Mastercard Foundation Uganda and Cyber School Technology Solutions launched a 5-year initiative aimed at strengthening the university's eLearning capacity.

Mbarara University of Science and Technology is one of the Universities in Uganda that will benefit from this initiative. This was confirmed on September 20th, 2022, when a team, led by Ms. Joanne Nakimuli, from the Cyber School Technology Solutions paid a courtesy call to the Vice Chancellor of Mbarara University of Science and Technology, Prof. Celestino Obua.

The visit kick-started a week-long baseline survey exercise aimed at assessing the MUST's capacity in digital pedagogy, instructional design, content digitization, content development and assessment.

The team was introduced to the Vice Chancellor by Mr. Amos Baryashaba the Head, Computing Services who provided the background of MUST's engagement with Cyber School Technology Solutions from the COVID-19 induced lockdowns to the materialization of the planned initiative.



Prof. Obua Celestino Vice Chancellor

He also outlined the envisaged benefits of the project to the university which include improvement in the university's infrastructural, technical and instructional capacity to deliver digital pedagogy, provision of affordable computing devices to staff and students and exposure of students to internship and entrepreneurial opportunities.



Ms. Joanna Nakimuli and Mr. Jacob Ogena from Cyber School

Ms. Joanne Nakimuli, the Data Officer from Cyber School Technology Solutions said they were partnering with the Mastercard Foundation Uganda to support staff and students by training them and providing affordable technology gadgets like tablets and laptops.

The Vice Chancellor informed the meeting that MUST was ready to further uptake eLearning in its teaching and research activities. He requested the team to think of innovative ways to orient and train staff in the use of eLearning technologies. He also suggested that the strategy used to provision affordable computing devices to students should be sustainable.

The Vice Chancellor also recognized the support from Mastercard Foundation for supporting the education in Uganda through scholarships, “Many have been given a chance to pursue their dream programmes. These will make a difference in the country and the world at large”.

Brief about the cyber school

Cyber School Technology Solutions is a premier provider of quality educational services offering world-class solutions to enhance the online educational environment globally.

The one-stop-site for development, e-learning, communication solutions, Cyber School Technology Solutions works with experienced educators and technocrats across the globe in designing and developing digital educational resources, portals and learning management systems for improved communication and easy access to syllabus-specific lessons on Science and mathematics.

Be it digital content on 3D, online tutoring services, ICT courses or School Online Information Systems, all our products, educational tools, training and support material and services are well-researched and tested, providing appropriate solutions to achieve student success at all levels.

MUST Obstetrics and Gynecology staff take the shine in winning grants



Congratulations to Dr. Joseph Ngonzi, Dr. Lisa Bebell and Prof. Alison Gernand for winning a 4-year grant from NIH

Funding Agency: National Institutes of Health (NIH)

Grant type: RO1

Duration: 1/10/2022 – 1/10/2026

Grant number: R01EB030130

Team leaders (Program Directors): Alison D. Gernand and Joseph Ngonzi

Other team members: Jeffery A. Goldstein, Yoel Sadovsky, Wang Z. James, Lisa Bebell, Julian Adong, Kelly Gallagher, Magee – Janet Catov, Stefan Kostadinov, Drucilla Roberts and Dr. Fred Kaggwa from Faculty of Computing and Informatics (FCI) at MUST.

Project title: Development of a Software to Rapidly Assess Placenta Images at Birth

Project aims:

1. To develop AI-based software that accurately identifies a range of placental features and diagnoses from digital images;
2. To improve the reliability and robustness of the AI-based software under different conditions. The team will test the impact of the variability of factors (e.g., different cameras, lighting) on the accuracy of feature identification;
3. To test and quantify improvements in software accuracy with medical data input. The team will add readily available clinical data to algorithms such as infant sex, delivery mode and birth weight to systematically quantify improvements when such data is available.



Who is Dr Joseph Ngonzi?

