



—MUHAS— NEWSLETTER

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

ISSN 0856 - 9991

April-June 2020

Issue No. 52



Pharm R&D team during a planning session preparing for ISO 17043B Accreditation.

MUHAS PHARM R&D LAB ATTAINS ISO ACCREDITATION

Muhimbili University of Health and Allied Sciences Pharmaceutical Research and Development Laboratory Proficiency (Proficiency Testing Programme) has been granted ISO accreditation as Proficiency Testing Provider by Kenya Accreditation Services (KENAS).

Pharm R&D Lab is integrated in the School of Pharmacy of Muhimbili University of Health and Allied Sciences (MUHAS) and it has two units; Pharmaceutical Technology Laboratory (PTL) and Pharmaceutical Analytical Laboratory (PAL). PTL is a current Good Manufacturing Practice (cGMP) model equipped lab involved in research on

formulation development including solid dosage forms like tablets and capsules. PAL is an Analytical Testing Lab involved in quality assurance and quality control of medicines like analytical testing, post-marketing surveillance testing, analytical method development and validation, stability studies of finished products.



Pharm R&D Lab Team in a Planning session preparing for ISO 17043 Accreditation. From Left is Prof Eliangiringa Kaale, Mr Raphael Shedafa, Dr Vicky Manyanga, Mr Mhando Machage, Ms Ruth Ng'wananogu and Edson Lutta.

The Lab also provides training, R&D and consultancy services in the pharmaceutical sector within East Africa. It has gained experiences on proficiency testing through various training, running of several rounds of proficiency testing (PT) schemes in the field including

participating in WHO External Quality Assurance testing schemes.

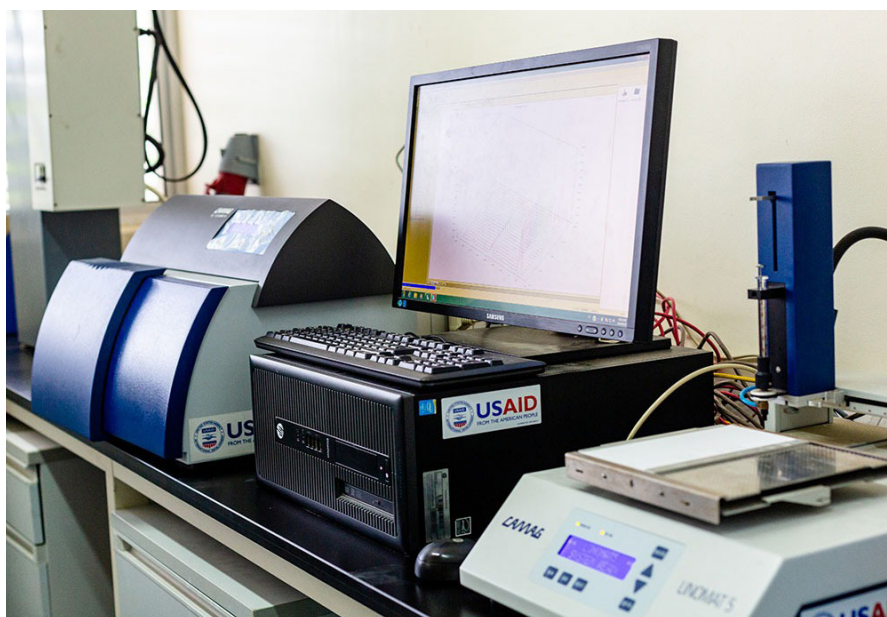
Proficiency Testing is an inter laboratory comparison of samples against pre-established criteria. In an effort to build regional capacity for providing

PT services in the pharmaceutical sector the EAC Secretariat in co-operation with PTB, the German Metrology Institute, started to support Pharma R&D laboratory, to become a regional PT provider for pharmaceutical testing laboratories.

According to Prof. Eliangiringa Kaale, a MUHAS Professor in Quality Assurance and Regulatory Affairs for Pharm R&D Lab, for the Lab to be ISO accredited means more trust and satisfaction from clients, and therefore more customers. "It means we have demonstrated that we are competent in providing the service and because of that we expect to get more customers", Prof. Kaale added.

Prof. Kaale said that Pharm R&D Lab is the only Lab in Africa that provides this service. So far nine (9) regional Proficiency Tests (PTs) on solid dosage forms have been undertaken. The clients are from Tanzania, Kenya, Uganda, Rwanda, Burundi, Ethiopia, Eritrea, Seychelles and Congo DRC and most QC labs from NMRA's, National Bureau of Standards (NBS), Industry, University and Procurement Agents.

