



Mbarara University of Science and Technology



SPECIAL EDITION II

28TH GRADUATION CEREMONY

28th May 2022



#MUST28thGrad

Graduation speech by the Vice Chancellor Prof. Celestino Obua



With much gratitude and humility, the Vice Chancellor Prof. Celestino Obua welcomed the congregation to the 28th graduation ceremony of Mbarara University of Science and Technology. He thanked and congratulated the graduands for their hard work, dedication, and commitment to learning.

Through the Guest of Honor, **Hon Dr Joyce Kaducu**, Prof. Obua conveyed his sincere gratitude to the Government of Uganda through the Ministry of Education and Sports. He thanked the First Lady and Minister Hon Janet Kataha Museveni for her able stewardship of the Ministry. He further gave Special thanks and recognition to the President of the Republic of Uganda **H.E Yoweri Kaguta Museveni**, for the great vision of developing science and technology in Uganda. To this, MUST is appropriately responding with programmes that promote Science, Technology, and Innovation. Celestino added that MUST is fostering national and international partnerships that would not have been possible without the support of His Excellence. He mentioned the Cuba-MUST partnership that goes back 33 years ago. "This has continuously provided human Resource support since the inception of MUST". He also mentioned the visit of Cuban ambassador to Uganda, Rwanda and Burundi **H.E Dr. Tania Perez Xiques**. The Vice Chancellor said her

visit to MUST revitalized the tie. The Vice Chancellor further mentioned that the government of Uganda still, through the Ministry of Science, Technology, and Innovation, has been supporting researchers and innovators at MUST in different areas, especially in medical development and standardization. Prof Obua appreciated the visit of Hon Monica Musenero which aimed at establishing a firm foundation, especially with the new project on Structuring the R&D Ecosystem of



the Pathogen Economy. "MUST faculties have been part of the Presidential Initiative on Epidemics (PRESIDE) where a number of faculties have been awarded funds for research and innovation". The vice chancellor appreciated sponsors from different organizations starting with the Students' Loans Scheme, implemented by the Higher Education Students' Financing Board (HESFB). Since 2014 and a total of over 783 Students benefited in the different disciplines of Science, Technology, Engineering and Mathematics Programmes at Mbarara University of Science and Technology. Other sponsors included: The Government of Uganda Merit-based Scholarships, The Hasse Foundation

based in Washington D.C; Madhvani Foundation; Fr. Bash Foundation; State House; Ministry of Health; Test 4 Uganda; Various Grants/Research projects through MUST Grants Office; The Pharmaceutical Society of Uganda; Help to help; MUST Council Award; and many more, MGH-MUST, PHARMBIOTRAC and others.

"Your support to MUST students is an investment in the future of this country". Said Prof. Obua.

Staff

In relation to the staff, Prof. Obua said staff of Mbarara University of Science and Technology had worked tirelessly to keep the University's reputation even when circumstances would dictate otherwise. He pointed out that the teaching staff had done this through mentorship programmes, teaching, research, and community engagement, despite all the challenges in and outside the University.

He further appealed to government to consider staff promotions. "While we appreciate salary enhancement, we would like to appeal to government to consider staff promotion. For this I will declare and will purposely sound like a broken record to ask Government to deliberately address our repeated requests for promotion of academic staff. The University is the only institution in which academic growth of the lecturer is an essential ingredient for quality of education. This institution has lecturers who have been in the same position for over ten years due to lack of money needed for promotions. "My humble appeal to government is to promote these dedicated lecturers if they have to derive any meaning from their sacrifices and engagement in the university". said Prof Obua. He added that promotion is equally important for both career growth and recognition among peers.

He further thanked and recognized the Academic Registrar's department (AR) for the determination to see that day become a reality. "The new normal evidently caught up with us without a choice. The AR's team together with the Deans and Lecturers ably coped with the new teaching systems, coordinated the examinations, and had marks entered the system on time. They then prepared the certificates and transcripts that all graduates will receive today after this function to go face the job market. As the Vice-Chancellor, I am extremely proud of you all, and I couldn't ask for a better team for the job. Thank you Dr Martha Kyoshaba Twinamasiko, the AR and your team! Thank you, Deans, Heads of Departments, and Lecturers for this achievement". The Vice Chancellor then recognized and paid respect to the departed staff with a moment of silence. These included:

- Prof. Julius Tumwiine from the Faculty of science department of Mathematics, who was one of the top researchers ranking 155th in the country
 - Ms. Edith Mbabazi from the Dean of Students Office
 - Ms. Diana Atwongere from the Simulation Centre, Faculty of Medicine
 - Dr. Moses Ndema from the Ophthalmology Department, Faculty of Medicine
- "May their souls rest in peace! Amen" He recognized **Mr Jastus Kizito Mugenyi the 33rd Guild President of MUST**. He said that as Management they were looking forward to

working with him. In the same vein, he commended **Ms. Iculet Arikosi Miriam**, the 32nd Guild President and her cabinet for having successfully completed their term of office despite the COVID-19 pandemic challenges. Celestino appreciated MUST's partners such as MGH - Global Health Collaborative and Epi-centre Uganda for the support they continued to provide to the MUST community

To the graduands, Prof. Obua had this to say:

"To the Graduands soon to be graduates, today you join the alumni family, those who have gone before you. They have held the MUST flag high at the National and International level. With the knowledge and skills acquired at MUST, they make the best of the world they serve. I trust you will also do the same.

He left them with a quotation from Janet Ann Napolitano, an American politician, lawyer, University Administrator, and former Secretary of Homeland Security under President Barrack Obama, that said, "***You don't go to University so you can punch a clock. You go to University so you can be able to make a difference***". "***Now that you have been to the university, go out into the world and make a difference***".