Dr. Joseph Ngonzi, MBChB, MMED, FCOG (ECSA), PhD is an Obstetrician/Gynecologist working at the Mbarara University of Science and Technology (MUST) and the Mbarara Regional Referral Hospital (MRRH) in Mbarara, southwestern Uganda. He is the current Dean of the Faculty of Medicine at MUST. He has previously served as the deputy Dean of Faculty of Faculty of Medicine and the Chair of the department of Obstetrics and Gynecology at MUST/MRRH. Dr. Ngonzi is the current Chair of the Uganda Medical Schools' forum of Deans. Joseph is involved in teaching, clinical work, research and administration. He has supervised more than 30 postgraduate students to completion. He continues to supervise and mentor students at different levels, including undergraduates, masters and PhD.

Dr. Ngonzi is a great alumnus of Mbarara University, having served as a Guild President while an undergraduate student. He obtained his first degree of Bachelor of Medicine and Bachelor of Surgery (MBChB) in 2006, Masters of Medicine in Obstetrics and Gynecology (MMED) in 2010. Dr. Ngonzi graduated with a PhD in Medical Sciences from the University of Antwerp, Belgium in 2019. He is a fellow of the East, Central and Southern Africa College of Obstetricians and Gynecologists. He is married to Emily and a father of three.

Dr. Ngonzi has always been passionate and inquisitive about research.

This passion has led to his involvement in various areas of maternal, newborn and child health. He has actively participated in various research projects in different portfolio as key personnel, co-Investigator and Principle Investigator. His obstetrics research interests have thus far focused on epidemiology and microbiology of maternal sepsis, antibiotic stewardship, placental pathology and impact on newborn and child neuro developmental outcomes, histologic chronic placental inflammation and its predictors among HIV-infected women. His focus in gynecology work and research has been in screening and surgical treatment for both benign and invasive disease of the cervix and other lower genital tract neoplasms. He is currently involved in research optimizing the use of artificial intelligence and machine learning techniques in diagnostic and prognostic clinical models for cervical pathology.

We congratulate Dr. Joseph Ngonzi, Professor Alison Gernand, Dr. Lisa Bebell and the team on their recently awarded R01EB030130 titled "Development of Software to Rapidly Assess Placenta Images at Birth". The summary aims of this great scholarly work are outlined here below: a) To develop AI-based software that accurately identifies a range of placental features and diagnoses from digital images; b) To improve the reliability and robustness of the AI-based software testing the impact of the variability of factors (e.g., different cameras, lighting) on the accuracy of feature identification; c) To test and quantify improvements in software accuracy with medical data input.

We congratulate the team on this great grant achievement. We wish them a successful implementation process.

Research team: Joseph Ngonzi, Alison Gernand, Lisa Bebell, Jeffery A. Goldstein, Yoel Sadovsky, Wang Z. James, Fred Kaggwa, Julian Adong, Kelly Gallagher, Magee – Janet Catov, Stefan Kostadinov, Drucilla Roberts.

Congratulations to the team on this great grant achievement. All the best on a successful implementation process.



Congratulations to Dr. Kayondo(PhD) & Prof. Verena for winning a 3year grant from Else Kroner-Fresenius Foundation(Germany)

Dr. Musa Kayondo (PhD) from the Faculty of Medicine, Department of Obstetrics and Gynecology and Prof. Verena Geissbuher from the University of Basel Switzerland and St Claraspital, Basel won a 3-year grant from Else Kröner-Fresenius Foundation (Germany).



Dr. Musa Kayondo and the Team at one of the Fistula camps.

Principle Investigators

Prof Verena Alice Geissbühler and Dr. Musa Kayondo
Grant title: Women's health in Uganda with focus on pelvic floor Disorders

The funding body: ElseKröner-Fresenius Foundation (Germany), website: <https://www.ekfs.de/en>

The grant amount: 400,000 Euros

Project duration: 3 years.

The purpose of the grant: To treat women with PFDs and train young Gynecologists to become Urogynecologists and develop capacity to handle women with PFDS.

Who is Dr. Musa Kayondo?