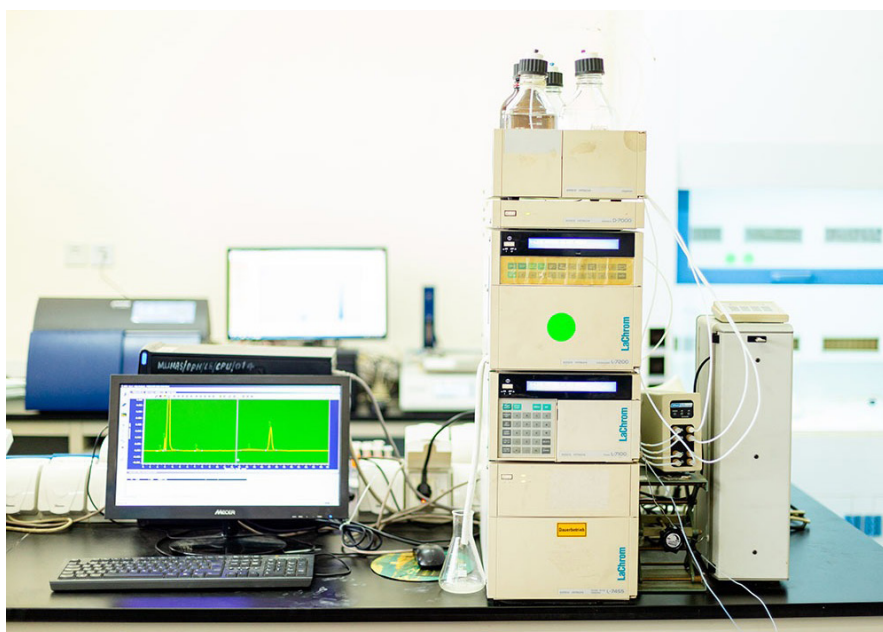
"We now want to expand to the whole of the African Region", Prof. Kaale commented. He explained that currently most of the labs from the developing countries participate in the WHO scheme and WHO used the lab which is in France to conduct these tests. "After obtaining this status, we will approach WHO and request them to use the MUHAS Pharm R&D Lab for the samples within the African



Equipment at the Pharm R&D Lab

region since it is much easier and cost effective to dispatch sample within the region rather than outside”, Prof. Kaale added.

Prof. Kaale further invited participating labs for training as part of Corrective action and Preventive Action (CAPA) and sharing their experience with fellow colleagues in the field. This external quality assurance (EQA) tool provides a competence assessment opportunity for the participant Labs towards quality system improvement. “The experience gained from running the scheme has been instrumental for MUHAS Pharm R&D Lab to demonstrate competence that was useful for the further



preparation towards ISO/IEC 17043 accreditation that we obtained today” Observed Prof Kaale.

*Equipment
 at the Pharm
 R&D Lab*

THE MUHAS SICKLE CELL PROGRAMME AWARDED THE DR LEE JONG-WOOK MEMORIAL PRIZE FOR PUBLIC HEALTH 2020

The World Health Organization awarded the Dr LEE Jong-wook Memorial Prize for Public Health 2020 to the Sickle Cell Disease Consortium (Sickle CHARTA) which is led by the Sickle Cell Programme within the Department of Haematology and Blood Transfusion at Muhimbili University of Health and Allied Sciences (MUHAS).

The decision was made at the 146th session of the Executive Board of the World Health Organization. The Sickle Cell Disease Consortium shares the 2020 award with Dr João Aprigio Guerra de Almeida (Brazil). The prize for each laureate is a plaque and US\$50,000.

The Dr LEE Jong-wook Memorial Prize was established in 2008 and is awarded to a person or persons, an institution or institutions, who have made an outstanding contribution to public health. The prize aims to reward work that has extended far beyond the call of normal duties. The Sickle Cell Disease Consortium was nominated by the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) in recognition of the contribution the consortium has made to the understanding and treatment of sickle cell disease (SCD) which is a disease of public health importance in Tanzania.