He thanked all those who turned up to share the MUST victory and happiness during the 28th Graduation Ceremony. "Thank you! Succeed we MUST! For God and my country!"



Mr Jastus Kizito Mugenyi



Ms. Iculet Arikosi Miriam



“Maintain the reputation of MUST”, the Chancellor Urges Graduates



The Chancellor Prof. Charles Mark Lwanga Olweny thanked the President of Uganda **H.E Yoweri Kaguta Museveni** for the continued support towards promoting Science and Technology Programmes. This in the long run has encouraged research and innovation at Mbarara University of Science and Technology. He said the University now boasts of being one of the best government Universities in Uganda according to the recent National Council for Higher Education ranking. Olweny further acknowledged the new events introduced at MUST with the goal of supporting and motivating the MUST community to say: **The University prayer breakfast**: “This allows us to reflect on our spiritual lives as we engage in our different roles in the university”. He thanked the participating clergy from the different religious denominations for the great works of ministry and supporting the MUST community to get closer to God, for we all know that, “the fear of the Lord is the beginning of wisdom”.

The Achievers Dinner: As Lailah Gifty Akita once said, “Every great

achiever knows the power of motivation”, Prof. Olweny said it was not different from MUST, because the university leaders were achievers, working towards motivating others. He thanked Prof. Obua and his team for introducing the achievers’ dinner aimed at motivating groups and individuals to stand out in research, innovation, and selfless service. He congratulated the first awardees for carrying the MUST Flag at the National and International level:



- **Assoc. Prof. Patrick Ogwang-Engeu** who was recognized at the National level for the Covidex innovation.
- **Dr. Joseph Kiwanuka**, a MUST alumnus and Lecturer in the Department of Anesthesia and Critical Care who was elected as the President of the Association of Anesthesiologists of Uganda. He congratulated Joseph upon that prestigious position, praying that his term of office would reflect a true MUST spirit of success.
- **Dr. Edith Wakida (PhD)** who won a Postdoctoral Fellowship at the Centre for African Studies, Harvard University. Her PhD and post doctorate was about implementation science, a field that called for promoting and improving the quality and effectiveness of Health services in the community. He encouraged more staff to try the field of Implementation science as a way of widening MUST’s fields of Research. He further congratulated Dr. Edith for that milestone in her career and

for the University.

Prof. Olweny thanked and recognized the **Community engagement activities at MUST**

He said, “MUST is well known for community engagement I thank the different departments in the university for engaging the community to address their challenges”. He recognized and thanked the team behind the **Student-Community Twinning Project**, a community based training in the Faculty of Interdisciplinary Studies that aimed at developing students as change agents with holistic practical skills for future employability and self-reliance. In that programme, students interact and diagnose community needs, working with the community to generate appropriate interventions for socio-economic transformation.



The different annual medical camps and campaigns. These were geared toward addressing community health problems and creating awareness. For example, Gynecological, Urology, ENT camp, and safe motherhood campaigns, kidney diseases campaigns, and others. Prof. Olweny thanked the leaders of those drives for holding the MUST flag high while promoting good health for Ugandans.



“This year, gynecological disorders camp where Dr. Musa Kayondo a senior Lecturer and gynecologist in MUST, led a team to Northern and central Uganda for the camp. These focused on supporting maternal health which is one of the government goals concerning the vision 2040. Thank you, Dr. Musa and your team, the University is proud of your works”.

In the same vein, he thanked and

recognized Dr. Marvin Mwesigwa for being at the frontline of opening a Urology clinic to address Urological disorders in southwestern Uganda.

In the recent camp held in March, over 66 males benefited with full board medical care.

Despite all the above achievements, Prof. Olweny said the University was operating with challenges of inadequate space, lack of equipment

and faculty. He appealed to Government to allocate funds to at least tackle two challenges of the three challenges within the next financial year.

To the graduates, he urged them to go out and make a difference with the knowledge acquired, maintain the reputation of those ahead who went before them, and above all serve to the best of their ability



MUST Recognises The Team Behind the E-Learning System and the Bus Chauffeur During the 28th Graduation

Ranking the stars: During the 28th graduation ceremony, the Vice Chancellor Prof. Celestino Obua requested the Minister Hon. Dr. Joyce Muriku Kaducu to present medals of honor to E-learning system team.

Prof. Obua said, “Where e-Learning is concerned, MUST for all the years of her existence has been a sleeping giant of sorts” (tongue in cheek)! He added that as a University, they had a well-developed Learning Management System in place but minimally utilized. The pandemic was a wake-up call. A team of staff woke up and worked on improving the Learning Management System, trained other staff and students on how the system works, notwithstanding its management. Finally, on-line teaching has become the order of the day, as we plan to embrace on-line examinations as well.

For effective implementation, Celestino called upon Government to support MUST in the following ways:

- Provide the band width needed up to 1000Mbps for effective internet experience
- Prioritize the procurement of LMS equipment such as computers for faculty
- Improve the server capacity, and software for online examination
- Train MUST staff on online teaching and examination.

Prof. Obua then recognized the team behind the success of E-learning, supervised by the Dean Faculty of Computing and Informatics Dr. Evarist Nabaasa.