Dr. Musa Kayondo (PhD) is the Head of Department

Obstetrics and Gynecology MUST. He is a Gynecologist and fistula surgeon. He is the Chief of Obstetrics and Gynecology and head of the Fistula plus Female Pelvic Medicine and Reconstructive Surgery Division at MUST/ MRRH. Since 2010, Dr. Kayondo has also been a full time Senior Lecturer and a mentor of Obstetrics and Gynecology at MUST.

Musa is a golden star MUST alumnus (MBChB 2004, MMedObgy 2011 PhD 2022). Dr. Kayondo is a member of the International Society of Obstetric Fistula Surgeons (ISOFS), as well as a member of the Uganda Fistula Technical Working Group (FTWG), which was established by the Ugandan Ministry of Health to manage fistula programs including surgery, training and prevention of obstetric fistula in Uganda.

He was Vice President of Association of Obstetricians and Gynecologists of Uganda 2019- 2021.

Dr. Kayondo first volunteered his services to Medicine for Humanity during his residency in 2009. In 2010, he became the first graduate of the MUST/ MFH collaborative Female Pelvic Medicine and Reconstructive Surgery Program.

He has brought MUST national and international collaborations these include Medicine for humanity, ElseKröner-Fresenius Foundation (Germany), MEDLEND, who supported the department of OBGY in the Extension and building of the fistula and gynecology ward at MRRH, and a lecture theater for the postgraduate students.

Dr. Kayondo heads a team of medical persons around Uganda (Nakaseke Lira Mbarara Bwindi) carrying our surgeries to correct Urogynecology disorders. On average, Dr. Musa and his team correct about 300 Urogynecology disorders annually.

He is happily married to Dr. Violette Nabatte, (MUST alumnus) who is a pediatrician at a local upcountry hospital for children living with HIV/ AIDS. Blessed with Children Moses and Martha

Congratulation Dr. Musa, Prof. Verena and the entire team for winning yet another grant to support and give hope to women in Uganda.

Alumni in the News

Sam Mugisha shines at the Swiss Re Foundation Award 2022



Samuel Mugisha and his team at Streamline Health Tech won the Entrepreneurs for Resilience Award 2022 by the Swiss Re Foundation.

From 264 applications across 81 countries, the Swiss Re Foundation announced Samuel Mugisha on behalf of Streamline Health Tech as the overall winner at the Award Ceremony held in Zurich. Streamline Health Tech will receive a grant and non-financial support from Swiss Re experts.



The Entrepreneurs for Resilience Award recognizes entrepreneurial initiatives that take innovative approaches to building resilient societies and realizing the United Nations Sustainable Development Goals. The 2022 award theme is improving financial access to healthcare

About Samuel Mugisha

Samuel Mugisha is a social serial entrepreneur who has spent the last 10 years building and implementing technologies in the health sector in East Africa.

He graduated from Mbarara University of Science and Technology in 2013 with a Bachelor of Computer Engineering. He also holds a Master of Advanced Computer Science from the University of Manchester.

Samuel Mugisha has won a number of awards including such as Fast Forward Accelerator in 2021, London School of Economic ASPECT Accelerator in 2021, Manchester Venture Further Social Entrepreneurship Award in 2020, and Annual CAMtech Medical Hackathon for Innovation in health care in 2019 and up accelerate Challenge Award for Data analytics innovation in health care, 2017.



Mr. Ronard Tushabe stands out with the CCERRRP grant

Mr. Ronard Tushabewon Covid-19 Economic Recovery and Resilience Response Program (CERRRP) grant support from Private Sector Foundation Uganda and Mastercard Foundation.

CERRRP was initiated to complement the efforts of the Government of Uganda in controlling the spread of COVID-19, support the government to develop a Post COVID-19 Economic Recovery as well as a Growth Strategy to augment the survival, recovery and resilience of enterprises in Uganda.