The prize citation acknowledges

that the “Sickle Cell Disease Consortium has demonstrated high capacity in translating research into innovative health policies and clinical practices, and has been an enabling force for developing health care in resource-limited settings. This consortium has also illustrated that effective global partnerships can build a critical mass of individuals and lead to significant advances in health and biomedical science in the area of public and family health.” The citation also acknowledged the close working relationship between the Sickle Cell Disease Programme and patient and advocacy groups including the Sickle Cell Disease Patients Community (led by Arafat Salim), Sickle Cell Foundation

of Tanzania (led by Grace Rubambey), Sickle Cell Youth Foundation (led by Yusuph Gesase) and the Tanzania Sickle Cell Disease Alliance (led by Dr Deo Soka)

Professor Julie Makani, the Principal Investigator in the Sickle Cell Disease Programme, is the formal awardee of the prize on behalf of the Consortium. Professor Makani thanked the MoHCDEG for the nomination and said that the prize reflected the hard work of many healthcare workers, researchers, advocacy groups, patients and support staff who are working to reduce the burden of SCD in Tanzania. The prize will contribute to the

ongoing work of the consortium (Sickle CHARTA) which is an innovative multidisciplinary approach to improving health outcomes that involves health research, training and advocacy.

The prize funds will contribute to the following activities:

- **Health:** supporting the Sickle Cell helpline, patient support and support to hospital facilities that manage SCD patients.
- **Research:** academic awards for research projects into SCD,
- **Training:** improving skills in SCD care and research,
- **Advocacy:** support to patient groups and community organisations.

Sickle Cell Disease (SCD) is a disease of public health significance in Tanzania and worldwide. It is common as it is estimated that 14 million children will be born with SCD between 2010 and 2050 with 84% of those babies born in Africa. In Tanzania it is estimated that 11,000 children are born every year. Without intervention childhood survival rates are low but with early detection and enrollment into comprehensive care survival rates can be much improved. Symptoms of SCD are extremely variable but common symptoms are pain, infection and anaemia.

CELEBRATION OF WORLD SICKLE CELL DAY



Hon. Ummu Mwalimu, the Minister of Health, Community Development, Gender, Elderly and Children speaking during the World of Sickle Cell Day at Muhimbili National Hospital.

Hospital (MNH) and was officiated by Hon. Ummu Mwalimu, Minister of health, Community Development, Gender, Elderly and Children. The MoHCDEC was represented by the Chief Medical Officer, Director of NCD and coordinator of Sickle Cell Disease. Also in attendance were Executive Directors of MNH, JKCI and MOI. The theme for this year was “Huduma bora kwa kila mhitaji, chukua hatua, panua wigo”.

The following key points were emphasized by the Minister aiming to improve the quality of care provided to sickle cell patients in Tanzania. Establishment of specialized care for sickle cell patients in regional and district hospitals, including availability of

On the 19th of June 2020, the Sickle Cell Program of Muhimbili University of Health and Allied Sciences joined hands with the alliances of Sickle Cell Patients Community Organizations

and the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDEC) to celebrate the World Sickle Cell Day.

This year the celebration was hosted at Muhimbili National

diagnostic equipment, essential drugs for patients and safe blood for managing complications related to Sickle Cell Disease (SCD).

In partnership with NOVARTIS, the minister promised wide availability of Hydroxyurea which is one of essential drugs for SCD patients as well as affordability of the drug. MoHCDEC also instructed the Health insurance companies to include essential drugs for management of SCD (hydroxyurea included) to their drugs list in order to reduce treatment burden in families with SCD patients.

The National Guideline for Management of SCD was also launched which is going to be shared to healthcare workers at all levels in Tanzania to guide the management of SCD patients. During the event, the Executive Director of MNH also pointed out the current plans to start curative treatments for SCD in Tanzania- Stem Cell Transplant.



Displaying the Guideline for Management of Sickle Cell Diseases Book after the Hon. Ummu Mwalimu, the Minister of Health, Community Development, Gender, Elderly and Children the launched it during the Sickle Cell Day.

In addition to this celebration on the 19th of June, several other campaigns were held towards the event to raise awareness on SCD in the country in collaboration with patients' organizations. Media campaigns were held in radios, televisions and social media. Health education materials as well as rapid testing

kits for SCD were provided to 10 health care facilities in Dar es Salaam and Pwani regions. In partnership with MAT and Sickle Cell Patients Community of Tanzania, SCP supported publications of two articles on experiences of patients and caregivers in COVID times.



Sickle Cell Programme Staff in a group photo during the Sickle Cell Day.

MUHAS AWARDED PROF TWALIB NGOMA A RESEARCH CHAIR POSITION



Prof. Twalib Ngoma

The Council of Muhimbili University of Health and Allied Sciences (MUHAS) during its 56th Meeting held on the 8th May, 2020 approved the application of Prof. Twalib Ngoma to be awarded MUHAS Post-Retirement Research Chair Position with immediate effect.