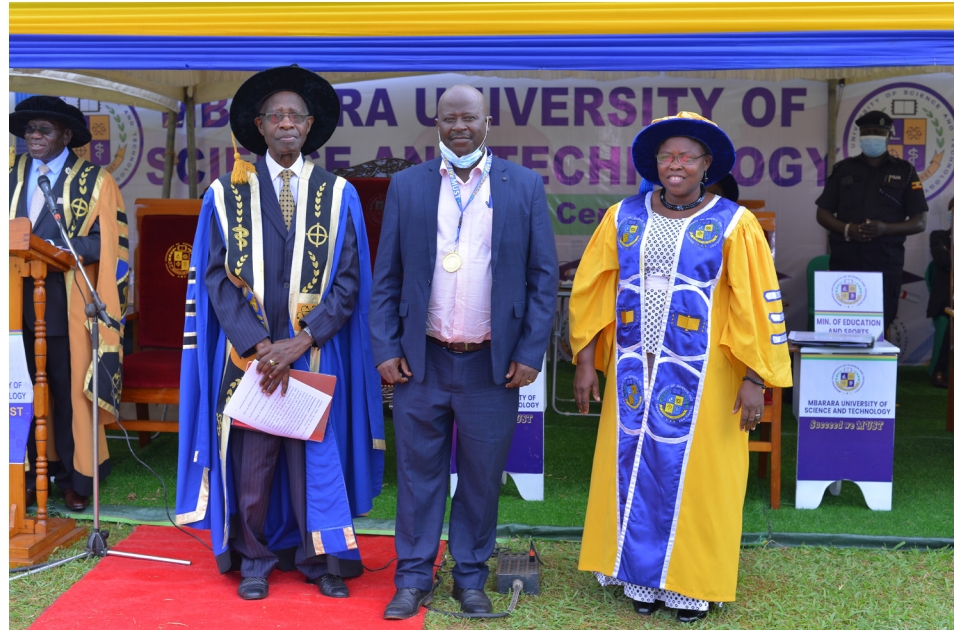
These included:

- Mr. Peter Bambaza, Mr. Martin Kijumi, Mr. Lasto Mubiru, Mr. Amos Baryashaba, Mr. Owen Owomuhangi and Ms. Christine Mukiza



L-R Mr. Owen Omuhangi, Mr. Mubiru Lasto, (awardees) Prof Celestino Obua, (VC) Prof. Mark Lwanga Olweny, (Chancellor) Hon. Dr. Joyce Kaducu, (Guest of Honor), Dr. Evarist Nabaasa Head of E-Learning, Mr. Amos Baryashaba, and Mr. Peter Bambaza (awardees).

In addition, Prof. Obua singled out one other outstanding staff member who had diligently worked under the hard times. He truly supported the students at the Kihumuro campus, cajoled and nursed the old bus, ferrying students from the Town campus to Kihumuro daily. “Mr. Baker Guma, we have trusted you with our students, and you have faithfully served where others would not want to be associated with this bus. I take this opportunity to recognize your service to MUST and to thank you most heartedly. You shall receive a MUST medal of honor”. Said Prof. Celestino Obua the Vice Chancellor



Mr. Baker receives the medal of honor

Cream De La Crème: List of the best students at Mbarara University of Science and Technology



During the 28th congregation of Mbarara University of Science and Technology, the best students were recognized by the University Convocation, a body that unites all MUST alumni. This is chaired by Hon. Kamara Nicolas. This year 2 students from the programme of Medical Laboratory Science had the same CGPA of 4.3, which qualified them both to receive an award. 60 students got first class degrees.

NB. Faculty of Medicine degrees are not classified.

The other body that recognized the best students was the ACCA ward Uganda. Annually, ACCA Uganda Recognizes the best student from the Faculty of Business and Management Science majoring in accounting. The award was presented by Ms. Dorothy Mutabazi the education Manager ACCA Uganda.

The best students per programme

Name	Programme	CGPA
ANDRODRI DENIS	Bachelor of Medicine and Bachelor of Surgery	4.39
GOBERA BOAZ	Bachelor of Pharmacy	4.45
DRALERU PEACE	Bachelor of Science in Nursing	4.54
MUTAKI REHEMA	Bachelor of Science in Nursing (BNC) - Completion	4.55
OLONG CLINTON	Bachelor of Medical Laboratory Science	4.3
TUMWESIGE ISAAC	Bachelor of Medical Laboratory Science (MLC) - Completion	4.3
ODOT SAM	Bachelor of Science in Pharmaceutical Sciences	4.12
ATENGE SHEILA	Bachelor of Science in Physiotherapy	4.11
MUGISA ALBERT	Diploma in Emergency Medicine for Emergency Care Practitioners	4.55
NDUHUKIRE DIANA	Advanced Diploma in Child and Adolescent Mental Health	4.52
BASIIMA JUSTINE	Bachelor of Science with Education	4.74
NANTONGO CHRISTINE	Diploma in Science Laboratory Technology	4.92
NAKANWAGI EVELYNE	Bachelor of Computer Science	4.26
NABASITU ELINAH	Bachelor of Information Technology	4.84
TASHOBYA TAIMA	Bachelor of Science in Accounting and Finance	4.62
BAMULINDE FRANK	Bachelor of Business Administration	4.9
MUGANZI JOEL	Bachelor of Science in Procurement and Supply Chain Management	4.54
NABBOSA MARIA	Bachelor of Science in Planning and Community Development	4.58
ARIKOSI MARIAM ICULET	Bachelor of Science in Gender and Applied Women Health	4.61
OKWENY ISAAC	Bachelor of Science in Agricultural Livelihood and Farm Production	4.76
MUSIIMENTA COMFART	Bachelor of Science in Computer Engineering	4.26
NAYEBARE CAROLYN	Bachelor of Biomedical Engineering	4.84
NAMATA HALIMAH	Bachelor of Science in Petroleum Engineering and Environmental Management	4.67
MUCHUNGUZI FELIX	Bachelor of Engineering in Electrical and Electronics Engineering	4.58