Ronard Tushabe completed Bachelor of Computer Engineering from Mbarara University of Science and Technology in 2017. He has won a number of awards and fellowships including 2022 Mandela Washington Fellowship (MWF) and 2021 Young Africa Leaders Initiative (YALI) Fellowship, US Department of State fully funded programs and 2021 Techpreneur of the Year Africa under 30 at the Founder of the Year Awards (FOYA) ceremony held in Nairobi. Ronard has won a number of grants including Funds for Internet Research Education (FIRE) in 2018, YALI Transformation Fund in 2021, National ICT Initiative Support Programme (NIISP) in 2021 and GIZ capacity building grant in 2022.

He will use this grant support, to build capacity of young people especially University students to launch and market their technology innovations.

Ms. Miriam Iculet chosen for chevening scholarship 2022

Ms. Iculet Arikosi Miriam was one of the 19 Ugandans selected for the UK 2022/2023 chevening scholarship 2022. Iculet was the 32nd Guild president of MUST, notwithstanding the valedictorian of the 28th graduation held on 28th May 2022.

At the same event, she won the convocation award of the Bachelor of Science in Gender and Applied Women Health programme in the Faculty of Interdisciplinary studies

She is going to pursue a MSc. Biosocial Medical Anthropology at University College London.



Congratulations to our alumni for raising the MUST flag. Keep winning.

Congratulations

Dr Jonans Tusiimire
for being elected as the
Vice President for the
**Commonwealth Pharmacist
Association (CPA)**



Vice President of the Commonwealth Pharmacists Association from MUST

The Commonwealth Pharmacists Association (CPA) Regional Assembly elected Dr Jonans Tusiimire as vice president for the next two years. Dr Tusiimire, the Deputy Dean Faculty of Medicine and Senior Lecturer in the Department of Pharmacy at Mbarara University of Science and Technology, is the representative for the Pharmaceutical Society of Uganda (PSU) at the CPA and thus a member of the CPA Council.

Prior to his election as Vice President, he had also been successfully nominated as a Regional Representative to the CPA Regional Assembly by the National Pharmacy Associations within the East and Southern Africa region. The CPA works in six regions: the Americas, Europe, West Africa, Eastern and Southern Africa, and the Pacific.

Established in 1969, the Commonwealth Pharmacists Association (CPA) is the professional body for national pharmacy associations in Commonwealth countries. The body is mainly concerned with advancing health and education for the public benefit through empowering pharmacists at all levels to improve health and wellbeing throughout the Commonwealth.

Accordingly, the three strategic objectives of the CPA are:

- To develop pharmacy workforce and build capacity through education and training
- To support pharmacists to strengthen healthcare systems through the safe and effective USE of medicines, prevention of disease and promotion of healthier lifestyles
- To advocate for improved ACCESS and QUALITY of medicines and vaccines, embedding pharmacists at all levels of medicines management

Dr Tusiimire Jonans will be formally announced at a CPA Council Meeting to be held during the International Pharmaceutical Federation (FIP) Congress in Seville, Spain on 20th September 2022.

MUST Trains Primary School Pupils on Primary Healthcare Management within Schools and Homes.



Mbarara University of Science and Technology (MUST) through the Ubuntu- First Mile Project has aided primary schools within Mbarara city south division through training pupils and their parents on living with a healthy body and within a safe environment.

This program under the Faculty of Medicine operates within primary schools which include ST. Paul's Primary School katete, Nyakayojo Primary School, and Nyamuyaga Primary school. In this program, the Nursing Department at MUST takes nursing students to these schools on weekly basis to provide health talks to learners on how to keep proper body hygiene and living in a healthy environment.

Area local leaders and school management committees are always brought on board to offer support to-

wards receiving students who are always in their communities interacting with pupils and teachers about peer health talks, improvement in hygiene and sanitation.

A fully equipped clinic was established at every school with a full-time nurse available to attend to children's health needs. In addition to this, the nurses together with the Nursing students from MUST do follow-ups within the children's home to access sanitation status among others.

Religious leaders and parents were grateful for the pragmatic health services rendered to them by the Ubuntu project especially in bringing health services closer to them relieving them from the burden of walking long distances with their children when a health need arises.