This award is as per MUHAS Research Chair Policy and Guidelines of 2019, Section 2 which stipulates that senior researchers at the time of their retirements may indicate their interest to apply for Research Chair position.

Prof. Twalib Ngoma retired at the age of 60 in 2013 as an Associate Professor in the Department of Radiology and Imaging at MUHAS. He was offered post retirement contracts as per regulations. His last contract ended in February 2019. Based on his ongoing research projects registered at MUHAS, Prof. Ngoma was found to be eligible and qualifies for the MUHAS Post-Retirement Research Chair Position.

The MUHAS Newsletter congratulates Prof. Twalib Ngoma and wishes him success in this new position.

SCHOOL OF PHARMACY FACILITATES A TRAINING ON MAKING HAND SANITIZERS TO BRAVE WIDOWS

Muhimbili University of Health and Allied Sciences through the School of Pharmacy facilitated the Hand sanitizers training to Brave Widows. The main objective was to equip the widows with skills to make hand

sanitizers from MUHAS experts so that they can make their own and supply to their local communities to earn an income.

The School of Pharmacy conducted the training and taught the women this valuable

skill during this pandemic of COVID-19. The training was facilitated by the Head of Department of Pharmaceutics, Dr. Betty Maganda and Mr. Vitalis Mbuya, Assistant Lecturer at the School of Pharmacy and it was both theoretical and practical.



*Nelly Magwai,
Health Lab
Technologist (1st
left) assisting the
Widows in the
preparation of
Hand Sanitizer
(Gel) during the
training session at
MUHAS.*

The first day of the training the Brave Widows' members learned about the introduction to hand sanitizers (what they are, types, active ingredients and uses), production of alcohol based hand sanitizers whereby under this section, participants learned about active ingredients and universal formula of the composition of each ingredient. Furthermore, they also learnt



Dr. Betty Maganda, Head, Department of Pharmaceutics (1st right), showing the ingredients used in the preparation of hand sanitizers to the widows during the session.

Foundation extended their sincere gratitude to MUHAS for making this training happen successfully. He gave his special gratitude to the Vice Chancellor for permitting the School of Pharmacy to conduct the training. He also thanked the facilitators for their guidance and assistance during the training.

The training was conducted for two days from 7th May to 8th May 2020 and Nine Brave Widows participated.

about the packaging and labelling of hand sanitizers as well as marketing and regulatory requirements.

Speaking at the end of the training, representative from United World with Africa

On the second day the Brave Widows took turns entering in the laboratory and learned how to make both “Spray” and “Gel” hand sanitizers. The trainers first demonstrated how to make the hand sanitizers and then let the widows make the sanitizer on their own and they managed to make very good sanitizers.

Jonas Njau, Health Lab Technologist (1st right) helping the widows on how to package hand sanitizer at the laboratory.



Brave widows and Program Coordinator in a group photo each holding a bottle of hand sanitizer at the end of the training at MUHAS.

MUHAS STUDENTS JOINED THE GOVERNMENT IN THE FIGHT AGAINST COVID-19 IN DIFFERENT DISTRICTS OF TANZANIA

By Edson Protas EHS2

MUHAS Environment Health Students Edson Protas, Vincent Silyvest and Maganga Peter under Tanzania Environmental Health Students Association (TEHSA) got an opportunity to provide awareness and health education to minimize the impact of COVID-19 in different districts in Tanzania including Magu district in Mwanza, Rombo District in Kilimanjaro and Nzega District in Tabora from March to May 2020.

This came about after the sudden postponement of all studies in the country as a protective measure against the spread Corona virus pandemic (COVID-19) and students had to stay at home until further notice. As students of environmental health, we thought of ways of serving the communities through raising awareness and provide health education during this time.

Through the assistance of the MUHAS department of Environmental Health and Occupational Studies in the School of Public Health and Social Sciences, we were introduced to the district authorities and reported to their respective District Health Offices (DHO).

The Districts were Magu District in Mwanza, Rombo District in Moshi as well as Nzega



Edson Protas showing health workers how to don and doff PPE at Nyanguge health centre in Magu-Mwanza

district in Tabora. We were well received and we participated in training for three days via special seminars that were organized by the government to empower district hospital health workers so that in turn they could be facilitators at other health care centers. We were then made part of Task Forces to provide health education on COVID-19.