Best students represent other students in jubilation of their achievements

Bachelor of Business Administration

Surname	Other Names	Sex	Student No.	CGPA
BAMULINDE	FRANK	M	2018/BBA/005	4.9
TUHIRIRWE	RACHEAL	F	2018/BBA/121/PS	4.55
BABIRYE	JULIET	F	2018/BBA/004	4.53
NABAGGALA	RESTY	F	2018/BBA/018	4.51
NABASUMBA	RESTY	F	2018/BBA/016	4.48
TWINEMATSIKO	IVAN	M	2018/BBA/014	4.48
TUSINGWIRE	AGNESS	F	2018/BBA/013	4.47
KATUSIIME	ZAINAB MUHUMUZA	F	2018/BBA/072/PS	4.4

Bachelor of Science in Accounting and Finance

Surname	Other Names	Sex	Student No.	CGPA
TASHOBYA	TAIMA	M	2018/BAF/201/PS	4.62
TAYEBWA	NICKSON	M	2018/BAF/171/PS	4.55
NATUHWERA	CHRISTINE	F	2018/BAF/192/PS	4.42
ABAASA	JOEL	M	2018/BAF/001/PS	4.42

Bachelor of Science in Procurement and Supply Chain Management

Surname	Other Names	Sex	Student No.	CGPA
MUGANZI	JOEL	M	2018/BPSM/112/PS	4.54
MENUBENARD	WILLY MORO	M	2018/BPSM/109/PS	4.47

Bachelor of Science in Planning and Community Development

Surname	Other Names	Sex	Student No.	CGPA
NABBOSA	MARIA	F	2018/BPCD/031/PS	4.58
MUTESI	HARRIET	F	2018/BPCD/049/PS	4.57
MUBIRU	BENARD	M	2018/BPCD/022/PS	4.48

Bachelor of Science in Gender and Applied Women Health

Surname	Other Names	Sex	Student No.	CGPA
ARIKOSI	MARIAM ICULET	F	2018/BGWH/004/PS	4.61
KATUSIIME	CYNTHIA	F	2018/BGWH/008/PS	4.48

Bachelor of Science in Agricultural Livelihood and Farm Production				
Surname	Other Names	Sex	Student No.	CGPA
OKWENY	ISAAC	M	2017/BSAL/028/PS	4.76
BEGUMANYA	ALBERT MULINZI	M	2017/BSAL/010/PS	4.67
MUSINGUZI	CHRISTOPHER	M	2017/BSAL/019/PS	4.64
OWUJJO	FRANCIS	M	2017/BSAL/029/PS	4.42
NDYAMUHAKI	LYNETTEE	F	2017/BSAL/026/PS	4.4

Bachelor of Biomedical Engineering				
Surname	Other Names	Sex	Student No.	CGPA
NAYEBARE	CAROLYN	F	2017/BME/045/PS	4.84
AMODOI	RONALD	M	2017/BME/069/PS	4.74
NTONDE	USHER KIRUNGI	F	2017/BME/047/PS	4.63
SSESSANGA	ISAAC MWESIGWA	M	2017/BME/057/PS	4.54
BABIRYE	JOY	F	2017/BME/012/PS	4.53
ASHERURE	IMMACULATE	F	2017/BME/009/PS	4.43

Bachelor of Science in Petroleum Engineering and Environmental Management				
Surname	Other Names	Sex	Student No.	CGPA
NAMATA	HALIMAH	F	2017/PEM/075/PS	4.67
NAHWERA	MACKLINE	F	2017/PEM/030/PS	4.66
AYEBAZIBWE	IVAN	M	2017/PEM/077/PS	4.56
NAIGAGA	BERACHIA	F	2017/PEM/037/PS	4.5
NINSIIMA	MOREEN	F	2017/PEM/040/PS	4.5
KINTU	KENNETH	M	2017/PEM/025/PS	4.5
NAIGA	LINNET	F	2017/PEM/066/PS	4.47
KIPSANG	DISMAS	M	2017/PEM/026/PS	4.46
KIBUUKA	JOSHUA	M	2017/PEM/024/PS	4.44
BAKARA	BENJAMIN	M	2017/PEM/014/PS	4.42

Bachelor of Engineering in Electrical and Electronics Engineering				
Surname	Other Names	Sex	Student No.	CGPA
MUCHUNGUZI	FELIX	M	2017/EEE/033/PS	4.58
ARUHO	GERALDS	M	2017/EEE/007/PS	4.53
ATWIJUKIRE	CHRISTOPHER	M	2017/EEE/015/PS	4.48

Bachelor of Science with Education				
Surname	Other Names	Sex	Student No.	CGPA
BASIIMA	JUSTINE	F	2018/BS/020	4.74
NUWAMANYA	OBED	M	2018/BS/208/PS	4.7
TANGIRIZA	RODGERS	M	2018/BS/093	4.59
KATUULA	FRED EDDY	M	2018/BS/035	4.58
NAKAKANDE	HADIJJAH	F	2018/BS/268/PS	4.58
BABALANDA	SAM	M	2018/BS/125/PS	4.56
AGABA	RONALD	M	2018/BS/121/PS	4.51
AINEOBUSHOBOROZI	GODWIN	M	2018/BS/006	4.51
SSENKUBA	FRANCIS	M	2018/BS/087	4.51
SERUNKUMA	DENIS	M	2018/BS/083	4.5
TUKASHABA	BRUCE	M	2018/BS/215/PS	4.49
NUWAMANYA	HERBERT	M	2018/BS/072	4.46
OCAN	EMMANUEL	M	2018/BS/073	4.45
TAREMWA	PETER	M	2018/BS/094	4.43