The Head Teachers of beneficiary primary schools testified that the project has not only promoted proper hygiene among learners but also increased the enrollment rates of their schools. For example, Katete Primary School's population increased from 200 to 500, Nyamuyaga Primary school from 50 to 180 pupils and Nyakayojo primary school from 100 pupils in 2018 to over 500 pupils in 2022.



Through such trainings, the parents and pupils in the selected schools have been able to acquire skills in areas of body and oral hygiene and management of menstruation periods.

"One day, my daughter in primary six came back home with materials and when I asked their importance, she told me that they were taught how to prepare themselves while they are in their monthly periods. She revealed to me the new teeth brushing skills she had learned from the Doctor (nursing student). With the Ubuntu project, pupils are learning practically which makes it hard for them to forget what they learned. We thank Ubuntu under the stewardship of Dr. Grace Nambozi because it has been there for our children in areas that we had not thought of. What you teach our pupils, also benefits us in one

way or the other," One of the parents at Nyakayojo P/S appreciated.

The Nursing students also benefit from these engagements through gaining exposure to what takes place within communities in terms of health care provision.

"Through community health education, we have been exposed to what real nursing is. This has been an eye-opener to what takes place outside classroom theory. This is preparing for life when we are posted in different areas as qualified nurses. With the mentorship from our supervisors, I'm lucky that I have been able to assist pupils in maintaining personal hygiene and discussing it with their parents. There is a lot to learn from communities because it has given me an exact image of what real nursing care is," Kazibwe Benard, a first-year Nursing student explained.



Dr. Grace Nambozi the team leader of the Ubuntu Project said that the purpose of this activity was to interact and know each other and to lay strategies as stakeholders to continue working together to support children so that they become responsible healthy citizens of this country. She acknowledged the local leadership of the communities where Ubuntu beneficiaries are situated.

The University Vice-chancellor was represented by the Dean Faculty of Medicine, Dr. Ngonzi Joseph who applauded Ubuntu directors, and sponsors for thinking about children especially those in schools in equipping them with skills aimed at having hygienic bodies and environments in fulfilling the aspect of community engagement which is one of the core reasons for the establishment of MUST.

He tasked management committees of the beneficiary primary schools to lay strategies aimed at ensuring the sustainability of what Ubuntu has established. He mentioned that parents and founding partners such as churches should be brought closer.

Other members on the team that inspected the activities within the partnering schools included Mr. Andrew Ainomugisha (Global Health Collaboration) Dr. Jonans Tusimire (Deputy Dean FoM), Director for Directorate of Graduate Research and Training (DRGT), staff from the Nursing department and students pursuing Bachelor of science in Nursing and Bachelor of Nursing Completion.

South Western Uganda's Communities appreciate the Post Graduate Community placement supported by the First Mile Community Health Program



Mbarara University of Science and Technology (MUST) through the First Mile Community Health Program started an initiative aimed at placing Post graduate students in under-specialized training in different communities of southwestern Uganda as a way of fulfilling the pillar of community engagement onto which MUST was established.

Since 2018, different health facilities in southwestern Uganda have been selected to receive postgraduate trainees for community placement depending on the available need.

This year, a section of Post graduates pursuing Masters in Medical Laboratory Science (MMLS) was placed in health facilities that included Rukunyu Hospital (Kamwenge district), Ruhoko Health Centre IV

(Ibanda district), Kisoro Hospital (Kisoro district), Rubaya H/C IV (Kabale district), Bugoye HC III (Kasese district), Rushere community hospital (Kiruhura district) and Kabuyanda Health centre IV (Isingiro district) for a period of two weeks with both financial and supervision support from First-Mile Community Health Program.



The PG trainees offered medical services and mentorship to the staff members in the laboratory departments at the community health facilities. The trainees also gained hands-on experience through working with different people in a new environment which is different from their normal working environment at the university and the regional referral.