We spent the time from April to May 30th 2020 educating the community and health workers and also served as Surveillance Team and Rapid response team (RRT) in these districts. We were able to cover different aspects including teaching on

the preventive measures against COVID-19 to the community and to health workers in different health facilities. Here the teachings covered Health care waste management, donning and doffing of PPE.

Moreover, as part of the surveillance team, Rapid Response Team (RRT) and case management team, we were able to participate in quarantine and

holding room setting together with highly Infectious Disease Treatment Unit (HIDTU) or commonly known as COVID-19 Treatment Centre (CTC).

We managed to work with other employed health workers as part of their own team who were very happy working with us and for the help we offered. It was pleasing to note that people in the community responded well to every training or education we offered to them by doing exactly what we educated them about.

Due to the experience we gained, we were able to become confident enough to face the public and educate them. As MUHAS students we were

recognized by the potential work we did in serving, helping and protecting the public's health against the COVID-19 Pandemic.

At the end of our participation in the districts' endeavors, the good and hard work done we were rewarded and commended by the DHOs (District health Officer) for using our time and potential in serving the community at large.

Much thanks goes to Muhimbili University of Health and Allied Science and to the School of Public Health, Department of Environmental and Occupational Health and to the Mentioned Districts for their support.



Maganga Peter and Vincent Silyvest teaching the community about COVID-19 at Nzega District in Tabora And Rombo District in Kilimanjaro Region

MUHAS RECEIVES A DONATION OF PERSONAL PROTECTIVE EQUIPMENT(PPE)



The President of Rotary Club of Mikocheni, Ms. Josephine Kaiza (2nd left) handing over the personal protective equipment to Daniel Kandoga, Data Coordinator of the Sickle Cell Programme.

than ten thousand individuals but 5000 were confirmed with the sickle cell disease.

He added that all of these activities are being supported by different grants and currently they are working on other project and were able to register more than 2000 patients. "We believe these donations have huge benefits to our patients" he said. Mr. Kandoga further appreciated and thanked the Rotary Club of Mikocheni for the donations which he said will be used by the health care providers and the sickle cell patients.

Muhimbili University of Health and Allied Sciences (MUHAS) through the Sickle Cell Programme received a donation of personal protective equipment from Rotary Club of Mikocheni, Dar es Salaam, Tanzania on 12nd May, 2020.

Speaking at the handover ceremony, on behalf of Principal Investigator (PI) Sickle Cell Programme, Daniel Kandoga, Data Coordinator gave brief remarks concerning the data on registered patients with sickle cell diseases in Tanzania. He said from 2003 up to 2013 they were able to register about more

Moreover, the President of Rotary Club of Mikocheni, Ms. Josephine Kaiza gave a brief remarks on their friendship

history with Prof. Julie Makani where they met at KCB foundation. And later she saw Prof. Julie Makani posts that she requests for mask donations for sickle cell patients and health care providers.

“Through that post I decided to present the matter to the management and see how we can contribute as the Rotary Club, and we are here today to donate these personal protective equipment” she said.

The Rotary Club of Mikocheni donated 100 masks and other personal protective equipment to the sickle cell programme at the Sickle Cell Center.



The Sickle Cell Programme Staff in a group photo with the President of Rotary Club of Mikocheni after the handing over ceremony at the Sickle Cell Centre.

MUHAS SITE IMPROVES RETENTION THROUGH ACTIVE TRACKING AND PARTICIPANTS' ENGAGEMENT MEETINGS



Nurse Tumaini Masawa educating participants on the concept and importance of vaccines

PrEPVacc's MUHAS site in Dar es Salaam, Tanzania, has implemented several strategies to enhance participants' retention in the HIV Negative Registration Cohort.

Among them are weekly participants' engagement meetings and the use of field peer female sex workers to trace participants who have missed a visit.

Since April 2019, a total of 24 participants' engagement and re-engagement meetings have been held with all cohort participants to improve understanding of the PrEPVacc study and to stress to participants the importance of timely study visit attendance.

Field teams have successfully been able to trace participants who missed their visit and this enabled staff to update their contacts and location information kept by the site.

Overall, these strategies have enabled the site to improve participants' retention from 65% at visit 2 (3 months after enrollment) to 93% at visit 6 (15 months after cohort enrollment).

PrEPVacc is an African-led, European-supported HIV prevention research project running in four countries in East and Southern Africa from 2018 to 2023. For the first time, it is combining evaluation of HIV vaccines and pre-exposure prophylaxis (PrEP) at the same time.