Bachelor of Information Technology				
Surname	Other Names	Sex	Student No.	CGPA
NABASITU	ELINAH	F	2018/BIT/006	4.84
NAKIBINGE	STEPHEN	M	2018/BIT/116/PS	4.81
NALUMAGA	MARIA	F	2018/BIT/007	4.54

Mbarara University of Science and Technology Graduates urged to embrace 21st Century competencies



On May 28, 2022, MUST held the 28th graduation ceremony at Kihumuro main campus. 1,319 graduated with diplomas, degrees, masters, and PhDs which is the highest number since inception. With a breakdown of 1091 undergraduates 228 post graduates (199 Masters and 29 PhD). These were in the fields of Medicine, Science, Technology, Education,

Business, Engineering, Development studies, and Governance. The guest of honor was **Hon. Dr. Joyce Moriku Kaducu** the Minister of State for Primary Education and a MUST Alumnus. She urged the graduates to be admirable ambassadors of MUST, uphold integrity, be innovative, creative, skillful and communication strategists. She added that

all those values are vital in the 21st century. Specifically, to the girl child Hon. Kaducu urged them to maintain their dignity by dressing up decently. The Minister added that, she trusts that MUST has given them the right skills to be job creators who can transform knowledge into practice to remain attractive in the job market.



Dr. Kaducu on behalf of Government appreciated MUST's contributions to the community through research, innovation, and publication. The Minister also noted that, the Government through the Ministry of ICT and Innovation has supported real time innovations at this University particularly, the Faculty of Computing and Informatics that provide solutions in the 4th technological generation.

Dr. Joyce Moriku Kaducu promised that Government through the Ministry of Education and Sports, and the Ministry of Health shall work out to support Photo Kabada Project that has been developed in the Faculty of Applied Sciences and Technology to develop it into a commercial product that can be deployed in the health facilities.

She congratulated all graduands for braving the challenging times of the COVID-19 pandemic to reach this day. She also extended her appreciation to everyone that supported the graduands especially the parents, guardians, sponsors, and university staff. Succeed we Must, for God and my Country.



We did it: 29 PhDs awarded





Name: Violah Mpangwire

Research title: **Enhancing Adoption of a Unified Identification System for Ministries, Departments and Agencies in Uganda**

This study examined the technological, organizational and environmental factors that influence the adoption of Unified Identification System (UIDS) among government Ministries, Department and Agencies (MDAs) in Uganda. The study highlights that for a successful and sustainable implementation of the UIDS among MDAs in Uganda, special attention should be focused on addressing the technological, organizational and environmental factors. The study recommends MDAs to define a clear vision and priorities for the UIDS, develop modules that are compatible with the country's telecommunication infrastructure, and streamline the legal status for electronic transactions.



Name: Silver Onyango

Research title: **Evaluation of Variations in Ambient Particulate Matter (PM10) at Selected Sites in Uganda: A Case of Rubindi, Mbarara, and Kyebando**

The research highlighted the severity of ambient air pollution at selected sites in Uganda ranging from Rural to Urban sites. The study recommended use of simple solutions to the air quality problem including reduction in open air waste burning, improving grass or pavement covering, reducing biomass consumption. The study has further inspired other studies that are investigating the link between particle pollution and its effects to human and environmental health in Uganda and raised awareness of the severity of particulate pollution.



Name: Wilbroad Aryatwijuka

Research title: **Ethical behavior, Managerial competencies and supply chain performance of relief aid organizations in Western Uganda**

The study established that ethical behavior, managerial competencies and accountability are positively and significantly associated with supply chain performance of relief aid organizations in western Uganda. The study provides insights on how relief aid organizations can improve their supply chain efficiency to ensure the relief supplies reach the intended beneficiaries



Name: Raphael Wangalwa

Research title: **Ecology, Phytochemical composition, and Bioactivity of Citropsis articulata a threatened Medicinal Plant: Implications for ex-situ conservation in Uganda**

There is a growing concern of antibiotic resistance, making infectious diseases harder to treat. This study explored Citropsis articulata as a potential source of antimicrobial agents. Findings of this study indicated that Citropsis articulata leaf extracts are effective against bacteria and fungi that cause infectious diseases. Thus, this plant is a potential source of potent bioactive chemicals that can aid in the development of novel antibiotics. Using GIS and Remote sensing technologies, this study also depicted the suitable places for growing Citropsis articulata outside protected areas in Uganda. This knowledge is critical for precision cultivation and domestication of vulnerable medicinal plants at both local and regional scale in a bid to ensure their sustainable use and conservation.



Name: Eliab Horub Kweyunga

Research Title: **Mathematical models for the dynamics of Banana Xanthomonas Wilt and the Banana Weevil, *Cosmopolites Sordidus* (Germar) and Control Interventions**

The study addresses two of the major impediments to banana yield and production in the east, central and southern Africa regions and has serious implications for global food security and household income. Specifically, the study looks at the role of asymptomatic but infectious plants in the persistence of the disease and provides a theoretical framework for the control of the banana weevil by trapping and use of natural enemies.