At Rukunyu hospital, PG trainees got a chance to work in a busy laboratory that serves Kamwenge and Kitagwenda districts and the neighboring areas. With the add-on of students' manpower and expertise, work within the laboratory was going on smoothly which reduced the waiting time for the patients to get their test results. The in charge of the laboratory at Rukunyu hospital Ms. Mugume Christine revealed that the facility is one

of the few accredited laboratories by SANAS which makes it a testing hub in the Rwenzori region. According to Ms. Mugume, many tests are brought to the facility, and with the help of MUST medical students, all tests are being done appropriately in the laboratory. She applauded First Mile Project for extending health service to them through community placement of well-trained PG trainees where both the students and the staff learn from each other.

Talemwa David (PG student), shared his experience on how he was able to offer guidance and learn from the facility staff in conducting viral load tests for pregnant mothers, TB gene-expert, CD4 counting, and PCR for Early infant diagnostic among other services. He acknowledged First Mile project for the full facilitation which has provided a favorable working environment for him.

On behalf of the Staff at Ruhoko health centre IV, Dr. Kwikiriza, the in-charge of the facility was grateful for the continued support from the First Mile Community Health program in terms of regular Continuing Medical Education (CMEs), for in charge and continuous placement of PG trainees with experience in various medical departments at Ruhoko. These not only gain practical experience in the health field but took a lead in the identification of gaps in the laboratory and mentorship of staff in laboratory organization and up-to-date handling of tests such as stool analysis, malaria slides, and writing laboratory requests. As a result of this, the waiting period for patients to get their results was reduced which boosted service delivery at the facility. She wished that more students in other departments such as Obstetrics and Gynecology, anesthesia, and ophthalmology be sent to aid the facility in service delivery.

Ms. Saphurah Nabaasa one of the students placed at Ruhoko health centre IV revealed that she was able to gain experience in handling many patients in the shortest time possible. They mentored the staff on organization and external quality control. About solving complaints of the laboratory not having instruments and reagents, the staff was advised to submit their requests to the government through the National Medical stores on time.

Ms. Namirembe Allen cherished First Mile for the support given to them to serve the community through using the skills they obtained from the school.

"We have benefited from this placement. Being under First Mile is a prestigious honor. This treatment has encouraged us to concentrate on attending to people to meet their health needs. For the time we have been here, we have served hundreds of patients and there is improvement in service delivery," She expressed gratitude.

She suggested that continuous evaluation should be conducted so that when other groups of students or health experts come and find the same challenges that were there before. This will enhance the sustainability of project achievements at all the health facilities where First Mile has a hand.

At Kabuyanda Health Centre IV, there were innovations put in place by PG trainees to enrich issuing of Test results on time. A new dryer was made from the local materials to assist in drying test samples within 5 to 10 minutes instead of using the normal dryer which would take 30 minutes to 1 hour to dry the samples and cause delays in the issuance of test results to the patients. Students also put in use some of the abandoned machines at the facility which included incubators and also went ahead to separate the office from the working space and improve the wiring of the laboratory for proper usage of electronic laboratory equipment.

Kiiza Frank reported that the placement has tested their creativity and innovativeness in health service delivery at Kabuyanda Health centre because they were able to talk to the management of the facility to make use of the available solar panels to work as a power backup in the case when the electricity goes off.

The in-charge of Kabuyanda Health Centre Ms. Kokunda Grace extended gratefulness to MUST and First-Mile for the initiative of the community placement because it has enabled them to learn new things from the medical students, especially in tests such as counting malaria species, the flow of patients and operation within the laboratory. She requested that if possible, the period of these community placements can be increased from two weeks to at least a month to increase the coverage.