Prof Said Aboud, the site Principal Investigator elaborating to participants on amount of blood drawn for various Laboratory blood sample tests

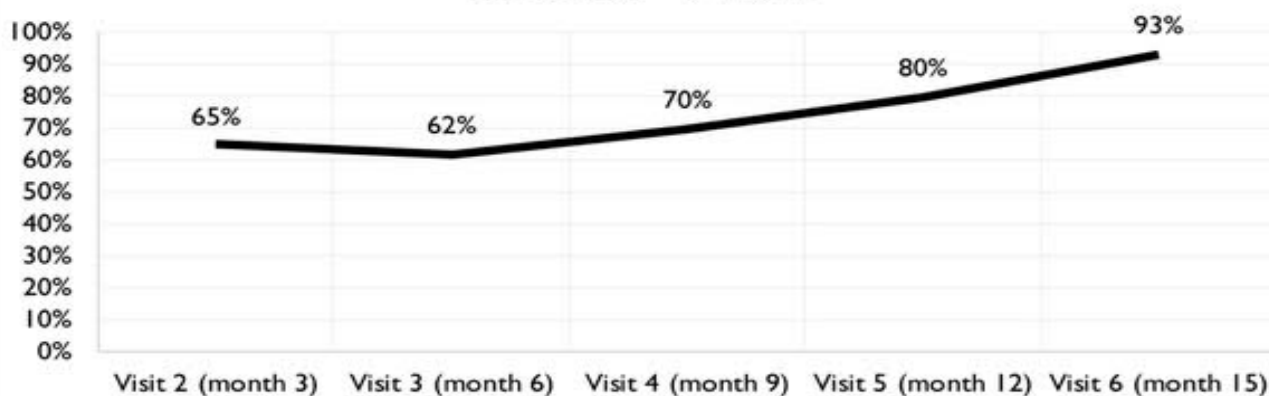


Field team tracing missing participants

PrEPVacc will test a minimum of 1,668 participants in four countries. It will test whether two experimental combination vaccine regimens can provide any protection against HIV in populations at risk of acquiring HIV infection. This is the first HIV vaccine efficacy trial to be funded outside the USA.

PrEP is a proven intervention that has been shown to prevent HIV, where an anti-retroviral pill is taken prior to being exposed to HIV. PrEP will be given in the trial during the time that participants are expected to reach their peak immune system response from the vaccines (three vaccination time points over six months). During this time, the trial will also assess a new PrEP agent against the established standard for PrEP.

PARTICIPANT RETENTION AT EACH STUDY VISIT



Trends of participants' retention in the cohort at different study visits

The PrEPVacc project dates are from January 2018 to March 2023. The preparation for the trial includes HIV Negative Registration Cohort (Observational study), whose first participants were enrolled

in October 2018.

The project name PrEPVacc is a conjunction of the two preventive methods i.e. PrEP and Vaccines.

Professor Said Aboud is the MUHAS Site Principal Investigator, Dr. Patricia Munseri is the Clinical Coordinator and Professor Eligius Lyamuya is the Laboratory Coordinator

APPOINTMENT OF DEANS AND DIRECTORS

The Vice Chancellor of Muhimbili University of Health and Allied Sciences has appointed the Deans and Directors for the triennium of 2018/2019 to 2020/2021 as follows: -

S/N	SCHOOL/DIRECTORATE/ INSTITUTE	NAME
1.	School of Medicine	Prof. Projestine S. Muganyizi
2.	School of Dentistry	Dr. Matilda Mtaya-Mlangwa
3.	School of Pharmacy	Prof. Kennedy Mwambete
4.	School of Nursing	Dr. Dickson Ally Mkoka
5.	School of Public Health and Social Sciences	Dr. Gasto Msofe Frumence
6.	Institute of Traditional Medicine	Dr. Joseph Otieno
7.	Dean of Students	Dr. Tumaini Nyamhanga
8.	Directorate of Research and Publications	Dr. Bruno Sunguya
9.	Directorate of Postgraduate Studies	Dr. Emmanuel Balandya
10.	Directorate of ICT	Dr. Rodrick Kisenge,
11.	Director of Continuing Education and Professional Development (CEPD)	Dr. Deodatus Conatus Vitalis Kakoko
12.	Director of Undergraduate Education	Dr. Erasto V. Mbugi

Congratulations to the appointed Deans and Directors

MUHIMBILI UNIVERSITY OF HEALTH ALLIED SCIENCES

P.O. Box 65001, Dar es Salaam, Tanzania

Telephone: +255-22-2150302 – 6

Fax: +255-22-2150465 • E-mail: vc@muhas.ac.tz