Name: Geoffrey Ogwang

Research Title: **The Effect of World Oil Price Shocks on Uganda's economy**

The study investigated the pass-through effect of world oil price shocks to the domestic pump prices using Structural Vector Autoregressive Model (SVAR) and it revealed an insignificant pass-through effect of world oil price shocks to the domestic pump prices. Further, using Vector Error Correction Model (VECM) to investigate the determinants of oil imports, the study showed that, in both short-run and long-run, Gross Domestic Product (GDP), had a positive effect and do promote oil imports for Uganda. The study recommends establishing a body to regulate the pricing of domestic petroleum products in Uganda



Names: Joseph Ezeonwumelu Obiezu Chukwujekwu

Research title: **Biopharmaceutical Evaluation of *Bidens Pilosa*, *Ageratum Conyzoides* and *Ocimum Suave* in Management of Oral Lesions of HIV/AIDS Patients**

The findings of this research have shown that most of the antibacterial and antifungal agents in the market are being resisted by both oral bacteria and yeasts of HIV/AIDS patients. It simply means that cotrimoxazole can be made toxic or ineffective sometimes when taken together with any of these plants' extracts. Therefore, HIV/AIDS patients visiting and using both pharmaceutical drugs and traditional healer's medicines at the same time should be properly guided on the use of these combinations by health workers, government agencies and other stakeholders to save their lives.



Name: Deborah Natumanya

Research title: **Electronic examinations framework with free handwriting**

This research helps improve the electronic examination process, by providing better electronic examination setting, electronic exam attempts with electronic free handwriting, electronic exam marking and storage of results. The research is beneficial to students, lecturers, and university management.



Name: Athanansio Bashaija

Research title: Occupational Stress, Hope, Alcohol Use among Secondary School Teachers in Greater Bushenyi, Uganda

This study examined associations in the levels of occupational stress, hope, and alcohol use across teachers' socio-demographic characteristics. It further explored the moderating effect of hope on the relationship between occupational stress and alcohol use among secondary school teachers in Greater Bushenyi, Uganda. It is important for administrators of secondary schools to devise means or strategies that enhance hope, minimize occupational stress and alcohol use among secondary school teachers in Uganda



Name: Musa Kayondo

Research title: Pelvic organ prolapse in Southwestern Uganda: Magnitude, Trends, Effect on Quality of Life, and Risk Factors for Recurrence after Surgery at Mbarara Regional Referral Hospital

Pelvic Organ Prolapse (POP) is one of the Pelvic Floor Disorders (PFDs) that negatively affects the Quality of Life (QOL) of women. This study investigated the magnitude and trends of POP at Mbarara Regional Referral Hospital (MRRH) over a five-year period. Finding of this study show that younger women, and those with postoperative vaginal cuff infection were more likely to experience recurrent prolapse after vaginal repair. We recommend that surgery should be scaled up to improve the QOL. Surgeons should put in place measures that minimize the risk of postoperative cuff infection in order to reduce the risk of POP recurrence.



Name: Trust Otto

Research title: Evaluating the Origin of Chemical Anomalies in Am Stars

This study revealed that radiative diffusion, combined with turbulent mixing, thermohaline convection, and slow to moderate rotation can account for most of the chemical peculiarities found in these Am stars. The discovery that the basic elements found in stars are the same elements that make up our bodies strengthens our bond with the cosmos. This connection has an impact on our lives, and the awe it inspires is perhaps one of the reasons why astronomy's beautiful images are so popular today.



Name: Irene Nalumansi

Research title: Spectrophotometric Method Development for Orthophosphate Anion Quantification in Water Systems

There is an overgrowing concern on eutrophication of water systems due to nutrients such as phosphates that arise from industrial discharge, use of detergents, agricultural wastes among others. Excess amount of phosphates in water lead to increased algal growth resulting into suffocation, fish kills and other related effects of eutrophication, hence the need to monitor quality of water systems using simple and accurate methods. The standard method of orthophosphate anion determination uses ascorbic acid reducing agent.



Name: Baguma John Muhunga Kule

Research title: **Control environment, Credit Management Systems and Financial Performance of Savings and Credit Cooperatives in Mid-Western Uganda**

The findings of this study indicate a strong positive and significant relationship between Control Environment and Financial Performance. The study further found that accountability plays a mediating role in the relationship between Control Environment and Financial Performance of SACCOs in Mid-Western Uganda. The study recommends that managers of SACCOs should further the design and implementation of an effective control environment by ensuring that integrity and ethical values are upheld.



Name: Mercy Gladys Tenywa

Research title: **Standardization of *Dracaena steudneri* Engl. As A Remedy for Pain Relief During Childbirth**

Pain during childbirth has been known to be severe and has a lot of implications like mortality, complications and also has caused many to avoid the giving of birth due to its severity. However, *Dracaena steudneri* plant has got pain relieving activity (analgesic), inducing activity (oxytocic) which will help the expectant mothers during labour/child birth. It is orally administered whereby there is no need for a medical personal/birth attendant, its available and minimizes costs.



Name: Paul Kyalimpa

Research title: **Leadership Competences and sustainable funding of Local Non-Governmental Organizations in Uganda**

The study established a leadership framework and tools to aid recruitment and evaluation of NGO leaders with competences requisite to effectively mobilize and efficiently manage resources to guarantee financial independency of local NGOs. The study recommends capacity building and mentorship to NGO leaders in competence areas that foster sustainable funding. Further policy recommendations for favorable government policy on tax exemptions on local NGO income generating ventures and contributing businesses to cultivate a fertile business and fundraising environment.