Summary of MMLS PG trainees placed for community rotations:

NO.	NAME	Allocated health facility site	Assigned placement dates
1	Frank FZ Ndunguru	Kisoro Hospital	28th August to 10th September
2	NAMIREMBE ALLEN	Kisoro Hospital	28th August to 10th September
3	Kiiza Frank	Kabuyanda HC IV	28th August to 10th September
8	Ojulong Fidel	Ruhoko H/C IV	28th August to 10th September
5	TENYWA DAVID	Rukunyu Hospital	28th August to 10th September
6	UWAMAHOLO Consolée	Rukunyu Hospital	28th August to 10th September
7	NABAASA SAPHURAH	Ruhoko H/C IV	28th August to 10th September
4	Taremwa Prosper	Kabuyanda HC IV	28th August to 10th September
9	MASEREKA EDSON	Rubaya Health Centre IV	28th August to 10th September
10	TibenderanaLauben	Rubaya Health Centre IV	28th August to 10th September
11	WANZANGUHYA RABSON	Bugoye H/C III	28th August to 10th September
12	Ojuko Samuel	Rushere Community Hospital	18th September to 1st October
13	Kamwesigye Duncan	Rushere Community Hospital	18th September to 1st October

MUST Research ranking @ 2038, FS, FoM and Central administration improve tremendously. Congratulations to them.

Community	Number of Publications in March	Number of Publications in April	Number of Publications in May	Number of Publications in June	Number of Publications in July	Number of Publications in August	Number of Publications in September
Central Administration	60	66	66	66	75	76	79
Faculty of Applied Sciences and Technology	25	30	36	36	36	36	36
Faculty of Business and Management Sciences	17	41	41	46	46	46	48
Faculty of Computing and Informatics	73	76	82	86	86	86	87
Faculty of Interdisciplinary Studies	107	107	107	108	108	108	125
Faculty of Medicine	663	879	993	1073	1194	1259	1280
Faculty of Science	203	204	204	213	227	248	374
Institute of tropical Forest and Conservation	77	88	89	92	93	99	100
Maternal Newborn and Child Health Institute	10	18	16	20	20	20	20
Total	1235	1503	1634	1740	1875	1976	2122

Individual Ranking September 2022

Name	Number of Publications in March	Number of Publications in April	Number of Publications in May	Number of Publications in June	Number of Publications in July	Number of Publications in August	Number of Publications in September
Dr. Francis Bajunirwe	107	111	115	117	119	122	122
Dr. Conrad Muzoora	31	36	102	103	104	104	104
Dr. Joseph Ngonzi	43	70	76	81	82	85	88
Dr. David Bangsberg	38	50	82	84	87	87	87
Dr. Godfrey Zari Rukundo	26	29	78	82	85	82	82
Assoc.Prof. Joel Bazira	63	75	53	78	79	80	81
Prof. Celestino Obua	43	52	57	59	75	76	80
Dr. Siedner, Mark J	30	38	58	61	62	62	65
Dr. Haberer, Jessica	27	38	59	61	62	62	63
Prof. Robert Bitariho	26	56	57	61	62	62	62
Prof. Jerome Kabakyenga				56	57	57	61
Dr. Scholastic Ashaba	42	42	47	49	51	51	51
Dr. Hunt Peter			47	47	50	50	50
Dr. Angella Musiimenta			45	47	50		
Tsai Alexandar	35	45		45	48	50	50
DR. Maling Samuel							49

For this and more please go to the link: ir.must.ac.ug congratulations to our reseachers

Obituary at MUST



Mr. Amos Muhairwe
Gone Too Soon

Mbarara University of Science and Technology with deep sorrow announce the untimely death of **Mr. Amos Muhairwe, security Guard** which has occurred today morning. He will be buried tomorrow October 7th 2022 in katunda, Mushunga Mitooma District.

Psalm 147:3
The Vice Chancellor on behalf of the MUST community

Succeed We Must

MbararaUniversity @MbararaUST Mbarara University of Science and Technology



Ms. Janat Nakachwa
MBChB IV
Gone Too Soon

Mbarara University of Science and Technology with deep sorrow announce the untimely death of **You will be remembered for your enviable character of pufing others first.**

Psalm 147:3
The Vice Chancellor on behalf of the MUST community

Succeed We Must

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EDITOR

Mr. Ampaire M. Lucas