Name: Rwakihembo John

Research title: **Corporate Governance and Financial Performance of Private Limited Companies in Central and Western Uganda**

The empirical findings of this study, depict the urgent need for managers to intensify efforts aimed at ensuring that companies are highly accountable and transparent to their stakeholders and maintain a good reputation as a way of survival in the market. Shareholders should ensure that the boards of their companies bear dynamic characteristics such as an appropriate number of members, non-executive directors, independent audit committees and segregation of the roles of the chairman board and the CEO



Name: Ajayi Clement Olusoji

Research title: Development of Pharmacopoeial Standards for Azadirachtaindica, Cymbopogoncitratatus, Moringaoleifera, Tithoniadiversifolia and Vernoniaamygdalina Antimalarial Plants in Uganda

The absence of official recognition of the use of antimalarial plant remedies in the health care delivery system in Uganda and other African nations has been partly attributed to the lack of quality and safety standards, despite the wide use of these plants. Therefore, this work involved carrying out several standardization experiments and provided botanical and chemical parameters, antimalarial potencies, toxicity profiles, and other useful standards for five Ugandan antimalarial plants. This study confirmed the pharmacognostical parameters for the first time, phytochemical and biological parameters of these plants in Uganda for the development of monographs which then qualify for incorporation into the first edition of Ugandan Herbal Pharmacopoeia.



Name: Andrew Lukyamuzi

Research title: Application of Machine Learning in Tracking Food Insecurity

Machine Learning allows development of models capable of learning from datasets and this offers benefits such as flexibility, creativity, extraction of complexity patterns, and high performance. The research findings apply to ministry of Relief, Disaster Preparedness, and Refugees in Uganda. While the policy document from the ministry embraces IT application to enhance ministry's activities, it is silent on harnessing Machine Learning. This study implores the relevant ministries to embrace Machine Learning as a computational technique that can enhance tracking of food insecurity.



Name: Nuwagira Catherine

Research title: Propagation and Growth Performance of Schkuhria Pinnata L., for Optimal Phytochemical Contents and Antimalarial Activity in Western Uganda

This study investigated the agronomical soil nutrient status and how it relates to agro-morphological traits of Schkuhria pinnata. Results showed that Schkuhria pinnata grows best in slightly acidic to neutral, sandy loam, non-saline soils of Kasese in Western Medium-High Farmland. The first-time viable in vitro propagation protocol was developed. For maximum phytochemicals and better antimalarial activity, local communities could consider harvesting Schkuhria pinnata at the flowering stage.



Name: Micheni Lisa Nkatha

Research title: Phylogeography, Transmission Dynamics and Drug Susceptibility patterns of Mycobacterium tuberculosis isolated from persons with Pulmonary Tuberculosis in Southwestern Uganda

The strain-to-strain diversity of Mycobacterium tuberculosis complex (MTBC) can have phenotypic implications such as transmissibility and treatment effectiveness. Findings of this study indicate a high genetic diversity of MTBC strains circulating in Southwestern Uganda with the Ugandan genotypes accounting for the larger proportion of the cases. Majority of pulmonary tuberculosis cases are due to reactivation and infections with multiple Mycobacterium tuberculosis complex strains are more prevalent among the newly diagnosed patients while multidrug resistance is significantly more among the relapsed patients.



Name: Ikiriza Hilda

Research title: Diversity, Phytochemical Profile and Micropropagation of Ananti-fertility Medicinal Plant (*DioscoreaBulbifera*) in Uganda

Dioscoreabulbifera is an important medicinal plant which grows in the wild forests of Uganda. The plant is at a high risk of extinction due to the high demand of diosgenin, a steroidal saponin which is a main precursor for production of synthetic steroidal hormones. Findings showed that *Dioscoreabulbifera* accessions from low altitude forests were found to have the highest quantities of diosgenin (anti fertility metabolite) and therefore such forests should be considered for future venture into industrial production of diosgenin in Uganda. *Dioscoreabulbifera* plant can also be considered in formulating a natural herbal contraceptive.



Name: Alonga Lina Sara Mathew

Research title: Safety Profiling of Traditional Antimalaria Plant, *Aristolochia Bracteolata* Lam. Commonly Used Among Communities of Jubek State, South Sudan

The study investigated the safety profile of *Aristolochiabraceolata* an antimalarial plant found in South Sudan. Findings of this study demonstrated that the plant caused mild adverse effects on the liver function, however, there was no significant adverse effect on kidney function tests. The histopathological examination of all the harvested organs exhibited no significant lesions. Therefore, just like it is with all drugs, the toxic effects of *Aristolochiabraceolata* extracts could be dose dependent. This plant could be a good option for malaria treatment if supported with further clinical trial and product development studies.



Name: Emanuel Peter

Research title: Herbal Formulation using *Momordica charantia* and *Abelmoschus esculentus* for Glycemic Control

Fruits of *Momordica charantia* and *Abelmoschus esculentus* plants have scientific evidence of their antidiabetic efficacy but remain underutilized due to insufficient standardization. In light of this problem, this study developed a standardized solid dosage form containing the two plants for glycemic control. A binary mixture of *Momordica charantia* and *Abelmoschus esculentus* fruit extract resulted in a stable, safe, and efficacious herbal capsule dosage form. Local communities and policymakers could utilize our study findings to promote these plant species' production and utilization as adjunct preparations for type 2 diabetes mellitus.



Name: Mushagalusa Kasali Félicien

Research title: Phytochemical and Pharmacological Study of *Chenopodium ambrosioides* and *Physalis peruviana* , herbs used to treat diabetes in Congolese Traditional Medicine

Diabetes mellitus remains a public health problem in many developing countries. Herbal remedies are gaining popularity because of several advantages. Findings of this study demonstrated that the antioxidant activity of fractions was more pronounced than α -glucosidase inhibition. However, compounds from *Chenopodium ambrosioides* presented good α -glucosidase inhibition and those from *Physalis peruviana*, more substantial antioxidant property. These plants demonstrated the antidiabetic potential in rats, explaining their use as an antidiabetic remedy locally.



Name: Agasha Ester

Research title: Capital Structure, Credit Risk Management and Loan Portfolio Quality of Microfinance Institutions in Uganda

The findings of this study, indicate the presence of cost of capital acts as a channel in the association between capital structure and loan portfolio quality in Microfinance Institutions. The study also confirmed that the presence of quality clients cannot be underestimated if a healthy loan book is to be achieved. Microfinance Institutions should keenly assess the terms and conditions of funds as well as have strong systems with new innovative ways to strengthen credit risk management efforts



Name: Abiriga Faustine

Research title: Assessing the impact of Equatorial Plasma Bubbles on the performance of GNSS Applications

Equatorial plasma bubbles (EPBS) are an ionospheric phenomenon near the Earth's geomagnetic equator at night time. They affect radio waves by causing varying delays. This study revealed that the occurrence of the different categories of EPBs and the patterns of signal scintillation events over this region follow a diurnal and seasonal pattern. The occurrence of the EPBs was also seen to be dependent on solar activity. It was also observed that the East African region experienced a higher percentage occurrence of amplitude scintillation events compared to phase scintillation events.



Name: Asiiimwe Frank

Research title: Corporate governance practices and performance of cities: the comparative case of Kampala capital city authority and the city of Kigali

This study examined the contribution of governing rules, accountability and leadership collaboration to better understand policy implementation, infrastructure development and service delivery in the two cities of Kamala and Kigali. The study recommends that for KCCA and CoK to have better policy implementation, infrastructure development and service delivery, they need more responsive city governance (RCG) that promotes responsiveness, participation of city residents and effectiveness in all city operations. Implementing RCG will enable the two cities to avoid unnecessary central government interference, promote responsibility and accountability among city governing agencies and develop a culture of good collaboration, which will enable them to achieve their performance goals and enhance the wellbeing of city dwellers.



Name: Emmanuel Ahishakiye

Research title: A Dictionary Learning Approach for Image Reconstruction in Low Field Magnetic Resonance Imaging

The empirical findings of this study, revealed that dictionary learning methods are very fast and less computationally expensive and may therefore be suitable for resource-constrained environments when compared to deep learning methods. Experimental results with the developed algorithms on the peak signal-to-noise ratio (PSNR), signal-to-noise (SNR), reconstruction time (in seconds), and high-frequency error norm (HFEN) revealed better image reconstruction results when compared to the current state-of-art dictionary learning algorithms.



Name: Ndayambaje François Xavier

Research title: The Metabolic Syndrome in Rwandan Patients with Epilepsy: Epidemiology and Risk Factors

This study investigated the prevalence and incidence of the metabolic syndrome and risk factors in adults with epilepsy, emphasizing on their respective anti-epileptic drug therapies. Findings of this study highlight that the prevalence and incidence of the metabolic syndrome is high among Rwandan patients with epilepsy. Therefore, physicians are advised to carefully select the type of anti-epileptic drugs administered and request regular anthropometric as well as laboratory checkups for patients with epilepsy who are on medications in order to predict a diagnosis of the metabolic syndrome and the complications thereof.

Meet the youngest PhD awardees of MUST



Deborah Natumanya born September 25 1992 in Bushenyi District, Dr. Deborah Natumanya attained her Primary education in Mbarara Municipal Primary School, Deborah went to Mayhill high school for Mbarara, O' level later joined Bwenyanyi Girls School in Bushenyi. She joined Mbarara University of science and Technology for her Bachelor's degree in Information

Technology, Graduated in January 2015. In January 2017 She graduated with a Master of Science in information systems. She is a daughter to Mr. and Mrs. Joy and John Kweyamba residents of Kiswahili Kakoba Mbarara.

Dr. Natumanya was awarded a PhD in Computing. Deborah is a lecturer in the Faculty of Computing and Informatics.



Dr. Raphael Wangalwa

Dr. Raphael Wangalwa was born in September 21 1991, he went to Nabuyonga Primary School. Later joined Mbale S.S for O level and Merryland High School for A Level. In 2014, he graduated with a first class and top of his class in Bachelor of Science with Education at MUST. In 2017, he graduated with a distinction and top of his class in Master of Science degree in Biology. He was awarded a PhD in Biology on May 28, 2022. His undergraduate and postgraduate studies were sponsored by Government of Uganda, German Federal Ministry of Education and Research (BMBF) through RELOAD project, and World Bank through PHARMBIOTRAC. He is currently serving as a teaching assistant in the Department of Biology, Faculty of Science at MUST.

Highlights of the 28th Graduation



Chancellor's conovy



Salutation: The Vice Chancellor Prof. Celestino Obua Introduces the staff to Hon. Joyce Muriku Kaducu the guest of honor.



Hon. Dr. Joyce Muriku salutes her Dean in Medical school Prof. Jerome Kabakenga



L-R, Dr. Warren Naamara Chairman Council, Hon. Joyce Muriku Kaducu Guest of Honor, Prof. Celestino Obua Vice Chancellor, and Prof. Charles Mark Lwanga Olweny Chancellor



Chancellor's procession





Macebearer: Ms. Elizabeth Kengonzi BNS II



MASTERS OF CEREMONY



Mr. Solomon Agum



Mrs Sheila Niinye Twinamasiko

Dr. Collins Agaba, Vice Chairman Convocation

Graduates



Parents and guardians



Religious leaders and VIPS





Sauvik Pandet Manager Bank of Baroda



Heather M. Director GHC, University of Calgary



Mr. Fred Ssempijja Mulago campus Coordinator

Sharing a moment of light: Some of the MUST faculty during the 28th Graduation





***CONGRATULATIONS TO ALL GRADUATES OF THE
28TH CONGREGATION
SUCCEED WE MUST***

Compiled by Angella Nakato Muyingo: PRO. Proudly sponsored by the Vice Chancellor's Office